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CERTIFIED MAIL – RETURN RECEIPT REQUESTED

June 12, 2015

Christine Gelles
Acting Manager
National Nuclear Security Administration
Los Alamos Field Office
3747 West Jemez Rd, MS A316
Los Alamos, NM 87544

Michael T. Brandt
Associate Director
Environment, Safety, Health
Los Alamos National Security, L.L.C.
P.O. Box 1663, MS M991
Los Alamos, NM 87545

RE: APPROVAL WITH MODIFICATIONS
2015 MONITORING PLAN FOR LOS ALAMOS/PUEBLO WATERSHED SEDIMENT TRANSPORT MITIGATION PROJECT
LOS ALAMOS NATIONAL LABORATORY
EPA ID#NM0890010515
HWB-LANL-15-022

Dear Ms. Gelles and Mr. Brandt:

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 Plan for Los Alamos/Pueblo Watershed Sediment Transport Mitigation Project* (Plan) dated and received May 15, 2015, and referenced by LA-UR-15-21412/EP2015-0031.

NMED has reviewed the Plan and hereby approves the Plan with the following modifications:

Modifications:

1. **Section 2.0, Monitoring Geomorphic Changes, p 2**

   Permittees' Statement: "In July 2014, the Laboratory collected aerial light detecting and ranging (LiDAR) data covering the entire extent of the Los Alamos/Pueblo watershed. LiDAR data were collected at a point density exceeding 8 points per square meter. The Laboratory intends to resurvey Los Alamos/Pueblo watershed in the fall of 2015 using the same point-density specifications. This LiDAR data provides an accurate representation of surface elevation within and outside of the active channel areas of the watershed. For the 2015 monitoring report, the Laboratory intends to evaluate changes in geomorphology within the project area using both LiDAR and total-station-based geomorphic cross-sections surveys at the locations described below."

   NMED's Comment: The Permittees state that the LiDAR data for the locations described in the plan will be used for evaluation of geomorphic changes within the project area for the 2015 monitoring report. As the project area includes the entire extent of the Los Alamos/Pueblo watershed, ensure that the data for the entire extent is presented in the 2015 monitoring report.

2. **Section 3.1, 2015 Monitoring Plan Changes, p 4**

   Permittees' Statement: "Gage stations E099 and E109.9 were both significantly damaged during the September 13, 2013, flood. The Laboratory subsequently lost administrative access to these gage stations. Therefore, monitoring at these stations was not performed in 2014. Stream stage gaging was restarted at E099 on September 11, 2014, at the NM 502 right of way. Storm water flow at E099 will be monitored as part of the MOU between BDDB and DOE, but storm water samples are not planned for collection or analyses at E099."

   NMED's Comment: NMED's March 18, 2015 *Approval with Modifications* letter stated, "NMED understands that access to gage station E109.9 has been denied by the Pueblo of San Ildefonso. NMED is concerned about this issue because sample collection from this station provides important information on water quality prior to entering the Rio Grande, an important source of water for the State of New Mexico. NMED urges the Permittees to make a concerted effort to renew their access agreement to this important gage station." Provide semiannual progress updates in October and April on the efforts made to regain access to, and continue sampling at, station E109.9.

3. **Section 3.1, 2015 Monitoring Plan Changes, p 4, and Section 3.3, Storm Water Sampling and Analysis Plan, p 7**

   Permittees' Statements: "This monitoring plan proposes to discontinue sampling for targeted radionuclides before the peak of discharge in each hydrograph. Since 2012, one sample has been planned for collection on the rising limb of the hydrograph near the peak discharge for analyses of gamma-spectroscopy radionuclides and isotopic plutonium instead

of SSC. The few samples collected to date have not been useful for estimating sediment transport."
and
"Collecting SSC samples at 2-min intervals during the first 30 min allows for better characterization of the early part of the hydrograph and provides samples for the radiochemical analyses before the discharge peak."

NMED's Comment: These statements appear to be contradictory. NMED agrees with the Permittees' plan to discontinue sampling for targeted radionuclides before the peak of discharge during storm flows, as these activities are not representative of the overall storm flow. However, NMED requires the continuation of analyzing rising limb samples for SSC. For clarification, the Permittees may discontinue sampling for targeted radionuclides before the peak of discharge during storm flows, but must continue analyzing rising limb samples for SSC.

4. **Section 3.1, 2015 Monitoring Plan Changes, p 4**

Permittees' Statement: "This monitoring plan proposes to discontinue analysis of unfiltered target analyte list (TAL) metals. Instead, this plan proposes analysis of total recoverable selenium, total recoverable aluminum, and total mercury at all locations. Monitoring of dissolved TAL metals plus dissolved boron will continue. The analyses proposed provide results suitable for comparison to applicable New Mexico Water Quality Control Commission surface-water-quality criteria in the Los Alamos and Pueblo watershed."

NMED's Comment: The objective of this project is to monitor sediment transport mitigation efforts. NMED believes that data from analyses of contaminants in unfiltered samples is crucial information in evaluating sediment transport of contaminants. Therefore, the Permittees must continue to analyze unfiltered samples for TAL metals.

5. **Section 3.1, 2015 Monitoring Plan Changes, p 4**

Permittees' Statement: "This monitoring plan focuses planned monitoring and reporting to support the objectives of the IMWP to evaluate the performance of sediment controls, and the results will be reported in the 2015 Monitoring Report for Los Alamos/Pueblo Watershed Sediment Transport Mitigation Project, to be submitted to NMED on or by March 31, 2016. Monitoring conducted to determine whether or not waters of the state are attaining designated uses will be reported in the 2015 Annual Site Environment Report (ASER), scheduled to be completed on or by September 30, 2016. Monitoring conducted solely to fulfill the requirements of the MOU between BDDB and DOE (DOE and BDD Board 2014, 600185) will be made publically available in IntellusNM only."

NMED's Comment: As a reminder, the results of all monitoring conducted under this work plan must be reported in the 2015 Monitoring Report for Los Alamos/Pueblo Watershed Sediment Mitigation Project.

The Permittees must provide semiannual progress updates, which can be submitted via email, regarding their efforts to re-establish access to station E109.9, beginning on **October 1, 2015**. The Permittees must submit the *2015 Monitoring Report for Los Alamos and Pueblo Canyons Sediment Transport Mitigation Project* no later than **March 31, 2016**.

Should you have any questions or comments, please contact Ben Wear at (505)476-6041.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

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File: Reading and LANL 2015, Surface Water, Los Alamos/Pueblo Watershed.