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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 5, 2014

Peter Maggiore
Assistant Manager, Env. Projects Office
Los Alamos Field Office, DOE
3747 West Jemez Road, Mail Stop A316
Los Alamos, NM 87544

Jeffrey Mousseau
Associate Director, Environmental Programs
Los Alamos National Security, LLC
P.O. Box 1663, MS M991
Los Alamos, NM 87545

RE: APPROVAL WITH MODIFICATIONS
COMPLETION REPORT FOR SANDIA CANYON GRADE-CONTROL STRUCTURE
LOS ALAMOS NATIONAL LABORATORY
EPA ID #NM0890010515
HWB-LANL-13-069

Dear Messrs. Maggiore and Mousseau:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security, LLC (LANS) (collectively, the Permittees) *Completion Report for Sandia Canyon Grade-Control Structure* (Report) dated and received December 19, 2013 and referenced by EP2013-0291.

The Permittees report that construction of the grade-control structure began on April 22, 2013, was functional on September 9, 2013, and stabilization activities were completed on November 27, 2013. The Permittees report that the grade-control structure consists of three sheet pile walls with design elements to establish smaller braided channels and increase surface contact time and vegetation growth. The walls were seated in bedrock to prevent ground water from seeping through the structure and engineered fill was placed behind the wetland to match the elevation of the surrounding wetland and to prevent the formation of pools behind the grade-control walls.

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The Permittees report that a variety of wetland species was to stabilize the wetland area.

The grade-control structure was designed by the Permittees to withstand a 25-year, two-hour storm event, and to reduce the stream velocity to less than 6 cubic feet per second. The Permittees report two major occurrences that impacted the construction of the grade-control structure: the observation of a tar-like substance oozing out of the second grade control wall and significant rainfall and flooding in the late monsoon season. The observation of a tar-like substance was reported to NMED on May 16, 2013, and a sample (CASA-13-34678) was collected and analyzed using SW 846 EPA Method 8270. The substance was verified by the Permittees to be coal tar, which was left in place. The Permittees report that the site was impacted by two significant rainfall and flooding events. The first event occurred on June 30, 2013, which resulted in 0.5 inches of rainfall, significant ponding at the construction site, which delayed construction. The second event occurred September 10-13th, which resulted in seven inches of rain, significant damage to the site, and delayed construction for one month. NMED has reviewed the Report and has the following comments.

Comments:

1. NMED notes that a stockpile of sediment (estimated volume of approximately 150 cubic) located in a small south-entering ravine, has not been characterized or addressed in the Report. NMED is concerned with both the characterization and final disposition of the material. The Permittees appear to have relocated the excavated material to an area both sloped and upstream of the sediment retention basin above the Sandia grade-control structure. The Permittees must document in the Report the erosion controls implemented to prevent the sediment from continuing to be eroded and mobilized downstream. The Permittees must also specify for what type of flood event the fill site can withstand and describe procedures that will be implemented in the event of a significant rainfall event.

2. The Permittees report that a significant amount of rainfall (seven inches) occurred September 10 -13th, 2013. NMED notes that this amount is greater than the 25-year, two-hour storm event that the grade-control structure was designed to withstand. Should regular storm events of this magnitude continue, the structure design may be inadequate.

The Permittees must address these two comments and submit replacement pages for the Report by **October 5, 2014**. All submittals (including maps and tables) must be in the form of two paper copies and one electronic copy in accordance with Section XI.A of the Order. In addition, the Permittees must submit a redline-strikeout version (electronic copy) that includes all changes and edits to the Report with the response to this approval with modifications.

Please contact Siona Briley of my staff at (505) 476-6049, should you have any questions or concerns.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

cc:

D. Cobrain, NMED HWB
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S. Briley, NMED HWB
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File: LANL, Sandia Canyon Grade-Control Structure , December 2013