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**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

December 1, 2015

Doug Hintze  
Manager  
Environmental Management  
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 Laboratory  
P.O. Box 1663, MS M991  
Los Alamos, NM 87545



**RE: DISAPPROVAL  
2013 EXCAVATION OF THE LOS ALAMOS CANYON LOW-HEAD WEIR,  
REVISION 1 AND RESPONSE TO DISAPPROVAL FOR THE 2013  
EXCAVATION OF THE LOS ALAMOS CANYON LOW-HEAD WEIR  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID #NM0890010515  
HWB-LANL-13-068**

Dear Messrs. Hintze and Brandt:

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) *2013 Excavation of the Los Alamos Canyon Low-Head Weir, Revision 1* (Report) and *Response to Disapproval for the 2013 Excavation of the Los Alamos Canyon Low-Head Weir* (Response) dated June 30, 2015 and received July 1, 2015 (referenced by LA-UR-15-24400/EP2015-0101).

The Permittees reported that the excavation of the sediment retention basins behind the Los Alamos Canyon low-head weir was completed on May 6, 2013. In the Report, the Permittees estimated that 6,000 cubic yards were removed from the retention basins, relocated

approximately 0.5 mile upstream in Los Alamos Canyon, and stockpiled in a former borrow pit as shown in Figures 1 and 2 of the Report. The Permittees report that prior to excavation, depth-integrated samples were collected to characterize the material. The original Report was provided to NMED on December 19, 2014. NMED disapproved of the Permittees' Report providing comments in a letter dated March 3, 2015. NMED has reviewed the Permittees' revised Report and Response and hereby disapproves the Report with the following comments:

**NMED Comments:**

1. The Permittees have not specified the type of flood event that the erosion controls installed at the former borrow pit were designed to withstand. The Permittees state in the Response that, "[t]he borrow pit should not be impacted by flooding events because it is located out of the flood plain." This assertion does not address events such as that which NMED DOE Oversight Bureau staff observed on September 13, 2013, where stormwater was flowing off of the sediment pile, out of the borrow pit, across the road, and into the canyon. Provide documentation such as storm water control engineering designs, calculations, technical specifications, and stormwater modeling results demonstrating that the erosional controls can withstand flash flooding events for the waste's current location.
2. During the phone call referenced in the Response between the Permittees and Mr. Cobrain of my staff, the Permittees indicated that the relocation of waste into the borrow area was intended to be temporary. On June 19, 2015, during a meeting with the Permittees and NMED staff at the former borrow pit, NMED staff asked the Permittees whether the stockpile was intended to be a permanent disposal location and discussed the ramifications of that decision. The Permittees' Response is the first written indication to NMED that the stockpile in the former borrow pit is intended to be the permanent disposal site for the excavated sediments. NMED staff requested more detailed information on the excavated sediments from the Permittees via email to Steve Veenis on July 8, 2015 and again on July 29, 2015. NMED received data from the Permittees via email on October 9, 2015, which indicated that post Las Conchas fire sediments were excavated and placed in the former borrow pit without any soil sampling or chemical analysis for contaminants.

The March 1, 2005 Compliance Order on Consent, as amended, and the Facility's RCRA permit define a Solid Waste Management Unit (SWMU) as "any discernible unit at which solid waste has been placed at any time, and from which the Department determines there may be a risk of a release of hazardous waste or hazardous waste constituents, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at the Facility at which solid wastes have been routinely and systematically released; they do not include one-time spills." Solid waste containing hazardous waste constituents has been routinely and systematically disposed of in the former borrow pit since approximately 2011.

Therefore, NMED hereby requests that a SWMU Assessment Report (SAR) be submitted by the Permittees to NMED for the former borrow pit where sediments excavated from the Los Alamos Canyon low-head weir containing hazardous constituents have been placed. The SAR must contain a detailed and complete history of all excavation events completed at the

Messrs. Hintze and Brandt

December 1, 2015

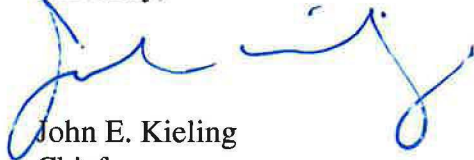
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Los Alamos Canyon low-head weir, including all sampling locations, analytical data, volume estimates, and final disposition of excavated soils for each event. A summary of this information was provided in the October 9, 2015 email, but must be formally submitted to NMED through the SAR.

The Permittees must address Comment 1 and submit a revised Report, or replacement pages, no later than **February 29, 2016**. The Permittees must respond to Comment 2 by submitting a SAR no later than **June 30, 2016**. All submittals 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 (replacement pages) with the response to this disapproval.

Please contact Neelam Dhawan of my staff, at (505) 476-6042, should you have any questions or concerns.

Sincerely,



John E. Kieling  
Chief

Hazardous Waste Bureau

cc:

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D. Cobrain, NMED HWB  
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File: Reading and LANL 2015, Los Alamos Canyon Low Head Weir