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Date: **AUG 03 2016**

Refer To: ADEM-16-5187

LAUR: 16-25646

Locates Action No.: U1600346\_01



John Kieling, Bureau Chief  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6303

**Subject: Submittal of the Response to December 1, 2015, Letter from the New Mexico Environment Department Hazardous Waste Bureau, Disapproval [for the] 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**

Dear Mr. Kieling:

Attached please find two hard copies with electronic files of the response to the New Mexico Environment Department's (NMED's) Disapproval [for the] 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, dated December 1, 2015, and referenced by ADESH-16-007. This response is due to NMED on August 5, 2016, as required by its approval of a request for extension, dated February 10, 2016, and referenced by HWB-LANL-13-068.

NMED's notice of disapproval (NOD) requires that Los Alamos National Laboratory (the Laboratory) submit a revised 2013 excavation report (Revision 2) and a solid waste management unit assessment report (SAR) to address the comments in the NOD. Laboratory personnel met with representatives of the NMED Hazardous Waste Bureau (NMED-HWB) on June 21, 2016, to discuss the response to the NOD and future sediment management. During the meeting, NMED-HWB representatives indicated that a revised excavation report was not necessary if the Laboratory adequately addresses Comment 1 in a SAR work plan, to be submitted under separate cover. NMED-HWB also indicated that a SAR work plan would replace the requirement to submit a SAR at this time. The Laboratory agreed to this approach and is submitting a SAR work plan under separate cover to address the comment in the NOD. The Laboratory's response to the NOD is included with this letter.

If you have any questions, please contact Steve Veenis at (505) 667-0013 (veenis@lanl.gov) or Cheryl Rodriguez at (505) 665-5330 (cheryl.rodriguez@em.doe.gov).

Sincerely,



Bruce Robinson, Program Director  
Environmental Remediation Program  
Los Alamos National Laboratory

Sincerely,



David S. Rhodes, Director  
Office of Quality and Regulatory Compliance  
Environmental Management  
Los Alamos Field Office

BR/DR/SV:sm

Attachment: Response to the Notice of Disapproval for the 2013 Excavation of the Los Alamos Canyon Low-Head Weir (EP2016-0096)

Cy: (w/att.)  
Cheryl Rodriguez, DOE-EM-LA  
Steve Veenis, ADEM ER Program

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Michael Brandt, ADESH  
William Mairson, PADOPS  
Craig Leasure, PADOPS

**Response to the Notice of Disapproval for the 2013 Excavation of the Los Alamos 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 No. NM0890010515, HWB-LANL-13-068, Dated December 1, 2015**

**INTRODUCTION**

To facilitate review of this response, the New Mexico Environment Department's (NMED's) comments are included verbatim. Los Alamos National Laboratory's (LANL's or the Laboratory's) responses follow each NMED comment.

**NMED Comment**

- 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.***

**LANL Response**

1. The Laboratory's response to this comment is included in the Solid Waste Management Unit Assessment Report [SAR] Work Plan for Los Alamos Canyon Borrow Pit, hereafter the SAR work plan, to be submitted to the NMED Hazardous Waste Bureau (NMED-HWB) by August 5, 2016. As-built conditions of the Los Alamos weir sediments emplaced in the borrow pit are provided in the SAR work plan. The as-built drawings detail the technical specifications by which the sediments were emplaced and the erosion control activities installed. Also included in the SAR work plan are the U.S. Department of Agriculture Revised Universal Soil Loss Equation 2 modeling results detailing the annual sediment yield before and after emplacement of the sediments.

**NMED Comment**

- 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 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.*

## **LANL Response**

2. Laboratory personnel met with representatives of NMED-HWB on June 21, 2016, to discuss this response to NMED-HWB's notice of disapproval (NOD) and the contents of the SAR. During the meeting, representatives of NMED-HWB indicated that a SAR work plan would replace the requirement to submit a SAR at this time. The Laboratory agreed to this approach and is submitting a SAR work plan under separate cover by August 5, 2016, to address this comment in the NOD. The SAR work plan summarizes activities undertaken during placement of weir sediments in the borrow pit, provides as-built technical specifications, presents annual sediment yield modeling results, presents and evaluates borrow pit sampling results to date, and proposes additional site characterization activities. It also provides a schedule for the completion of field work and the submittal date for the SAR.