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Date: March 31, 2009  
 Refer To: EP2009-0167

James P. Bearzi, Bureau Chief  
 Hazardous Waste Bureau  
 New Mexico Environment Department  
 2905 Rodeo Park Drive East, Building 1  
 Santa Fe, NM 87505-6303

**Subject: Submittal of Status Report on Actions Completed to Date on the Interim Measure Work Plan to Mitigate Contaminated Sediment Transport in Los Alamos and Pueblo Canyons**

Dear Mr. Bearzi:

The Los Alamos National Laboratory (the Laboratory) is submitting the attached report to fulfill the requirement to provide status by March 31, 2009, on mitigation actions conducted in Los Alamos and Pueblo Canyons as required in Comment 6d of the New Mexico Environment Department's Approval with Modifications letter (dated July 18, 2008) on the "Interim Measure Work Plan to Mitigate Contaminated Sediment Transport in Los Alamos and Pueblo Canyons" (IM work plan). The July 18, 2008, approval with modifications letter also required that the Laboratory prepare a supplemental work plan and associated deliverables. The attached status report provides a summary of work conducted to date under the initial IM work plan. The "Supplemental Interim Measure Work Plan to Mitigate Contaminated Sediment Transport in Los Alamos and Pueblo Canyons" received an approval with modifications letter on February 20, 2009. That approval establishes a schedule for implementation of actions and additional status or completion reports.

If you have any questions, please contact Danny Katzman at (505) 667-6333 (katzman@lanl.gov) or Nancy Werdel at (505) 665-3619 (nwerdel@doeal.gov).

Sincerely,

Michael J. Graham, Associate Director  
 Environmental Programs  
 Los Alamos National Laboratory

Sincerely,

For David R. Gregory, Project Director  
 Environmental Operations  
 Los Alamos Site Office



MG/DG/DK:sm

Attachment: Status Report on Actions Completed to Date on the Interim Measure Work Plan to Mitigate Contaminated Sediment Transport in Los Alamos and Pueblo Canyons (LA-UR-09-1671)

Cy: Laurie King, EPA Region 6, Dallas, TX  
Tom Skibitski, NMED-OB, Santa Fe, NM  
Neil Weber, San Ildefonso Pueblo  
Steve Yanicak, NMED-OB, White Rock, NM  
Cheryl Rodriguez, DOE-LASO, MS A316  
Nancy Werdel, DOE-LAO, MS A316  
Keyana DeAgüero, DOE-LASO (date-stamped letter emailed)  
Steve Veenis, EP-LWSP, MS K490  
Danny Katzman, EP-LWSP, MS M992  
Kristine Smeltz, EP-WES, MS M992  
Michael J. Graham, ADEP, MS M991  
Paul Huber, EP-LWSP, MS M992  
Alison M. Dorries, EP-WES, MS M992  
EP-LWSP File, MS M992  
RPF, MS M707  
Public Reading Room, MS M992  
IRM-RMMSO, MS A150 (date-stamped letter emailed)

## **Status Report on Actions Completed to Date on the Interim Measure Work Plan to Mitigate Contaminated Sediment Transport in Los Alamos and Pueblo Canyons**

The following actions have been completed to date.

### **Willow planting**

In April 2008, approximately 4000 willows were planted in a section of Pueblo Canyon between the Los Alamos County's (LAC's) new wastewater treatment plant outfall location and Hamilton Bend. The goal is to increase bank stabilization and sediment-trapping efficiency in a newly wetted portion of the canyon. The attached orthophoto and photographs show two before-and-after time-series perspectives that illustrate the successful response of the planting.

### **Los Alamos Canyon low-head weir excavation**

To date, preparation has begun for field activities associated with excavation of the sediment behind the low-head weir in Los Alamos Canyon. Excavation activities are expected to begin by early April 2009.

### **Other Pueblo Canyon mitigations**

Progress has been made on coordination efforts with LAC for mitigation actions planned for portions of Pueblo Canyon that are on LAC property, including construction of the cross-vane structures intended to reduce the magnitude of storm flows.

### **Gage station upgrades**

Design work is being completed for upgrades planned for gaging stations E042 and E050 upcanyon and downcanyon of the Los Alamos Canyon low-head weir. Construction is projected to begin this spring and before summer rains.

Conceptual planning for upgrades to gage station E110 has been completed and is awaiting approval from San Ildefonso before construction can begin. The upgrades include implementation of an early notification system that will transmit information to the Buckman Direct Diversion system for use in determining the need to shut off diversion of water from the Rio Grande.



Orthophotograph of the Pueblo Canyon willow-planting areas shown in the following before-and-after photographs

**Location 1**

Initial after planting



Approximately 5 months after planting



**Location 2**

Initial after planting



Approximately 5 months after planting

