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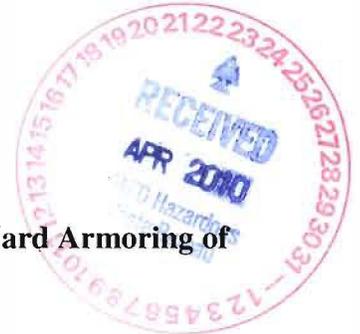
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National Nuclear Security Administration
 Los Alamos Site Office, MS A316
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Date: APR 23 2010
 Refer To: EP2010-0193

James 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 Documentation Demonstrating Completion of Hard Armoring of Stream Banks in South Fork Acid Canyon

Dear Mr. Bearzi:

In accordance with the New Mexico Environment Department's (NMED's) Approval with Modifications for the Supplemental Interim Measure Work Plan to Mitigate Contaminated Sediment Transport in Los Alamos and Pueblo Canyons (LANL-HWB-08-004) letter, dated February 20, 2009, Los Alamos National Laboratory has completed the rock armoring to stabilize eroded stream banks in the South Fork of Acid Canyon. The specific area requiring stabilization and the approach implemented was agreed upon during a field visit with NMED on October 29, 2009.

If you have any questions, please contact Steve Veenis at (505) 667-0013 (veenis@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,

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



MG/DG/DM/SV:sm

Attachment: Two hard copies with electronic files – Documentation of Completion of Stream Bank Stabilization in the South Fork of Acid Canyon (LA-UR-10-1877)

Cy: (w/att.)

Laurie King, EPA Region 6, Dallas, TX
Steve Yanicak, NMED-DOE-OB, MS M894
David Cobrain, NMED-HWB, Santa Fe, NM
Nancy Werdel, DOE-LASO, MS A316
Steve Veenis, EP-CAP, MS M992
RPF, MS M707 (with two CDs)
Public Reading Room, MS M992
Kristine Smeltz, EP-WES, MS M992

Cy: (w/o att.)

Tom Skibitski, NMED-OB, Santa Fe, NM
Annette Russell, DOE-LASO (date-stamped letter emailed)
Michael J. Graham, ADEP, MS M991
Dave McInroy, EP-CAP, MS M992
IRM-RMMSO, MS A150 (date-stamped letter emailed)

Documentation of Completion of Stream Bank Stabilization in the South Fork of Acid Canyon

The project to stabilize locally nonvegetated stream banks in the south fork of Acid Canyon (south fork) has been completed. As requested by the New Mexico Environment Department (NMED) in its February 20, 2009, letter, "Approval with Modifications, Supplemental Interim Measures Work Plan to Mitigate Contaminated Sediment Transport in Los Alamos and Pueblo Canyons" (LANL-HWB-08-004), this work involved rock-armorning in part of the south fork between the E055.5 gaging station and the confluence with Acid Canyon. The specific area requiring stabilization and the approach implemented were agreed upon during a field visit with NMED on October 29, 2009. At this location, large rocks in the center of the stream channel appeared to have forced ephemeral flow to the sides, thus eroding the banks. The stabilization work involved removing the rocks from the center of the channel and using them to armor the adjacent banks. Flat rocks were set against the banks in an imbricated design to minimize the potential for flows to move them. Figures 1a, 1b, and 1c show the channel before stabilization, and Figures 2a and 2b show the channel after stabilization.



Figure 1a View of the south fork Acid Canyon stream channel showing nonvegetated banks where large rocks deflected flow, looking downstream



Figure 1b View of the south fork Acid Canyon stream channel at same location shown in Figure 1a, looking upstream



Figure 1c Closeup of nonvegetated bank



Figure 2a View of rock-armoring, looking downstream



Figure 2b View of rock-armoring, looking upstream