



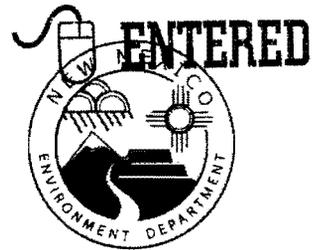
SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Phone (505) 476-6000 Fax (505) 476-6030
www.nmenv.state.nm.us



DAVE MARTIN
Cabinet Secretary

RAJ SOLOMON, P.E.
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 1, 2011

George J. Rael, Assistant Manager
U.S. Department of Energy
National Nuclear Security Administration
Los Alamos Site Office
3747 West Jemez Road, MS A316
Los Alamos, NM 87544

Michael Graham, Associate Director
Environmental Programs
Los Alamos National Security, L.L.C.
P.O. Box 1663, MS 991
Los Alamos, NM 87545

**RE: APPROVAL WITH MODIFICATIONS
2010 GEOMORPHIC CHANGES AT SEDIMENT TRANSPORT MITIGATION
SITES IN THE LOS ALAMOS AND PUEBLO CANYON WATERSHEDS
LOS ALAMOS NATIONAL LABORATORY (LANL)
EPA ID #NM0890010515
HWB-LANL-11-034**

Dear Messrs. Rael and Graham:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *2010 Geomorphic Changes at Sediment Transport Mitigation Sites in the Los Alamos and Pueblo Canyon Watersheds* (Report), dated May 2011 and referenced by LA-UR-2970/EP2011-0157. NMED has reviewed the Report and hereby issues this Approval with Modifications.

34595



Modifications:

1) Figures 2, 6, 10, 13, 16 and 19, plan view orthophotos.

NMED Comment: The following changes to these figures must be implemented for all future reports documenting geomorphic changes.

- a) change the color of the line depicting the thalweg for better contrast and identify differences in lengths,
- b) locate the cross section labels to the side for better aerial views of channel,
- c) provide the dates of the imagery used,
- d) provide geomorphic evaluation maps and cross-sections in addition to the aerial maps, and
- e) provide a figure depicting the willow plantings, plant density, and annual changes in willow distribution.

2) Information not included in the Report

NMED Comment: The following data and information were not included in the current Report, but must be incorporated in all future reports documenting geomorphic changes.

- a) a map depicting channel banks and terraces utilizing GIS,
- b) information on observations of the health and success of the willow plantings, which must be performed during the summer or fall seasons,
- c) photographic documentation of willow plantings observations with successive photographs taken from the same locations and vantage points, and
- d) photographic documentation of all grade control structures, as well as examples of bank erosion and aggradation at surveyed cross section locations, with successive photographs taken from the same locations and vantage points.

Messrs. Rael and Graham

July 1, 2011

Page 3

The next report documenting observed geomorphic changes in the Los Alamos and Pueblo Canyons Watershed is due on **May 31, 2012**. Please contact Ben Wear at (505) 476-6041 should you have any questions.

Sincerely,



John E. Kieling

Acting Chief

Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
N. Dhawan, NMED HWB
B. Wear, NMED HWB
S. Yanicak, NMED DOE OB, MS J993
T. Skibitski, NMED DOE OB
L. King, EPA 6PD-N
P. Maggiore, DOE-LASO, MS A316
S. Veenis, EP-CAP, MS M992
C. Rodriguez, DOE-LASO, MS A316

File: Reading and LANL '11, Los Alamos/Pueblo Canyons Surface Water