



BILL RICHARDSON  
GOVERNOR

State of New Mexico  
**ENVIRONMENT DEPARTMENT**

Hazardous Waste Bureau  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
Telephone (505) 428-2500  
Fax (505) 428-2567  
www.nmenv.state.nm.us

TA21



RON CURRY  
SECRETARY

DERRITH WATCHMAN-MOORE  
DEPUTY SECRETARY

Reading Bill  
mailed  
6/4/04  
cm

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

June 4, 2004

Elizabeth Withers, NEPA Compliance Officer  
Los Alamos Site Office  
Department of Energy  
528 35<sup>th</sup> Street  
Los Alamos, NM 87544

**RE: FLOODPLAINS/WETLANDS ASSESSMENT FOR LANL CONVEYANCE AND  
TRANSFER PROJECT: RENDIJA AND DP CANYONS  
LOS ALAMOS NATIONAL LABORATORY, NM0890010515**

Dear Ms. Withers:

The New Mexico Environment Department (NMED) has reviewed the Department of Energy (DOE) document titled "*Floodplains/Wetlands Assessment for LANL Conveyance and Transfer Project: Rendija and DP Canyons*," dated May 2004 and referenced by LA-UR-04-3112, and provides the following comments.

**DP Canyon:**

1. Due to historical releases from Technical Area (TA) 21 that resulted in contamination of sediments in DP Canyon, and the proximity of the proposed fencing to the tritium facility located at DP East and potential exposure from activities at the Los Alamos Neutron Science Center (LANSCE) located at TA-53, the location of the proposed fence must be reevaluated.
2. DP Canyon received untreated and treated effluent from plutonium processing operations at TA-21, resulting in sediments contaminated with organic constituents, metals, and

30266



radionuclides such as cesium-137 and strontium-90. Areas with sediments thusly contaminated should not be included in the conveyed property. The fence should therefore be relocated to the mesa top to restrict individuals from entering the canyon bottom where the contamination exists. If access to the canyon bottom is allowed, a detailed risk assessment and necessary remediation must be completed prior to transfer or conveyance of the parcel. In any event, public access to the canyon and areas with contaminated sediments must be restricted.

3. DOE must evaluate the proposed land use, conduct an NMED-approved appropriate risk assessment, receive prior approval from the State of New Mexico for the transfer or conveyance, and submit a permit modification prior to transfer or conveyance of land. This position was unequivocally stated in a Notice of Violation issued to DOE on November 6, 2002.

**Rendija Canyon:**

4. The scale on the map titled "Location of Rendija Canyon C & T tract W/Projects" appears to be incorrect.
5. Placement of boulders in the Rendija Canyon stream channel to prevent access by off road vehicles may be futile due to the magnitude of post Cerro Grande flood flows in Rendija Canyon.
6. The following peak flows have occurred in Rendija Canyon since the Cerro Grande fire. Rendija Canyon post fire peak flows – 2001 (2120 ft<sup>3</sup>/s); 2002 (486 ft<sup>3</sup>/s); and 2003 (856 ft<sup>3</sup>/s). These flows are moving very large-sized boulders and unless they are buried deeply, will likely remove most any obstacle or barrier placed under this action. Even if the obstacles were anchored enough to not be moved, the erosion caused by these flows as they pass around these boulders would be unacceptable. This would necessitate additional boulders to block the newly formed channel after each major flood event. Additionally, off-road vehicle drivers tend to be adventurous and their vehicles robust. Boulders may not be sufficient to bar their entry to the canyon.
7. NMED suggests that fencing that is regularly washed out and replaced (until watershed restoration is well advanced) would be preferable to placing large, flow impeding, erosion causing boulders that block normal stream flow or that may be moved randomly by extreme flows into positions that may cause an increase in erosion.
8. NMED agrees with alternative "e", which discusses installment of weirs at strategic locations to trap lead bearing sediment. However, at the rate of sediment transport occurring and expected to continue in the near future - and possibly long-term - in Rendija Canyon, these basins would have to be cleaned out more frequently than at the estimated 100 year frequency flood intervals as discussed.

Ms. Elizabeth Withers

June 4, 2004

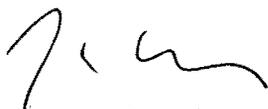
Page 3

9. Several "mortar impact areas" [solid waste management units (SWMUs) 00-011(a, c and e)] exist in this area of Rendija Canyon, adjacent to and down gradient of the Sportsmans Club. Munitions and Explosives of Concern (MEC) such as "live mortar rounds," including 2.36-in. bazooka rounds, 60-mm mortars, 37- and 20- mm cannon shells should be expected in this area. Therefore, prior to excavating, the area must be investigated for unexploded ordnance (UXO) and other MEC that may have migrated down gradient during runoff events or landed off-target.
  
10. The areas identified as "mortar impact areas" must be investigated and remediated prior to any transfer or conveyance of land to Los Alamos County or other entity as MEC and UXO are serious safety concerns. Investigation techniques and standards that were viable a few years ago are not adequate today. NMED requires that the DOE investigate and remove any MEC/UXO prior to any construction activities (moving boulders or installation of fencing), in addition to conveyance or transfer of land. DOE must also assess the level of investigation and removal given the current and potential future land use of these areas.

NMED requires that the DOE obtain prior approval for any investigation and remediation of contamination and MEC/UXO that may be present in DP and Rendija Canyons that are impacted or potentially impacted by the activities proposed in the Floodplains/Wetlands assessment. NMED uses the work plan approval process to facilitate such prior approval. NMED also requires the DOE to submit a work plan for approval outlining the investigation for and potential removal of any MEC/UXO prior to any construction activities.

Should you have any questions, please feel free to contact John Young of my staff at (505) 428-2538.

Sincerely,



James P. Bearzi

Chief

Hazardous Waste Bureau

JPB:jry

cc: J. Kieling, NMED HWB  
D. Goering, NMED HWB  
C. Voorhees, NMED DOE-OB  
C. DeSaillan, NMED OGC

Ms. Elizabeth Withers

June 4, 2004

Page 4

D. McInroy, LANL RS, MS M992  
N. Quintana, LANL ECR, MS M992  
B. Ramsey, LANL RRES, MS M992  
L. Cummings, DOE LASO, MS A316  
D. Gregory, DOE LASO, MS A316  
J. Vozella, DOE LASO, MS A316  
P. Bacon, Los Alamos County  
L. King, EPA 6PD-N  
file: Reading