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BILL RICHARDSON  
Governor

DIANE DENISH  
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](http://www.nmenv.state.nm.us)



RON CURRY  
Secretary

SARAH COTTRELL  
Deputy Secretary

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

May 14, 2010

George J. Rael  
Environmental Operations Manager  
Los Alamos Site Office  
Department of Energy  
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  
DRILLING WORK PLAN FOR PERCHED-INTERMEDIATE PUMPING WELL  
CDV-16-4ip  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID#NM0890010515  
HWB-LANL-MISC-GW**

Dear Messrs Rael and Graham:

The New Mexico Environment Department (NMED) is in receipt of the United States Department of Energy (DOE) and the Los Alamos National Security, L.L.C.'s (collectively, the Permittees) document entitled *Drilling Work Plan for Perched-Intermediate Pumping Well CdV-16-4ip* (Plan) dated April 27, 2010 and referenced by EP2010-0177.

Pursuant to Section III.M.2 of the March 1, 2005 Order on Consent (Order), NMED has reviewed the Plan and hereby issues this approval with the following modifications.

1. Within 100 feet of encountering the expected perched zone (at approximately 700 feet below ground surface), the Permittees must cease the use of drilling fluids or additives such as QUIK-FOAM or AQF-2. Although the primary purpose for drilling CdV-16-4ip is for hydraulic properties testing, the post-testing usefulness of the well shall be directed at contaminant detection, characterization, and monitoring with reference to potentially replacing the upper screens in well R-25; specifically screens 1 and 2.

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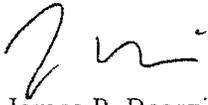


2. During drilling, well construction, and pumping tests, the Permittees must make every attempt to limit the amount of mixing between perched groundwater in the Otowi Member of the Bandelier Tuff and the Puyé Formation, assuming the perched zones in these stratigraphic units are not hydraulically connected.

Nothing in this letter shall be construed as an abrogation of NMED's rights to pursue enforcement actions against the Permittees for failure to comply with the requirements of the Order.

Should you have any questions, please contact Michael Dale of my staff at (505) 661-2673.

Sincerely,



James P. Bearzi  
Chief  
Hazardous Waste Bureau

JPB:md

cc: D. Cobrain, NMED HWB  
K. Roberts, NMED HWB  
J. Kulis, NMED HWB  
M. Dale, NMED HWB  
T. Skibitski, NMED DOE OB  
S. Yanicak, NMED DOE OB, MS M894  
B. Olson, NMED GWQB  
L. King, EPA 6PD-N  
D. Katzman, EP-LWSP, MS M992  
H. Shen, DOE LASO, MS A316

File: '10 Reading and LANL Groundwater General, Drilling Work Plan for CdV-16-4ip