

TALB



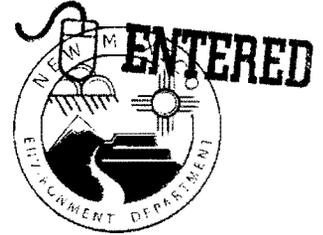
BILL RICHARDSON  
Governor

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Lieutenant Governor

NEW MEXICO  
ENVIRONMENT DEPARTMENT

*Hazardous Waste Bureau*

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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  
WORK PLAN FOR REDRILLING WELL R-47  
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 *Work Plan for Redrilling Well R-47* (Plan) dated November 13, 2009 and referenced by EP2009-0606.

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. During the redrilling of R-47, the Permittees must determine the depth intervals of all perched intermediate groundwater, including the deep perched aquifer encountered during the original R-47 borehole and monitored by R-47i. If the deep perched zone is encountered, the Permittees shall allow the water in the borehole to stabilize followed by accurately measuring the water level in the borehole. The measured water level at this location will improve the potentiometric surface map (i.e., flow direction determination) for the deep perched aquifer. The improved map will aid in refining the subsurface



conceptual model for contaminant transport beneath Consolidated Unit 16-021(c)-99, which is currently being investigated to support the Corrective Measures Evaluation process required by the Order.

2. If perched groundwater is encountered at more shallow depths than the R-47i horizon, the Permittees must notify NMED by phone within one business day of each such occurrence and must minimize the impact of bentonite or other drilling fluids on the perched horizon(s). If NMED determines that the perched water requires monitoring, the Permittees shall install an intermediate well at that horizon. A work plan for the intermediate well(s), if required, must be submitted to NMED no later than 30 days following the completion of R-47.

Please contact Michael Dale (505) 661-2673 should you have any questions.

Sincerely,



James P. Bearzi  
Chief  
Hazardous Waste Bureau

BRZ:md

cc: D. Cobrain, NMED HWB  
K. Roberts, NMED HWB  
J. Kulis, NMED HWB  
M. Dale, NMED HWB  
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File: '10 Reading and LANL Groundwater General, Redrilling Work Plan for R-47