October 29, 2009

David Gregory  
Project Director, Environmental Operations  
Los Alamos Site Office, Department of Energy  
3747 West Jemez Road, Mail Stop A316  
Los Alamos, NM 87544

David McInroy  
Remediation Services Deputy Project Director  
Los Alamos National Laboratory  
P.O. Box 1663, MS M992  
Los Alamos, NM 87545

RE: APPROVAL WITH MODIFICATION  
DRILLING WORK PLAN FOR REGIONAL AQUIFER WELL R-50  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID #NM0890010515  
HWB-LANL-MISC-GW

Dear Messrs. Gregory and McInroy:

The New Mexico Environment Department (NMED) is in receipt of the United States Department of Energy (DOE) and Los Alamos National Security (LANS) (collectively, the Permittees) document entitled Drilling Work Plan for Regional Aquifer Well R-50 (Plan) dated October 16, 2009 and referenced by EP2009-0507.

NMED has reviewed the Plan and hereby issues this Approval with the following modifications. If the Permittees fail to implement the modifications, the approval for this document will be automatically rescinded.

1. If perched intermediate water is encountered during drilling of well R-50, the Permittees must notify NMED by phone within one business day of each such occurrence and shall minimize the impact of bentonite and drilling fluids on the perched horizon. If NMED determines that the perched water horizon requires monitoring, the Permittees shall install an intermediate well in that horizon, either in the R-50 borehole or in a separate borehole at a nearby location approved by NMED. If the Permittees choose to install the
intermediate well in the R-50 borehole, they shall include the intermediate well in the proposed design for R-50. If the Permittees choose to install the intermediate well in a separate borehole, they shall submit to NMED a drilling work plan for the intermediate well no later than 30 days after the completion of R-50.

2. In a letter dated August 31, 2009, NMED directed the Permittees to install well R-50 no later than December 31, 2009. NMED expects the Permittees to meet the deadline. However, should unforeseen field conditions prevent the Permittees from completing well R-50 prior to the planned closure of the Laboratory in late December 2009, the Permittees shall reschedule drilling operations to avoid prolonged cross-communication between different aquifer zones in an unfinished borehole. The Permittees shall notify NMED by December 15, 2009 if they are unable to meet the December 31, 2009 well completion due date.

Should you have any questions, please contact Jerzy Kulis of my staff at (505) 476-6039.

Sincerely,

James P. Bearzi
Chief
Hazardous Waste Bureau

BRZ:jk

cc: J. Kieling, NMED HWB
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file: Reading and LANL General (Groundwater General)