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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 28, 2009

David Gregory
Project Director, Environmental Operations
Los Alamos Site Office, Department of Energy
528 35th Street, 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 OF REQUEST FOR VARIANCE FROM WORK PLAN FOR
DEEPENING OF BOREHOLE CdV-16-3(i) (WELL R-48)
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 and Los Alamos National Security, LLC (collectively, the Permittees) document entitled *Update on Borehole CdV-16-3(i) (Well R-48) and Request for Variance on Approved Work Plan* (hereafter, the Request) dated July 6, 2009 and referenced by EP2009-0312.

The Permittees state in the Request that attempts to advance the CdV-16-3(i) borehole were unsuccessful due to the inability to remove cuttings from the borehole by using only air and water. The Permittees propose to use drilling additives, specifically the foaming agent AQF-2 and foam stiffener EZ-MUD GOLD, to improve borehole stability and cuttings removal. The Permittees also propose to remove the limitation of drilling in 100-ft increments, since drilling additives, if approved, are going to be used through the entire drilling interval.

NMED hereby grants the request for variance from the work plan for deepening of the CdV-16-3(i) borehole by approving the use of drilling additives AQF-2 and EZ-MUD GOLD, and by allowing a non-stop drilling until the total depth is reached. To mitigate the potential effects of drilling additives on groundwater chemistry, the Permittees must perform a thorough well



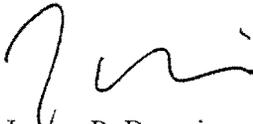
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development, using methods that will maximize removal of all traces of drilling additives from the well screen and the surrounding formation. The Permittees must also perform testing to demonstrate that drilling additives have been removed and are not affecting chemistry of groundwater.

The Permittees must be cautioned that their previous efforts to use drilling additives in well construction resulted in a number of wells that became negatively impacted by drilling additives and, consequently, unsuitable for monitoring purposes. In the event that testing performed after development of well CdV-16-3(i) indicates that drilling additives are affecting chemistry of groundwater, the Permittees will likely be required to replace that well.

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

Sincerely,



James P. Bearzi
Chief
Hazardous Waste Bureau

JPB:jk

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file: Reading and LANL General (Groundwater General)