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FEB 2 9 2008

Date: February 29, 2008 Refer To: EP2008-0076

James P. Bearzi, Bureau Chief Hazardous Waste Bureau New Mexico Environment Department 2905 Rodeo Park Drive East, Building 1 Santa Fe, NM 87505-6303

Subject: Submittal of Los Alamos and Pueblo Canyons Groundwater Monitoring Well Network Evaluation and Recommendations, Revision 1

Dear Mr. Bearzi:

Enclosed please find two hard copies with electronic files of the Los Alamos and Pueblo Canyons Groundwater Monitoring Well Network Evaluation and Recommendations, Revision 1. This revised report is submitted in response to a requirement in the New Mexico Environment Department's (NMED's) notice of disapproval (NOD), dated January 18, 2008, of the first submittal of this report on December 15, 2007.

The revised report addresses the comments provided by NMED in its NOD. Specifically, it addresses the following:

1. Evaluation of potential lateral flow of perched-intermediate groundwater

As requested, the conceptual model discussion (section 2) and hydrology section (Appendix D, including figure) were edited to include a discussion of potential lateral flow within the Guaje Pumice Bed. In addition, the evaluation of the monitoring well locations (Appendix C) was modified to include potential sources resulting from such lateral flow. Finally, additional drilling is recommended to investigate the presence of perched-intermediate groundwater along this potential pathway. If sufficient saturation is found, a perched-intermediate well will be constructed.

2. Inclusion of Technical Area (TA) 53 as a Potential Breakthrough Location

The report was modified to include a discussion of the status of the former TA-53 wastewater impoundments and to include a potential source area beneath the impoundments. In addition, some of the source areas added and analyzed to represent lateral flow within the Guaje Pumice Bed (see #1 above) are located beneath TA-53.

3. Validation of Statistical Analysis

Appendix C was modified to discuss the validity of the statistical analysis. Two additional figures were included to demonstrate the normality of the log-transformed particle travel times.

If you have any questions, please contact Danny Katzman at (505) 667-6333 (katzman@lanl.gov) or Mat Johansen at (505) 665-5046 (mjohansen@doeal.gov).

Sincerely,

Susan G. Stiger, Associate Director

Environmental Programs

Los Alamos National Laboratory

Sincerely,

David R. Gregory, Project Director

Environmental Operations
Los Alamos Site Office

SS/DG/PH/DK:sm

Enclosures: 1) Two hard copies with electronic files - Los Alamos and Pueblo Canyons

Groundwater Monitoring Well Network Evaluation and Recommendations,

Revision 1 (EP2008-0076)

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