



## Department of Energy

Washington, DC 20585

December 24, 1991

Mr. Joseph J. Holonich, Director  
Repository Licensing and Quality  
Assurance Project Directorate  
Division of High-Level  
Waste Management  
Office of Nuclear Material  
Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Linehan:

During the FOCUS '91, Nuclear Waste Packaging Conference, held from September 29-October 2, 1991, Mr. Philip Reed, of the U.S. Nuclear Regulatory Commission, requested reports on the ion-exchange properties of zeolites in tuff from Yucca Mountain and studies on zeolites to remove radionuclides in tuff from Yucca Mountain. Enclosed are several reports issued by Los Alamos and studies on zeolites to remove radionuclides in tuff from Yucca Mountain.

If you have any questions regarding the enclosures, please contact Cori Macaluso of my staff at FTS 896-2837.

Sincerely,

Linda J. Desell, Chief  
Regulatory Integration Branch  
Office of Systems and Compliance  
Office of Civilian Radioactive  
Waste Management

*no enclosures received*

Enclosures:

- 1) Summary of Sorption Measurements Performed with Yucca Mountain, Nevada, Tuff Samples and Water from Well J-13, Kimberly W. Thomas, Los Alamos National Laboratory, Issued December 1987.
- 2) Yucca Mountain Project Far-Field Sorption Studies and Data Needs, Arend Meijer, Los Alamos National Laboratory, Issued September 1990.

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- 3) Preliminary Report on Sorption Modeling, H. R. Fuentes, W. L. Polzer, J. Gruber, B. Lauctes, E. H. Essington, Los Alamos National Laboratory, Issued August 1987.
- 4) "Deconvolution of Multivalent Cation-Exchange Isotherms", Ines R. Triay and Robert S. Rundberg, Los Alamos National Laboratory, Journal of Physical Chemistry, July 13, 1989.
- 5) "Application of deconvolution to the analysis of univalent ion-exchange isotherms in zeolites X and Y", Ines R. Triay and Robert S. Rundberg, Los Alamos National Laboratory, Zeolites, Vol. 9, May 1989.
- 6) "Radionuclide Migration as a Function of Minerology", Ines R. Triay, Alan J. Mitchell, Martin A. Ott, Los Alamos National Laboratory, Radioactive Waste Management.
- 7) "Determination of Selectivity Coefficient Distributions by Deconvolution of Ion-Exchange Isotherms, Ines R. Triay and Robert S. Rundberg, Los Alamos National Laboratory, Journal Of Physical Chemistry, Vol. 91, 1987.

cc:

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