



Pacific Northwest Laboratories
 P.O. Box 999
 Richland, Washington U.S.A. 99352
 Telephone (509)

Telex 15-2874 375-3764

July 14, 1988

Dr. Don Sherry, Section Leader
 Division of High-Level Waste Management
 Office of Nuclear Material Safety and Safeguards
 U.S. Nuclear Regulatory Commission
 Mail Stop NMSS/DHLWM
 Washington DC 20555

Dear Dr. Sherry:

I appreciated the opportunity to talk with you on July 8, 1988 on the subject of possibly applying the GEO2 code to the Tuff repository thermohydrological analysis for the Nuclear Regulatory Commission.

One additional piece of information that may be of interest is that we have an on-going contract with the NRC's Reactor Systems Branch. Since you indicated that there might be some work in thermohydrological analysis in this fiscal year, it might be advantageous to use this existing channel of work authorization which applies to all NRC branches. All we have to do is to submit an NRC Form 189 "Project and Budget Proposal for NRC Work" based on your Statement of Work. The paper work involved is minimal, and usually the turn-around time is fast (a few weeks if the contract people on both sides get advance notice).

Attached is a paper published recently for the International Conference on Groundwater Contamination held in Amsterdam, October 1987. It should give you a general idea about our capabilities in the area of thermohydrological analysis. It should be noted that the work described in the paper is for basalt, a saturated medium. The GEO2 code, on the other hand, was developed for a partially saturated medium.

If I can provide you with any additional information, please call me at (509) 375-3764.

Sincerely,

S. H. Bian
 Senior Research Engineer
 Fluid and Thermal Science Section

SHB:bjn

Attachment

CC: R.L. Ballard (NRC)
 R. Code11 (NRC)
 C.W. Stewart (PNL)

8807180273 XA
 880714
 -886

426.1
 NH14
 Wm-11