

September 23, 2002

Dr. English C. Pearcy, Manager  
Geohydrology & Geochemistry  
Center for Nuclear Waste Regulatory Analyses  
6220 Culebra Road, Building 189  
San Antonio, Texas 78228-0510

SUBJECT: REVIEW AND APPROVAL OF THE CENTER FOR NUCLEAR WASTE  
REGULATORY ANALYSES REVIEWS OF DOE AGREEMENT ITEMS 2.03,  
2.04, AND 3.08 RELATING TO RADIONUCLIDE TRANSPORT KEY  
TECHNICAL ISSUE, DATED AUGUST 29, 2002

Dear Dr. Pearcy:

The Center for Nuclear Waste Regulatory Analyses (CNWRA) reviews of the U.S. Department of Energy (DOE) responses to the Radionuclide Transport (RT) Agreement Items 2.03, 2.04, and 3.08, submitted to the U.S. Nuclear Regulatory Commission (NRC) on August 29, 2002, have been reviewed by the NRC staff. These products are programmatically and technically acceptable.

RT Agreement 2.03 states that DOE will provide NRC with a detailed testing plan for Alluvial Testing Complex. RT Agreement 2.04 states that DOE will provide pre-test predictions for the Alluvial Testing Complex. DOE combined its responses to these Agreements in a single report submitted April 30, 2002. CNWRA review of this report was used in its entirety in the NRC's response to DOE, transmitted in a letter dated August 30, 2002. As we discussed, the status of RT 2.03 is listed as "need additional information," whereas, that of RT 2.04 is listed as "complete."

RT Agreement 3.08 requires that DOE will provide justification of microspheres as analogs for colloids. DOE submitted a letter report on April 26, 2002, describing the work to justify the use of microspheres. CNWRA review correctly identified areas of concern, and suggested the need for additional information, relating to the use of microspheres for simulating transport of colloids through alluvium. CNWRA's review was used in the NRC's response to DOE, sent in a letter on August 16, 2002. The status of RT 3.08 is listed as "needs additional information."

If you have any questions concerning this review, please contact me at (301) 415-6597.

Sincerely,  
/RA/

John W. Bradbury  
Program Element Manager  
High-Level Waste Branch  
Division of Waste Management  
Office of Nuclear Material Safety  
and Safeguards

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OFC	HLWB						
NAME	J. Bradbury						
DATE	09/23/02						

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