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WM Record File  
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WM Project

Docket No.

PDR ☒

LPDR

Mr. Robert E. Browning, Director  
Waste Management Division  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Distribution:

REP MSB  
JDB

Linehan  
Hildenbrand

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Dear Mr. Browning:

DATA REVIEW OF HYDRAZINE-EXPERIMENT RECORDS

This is in response to the letter of March 30, 1987, from Mr. John J. Linehan to Mr. John H. Anttonen, in which a data review of hydrazine-experiment records was requested prior to final preparation of the NRC STP "Use of Hydrazine to Experimentally Simulate Expected Site Repository Redox Conditions and Reactions." We have agreement with Mr. P. Hildenbrand of your staff to hold the data review on July 21 and 22, 1987, at the PNL Facility (Building 331, Room 69) from 8:30am to 4:30pm. Specific details are being arranged with your staff but I would like to bring to your attention, some important points that have been discussed.

From about 1980 to 1984 the DOE used hydrazine experiments to create a reducing environment for experiments to study sorption of radionuclides. The hydrazine was used in these developmental experiments to overcome the sluggish redox reactions and long testing time for experiments without hydrazine. As stated in DOE comments on the draft STP, the use of hydrazine was intended not to "simulate" repository conditions but to simply investigate sorption in a reducing environment.

The DOE has discontinued using hydrazine and is now using crushed basalt to control the redox environment in the sorption studies. At this time, DOE does not intend to use the results of tests with hydrazine (from either the previous tests or new tests) in a license application. If, however, DOE's position should change, we would expect to keep NRC informed.

Your staff has requested an opportunity for them to examine the DOE data and finalize the STP to remove any ambiguity about NRC's position using hydrazine if this subject should come up in the future. Accordingly, the DOE will support your staff to the extend possible and consistent with DOE's program objectives.



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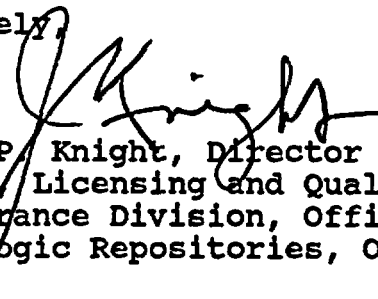
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I would like to note that we do not anticipate any follow on actions to result from this examination but would be interested in any conclusions the NRC staff develops as a result of this activity.

Please contact Mr. M. J. Furman on FTS 444-7062 for specific discussions regarding the agenda and Mr. J.E. Mecca on FTS 444-5038 for regulatory interface and meeting arrangement and logistics.

Sincerely,



James P. Knight, Director  
Siting, Licensing and Quality  
Assurance Division, Office of  
Geologic Repositories, OCRWM

Copy to:

J. Anttonen, BWIP  
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