

MAY 30 1991

89001358

HLW GLASS/4.2.91 RESPONSE

- 1 -

Mr. Dwight E. Shelor
Acting Associate Director for
Systems and Compliance
Office of Civilian Radioactive Waste Management
U.S. Department of Energy RW-30
Washington, D.C. 20585

Dear Mr. Shelor:

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION REQUEST FOR BOROSILICATE GLASS
SAMPLES

I am writing in response to your April 2, 1991, letter regarding our ongoing interest in obtaining samples of simulated borosilicate glass waste of the kind expected to be produced at the Defense Waste Processing Facility and West Valley Demonstration Project as well as samples of Approved Reference Material (ARM-1) from the Materials Characterization Center, Pacific Northwest Laboratory. As stated in our August 21, 1990, request, the staff plans to use the glass samples for independent research activities on this expected high-level radioactive waste form.

In your letter, you suggested that it would be appropriate for the U.S. Nuclear Regulatory Commission (NRC) technical and contractor staff to visit cognizant U.S. Department of Energy (DOE) facilities to become familiar with the processes by which glass samples were made and are used in the test program, to understand the experimental or testing procedures and analytical techniques, to review the test results obtained to date, and to establish points of contact between our respective technical organizations. I fully agree with your suggestion to visit cognizant DOE facilities and believe such interaction would be most beneficial to both NRC technical and contractor staff involved in the glass waste form research activities. As part of this activity, the staff would be especially interested in gaining an appreciation for any "lessons learned" by DOE and its contractors during the conduct of its research program.

There are, however, other suggestions in DOE's April 2, 1991, letter which I do not consider appropriate for a regulatory agency such as NRC to consider. First, it would be inappropriate for DOE to review the results of NRC contractor experiments or research prior to the release of the test results to the public. I am sure you recognize and appreciate the need for NRC to preserve both its independence and objectivity, especially as they might relate to potential licensing issues. This policy is not meant to preclude the direct technical interaction and communication between our respective research contractor staffs that would be expected in these research activities. In fact, I would encourage these scientist-to-scientist interactions, recognizing their benefit to the conduct of our respective research and testing programs. However, in order to encourage the early exchange of information sought by DOE in its proposal, the NRC staff is alternatively proposing a series of technical exchanges on the results of glass waste form experiments, when appropriate, which would be open to the public.

9106070243 910530
PDR WASTE
WM-1 PDR

109

The second DOE proposal in the April 2, 1991, letter was that NRC would conduct its borosilicate glass research activities in accordance with a DOE-approved quality assurance (QA) program per DOE's QA Requirements Document (QARD) RW-0214, Revision 4. NRC's technical assistance contractor, the Center for Nuclear Waste Regulatory Analyses (CNWRA), conducts all research and testing activities under a QA program that complies with the requirements of Appendix G (Quality Assurance) to 10 CFR Part 60. This QA program has been reviewed and accepted by the NRC staff. In accordance with the NRC/DOE site-specific procedural agreement, I am enclosing a copy of the CNWRA's QA plan for your information.

Finally, DOE proposed a meeting to formalize the cooperation between our respective staffs in conducting research. I do not believe a separate formal agreement with DOE is necessary for the conduct of our borosilicate glass research program. Rather, this issue can be addressed through the NRC/DOE site-specific procedural agreement which is presently being reviewed by DOE and NRC and being revised, as necessary. I do agree that the establishment of points-of-contact for technical communications would be desirable. The technical points-of-contact for NRC-sponsored research in this area are Dr. Richard A. Weller of the NRC (telephone 301/492-3458) and Dr. Hersh K. Manaktala of the CNWRA (telephone 512/522-5210). With regard to a meeting, I would propose that the meeting be at one of the "cognizant DOE facilities" to finalize the details for obtaining the desired glass samples and for gaining familiarity with DOE's glass waste form testing program. Please contact Mr. Michael P. Lee (telephone 301/492-0421) of the NRC to schedule a mutually convenient date for this meeting. Please also indicate who the DOE point-of-contact will be for glass waste form technical communications.

I appreciate DOE's efforts to satisfy our request for borosilicate glass samples and look forward to visiting the DOE facilities. Should you have any questions regarding this response, please contact Mr. Lee of my staff.

Sincerely,

(Original Signed by Joseph Holovich)
John J. Linehan, Acting Director
Repository Licensing and Quality
Assurance Project Directorate
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure: As stated

cc: w/o enclosure

R. Loux, State of Nevada
C. Gertz, DOE/NV
S. Bradhurst, Nye County, NV
M. Baughman, Lincoln County, NV
D. Bechtel, Clark County, NV
D. Weigel, GAO
W. Barnard, NWTRB
C. Thistlethwaite, Inyo County, CA

DISTRIBUTION AND CONCURRENCE: See next page.

DISTRIBUTION (w/o enclosure)

Central Files	NMSS R/F	HLPD R/F	LSS	LPDR
ACNW	PDR	On-Site Reps	BJYoungblood	JLinehan
RBallard	RWeller	JHolonich	MLee	STreby
CNWRA	MSilberberg	JRandall		

CONCURRENCE NOTE:

MSilberberg (RES/WMB) concurs with the following condition:

The letter refers to research work being planned under the technical assistance program. This is work that should be sponsored and funded by RES, but due to budget constraints it is not possible to do so at this time. In the Five-Year Plan, RES is planning to start spent fuel source-term research, as well as work on the glass waste form in fiscal year (FY) 1993. In the interest of continuity, RES agrees to allow NMSS/HLWM to continue to take the technical and funding lead with close coordination with RES during the FY 1991-1992 transition period, until the work is transferred to RES program in FY 1993. This process should be followed for other examples of research work currently under the technical assistance program.

MSilberberg 05/24/91

* Telephone concurrence

OFC :HLPD	MPL	:HLEG	raw	:HLEG	:HLPD	:RES/WMB*	MPL
NAME:MLee		:RWeller		:RBallard	:JHolonich	:MSilberberg	fr
Date:05/24/91		:05/24/91		:05/25/91	:05/24/91		

OFC :HLWM	:	:	:	:	:
NAME:JLinehan	:	:	:	:	:
Date:05/24/91	:	:	:	:	:

ADDENDUM

- 1 -

NOTE CONCERNING LETTER ENTITLED "U.S. NUCLEAR REGULATORY COMMISSION REQUEST FOR BOROSILICATE GLASS SAMPLES"

The concurrence copy of this letter is being redistributed due to the omission of the RES/WMB concurrence note on the concurrence page (page 3). This version is to supersede the version currently in circulation (dated May 30, 1991) and on file.

MLee, HLWM 06/12/91