

Distribution:

- WM File: 409.1 ✓
- WMEG
- NMSS
- REBrowning
- MJBell
- JTGreeves
- TCJohnson
- JCVoglewede
- RLJohnson
- JJLinehan
- DMattson
- Materials Section
- HJMiller
- JOBunting
- LBHigginbotham
- PDR & LPDR

WMEG/JCV/LETTER TO JEFF NEFF

DEC 30 1985

- 1 -

Mr. Jefferson O. Neff
 Program Manager
 U. S. Department of Energy
 Salt Repository Project Offices
 505 King Avenue
 Columbus, OH 43201-2693

SUBJECT: DOCUMENTS RELEVANT TO SALT WASTE PACKAGE WORKSHOP

Dear Mr. Neff:

Under separate cover, a number of published NRC staff and contractor reports are being transmitted to you. These documents, which are identified in the attachment to this letter, describe our work in the Salt Repository Waste Package area. Although these reports have previously been made available, they are being retransmitted as a set in preparation for the Salt Waste Package Workshop to be held January 22-24, 1986 in Columbus, Ohio.

The list of documents, which was informally reviewed and approved by your staff, has been modified. First, a series of reports (NUREG/CR-4026) dealing with the performance of engineered barrier systems, was inadvertently omitted from our original list. These reports have been added to the attached list and are included with those documents being transmitted to you. Second, Volume 2 of NUREG/CR-3472 was previously listed as an available report. This report, which is in preparation by our Office of Nuclear Regulatory Research, is unfortunately not yet available. The status of this document will be reported to you at a later date. These two modifications have been discussed with your staff.

Should you require further information regarding this transmittal, please contact John C. Voglewede of the Waste Management Engineering Branch at (301) 427-4275.

John J. Linehan
 Repository Projects Branch
 Division of Waste Management

WM Record File

106

WM Project

16

Docket No.

PDR

LPDR

(3)

- cc: L. Casey, DOE/SRPO
 R. Wu, DOE/SRPO
 T. Verma, NRC/SRPO
 D. Mattson (States)

8604180015 851230
 PDR WASTE PDR
 WM-16

Distribution:

(Return to WM, 623-SS)

OFC	: NMSS/WMEG	: NMSS/NREG	: NMSS/WMRP	: NMSS/WMEG	:	:
NAME	: JCVoglewede	: TCJohnson	: RLJohnson	: JJLinehan	:	:
DATE	: 12/23/85	: 12/23/85	: 12/30/85	: 12/30/85	:	:

DOE/NRC WASTE PACKAGE WORKSHOP

Listing of NRC Reports Applicable to the Workshop

Published Reports

- ATR-85(5810-01)-1ND K. Stephens et al., Methodologies for Assessing Long-Term Performance of High-Level Radioactive Waste Packages, Aerospace Corporation Report, May 1985.
- BNL Letter Report T.M. Sullivan, Estimates of the Maximum Permissible Fractional Number of High Level Waste Container Failures and Failure Rates That Allow Post Containment Radionuclide Release Criteria to be Met During the Containment Period, Brookhaven National Laboratory Informal Report, October 1985. [Transmitted by T. Sullivan (BNL) letter to E.A. Wick (NRC) dated October 16, 1985.]
- NRC Staff Report [Draft] "Draft Site Issues for Waste Package," [Draft] Issue-Oriented Site Technical Position (ISTP) for Salt Repository Project (SRP), Permian Basin Sites, September 1984. [Transmitted by H.J. Miller (NRC) letter to W.J. Purcell (DOE) dated November 2, 1984].
- NRC Staff Report [Draft] "Draft Site Issues for Waste Package," [Draft] Issue-Oriented Site Technical Position (ISTP) for Salt Repository Project (SRP), Gulf Coast Dome Sites, September 1984. [Transmitted by H.J. Miller (NRC) letter to W.J. Purcell (DOE) dated November 2, 1984].
- NRC Staff Report [Draft] "Draft Site Issues for Waste Package," [Draft] Issue-Oriented Site Technical Position (ISTP) for Salt Repository Project (SRP), Paradox Basin Sites, September 1984. [Transmitted by H.J. Miller (NRC) letter to W.J. Purcell (DOE) dated November 2, 1984].
- NRC Staff Report [Meeting Presentation] E.A. Wick, "How Reliable Does The Waste Package Have To Be?," Proceedings of the Workshop on the SOURCE TERM for Radionuclide Migration From High-Level Waste or Spent Nuclear Fuel Under Realistic Repository Conditions, Albuquerque, NM, November 13-15, 1984 (Published July 1985).
- NRC Staff Report Draft Generic Technical Position on Waste Package Reliability. [Transmitted by J.T. Greeves (NRC) memorandum to M.R. Knapp (NRC) and H.J. Miller (NRC) dated August 27, 1985.
- NRC Staff Report Draft Generic Technical Position on Licensing Assessment Methodology for HLW Geologic Repositories, July 1984.

- NUREG-0279 Determination of Performance Criteria for High-Level Solidified Nuclear Waste, Lawrence Livermore Laboratory Report, July 1977.
- NUREG/CP-0005 Proceedings of Conference on High-Level Radioactive Solid Waste Forms, Denver, CO, December 19-21, 1978.
- NUREG/CR-0895 Solidification of High-Level Radioactive Wastes, National Academy of Engineering Report, National Academy of Sciences, July 1979.
- NUREG/CR-2317
(BNL-NUREG-51449) Container Assessment - Corrosion Study of HLW Container Materials, Brookhaven National Laboratory Report,
Volume 1, Nos. 1-2, "Quarterly Progress Report, April - June 1981," December 1981.
Volume 1, No. 3, Quarterly Progress Report, July - September 1981," January 1982.
Volume 1, No. 4, Quarterly Progress Report, October - December 1981," April 1982.
Volume 2, No. 1, Quarterly Progress Report, January - March 1982,"
(BNL-NUREG-31611) "Quarterly Progress Report, April - June 1982".
(BNL-NUREG-32047) "Quarterly Progress Report, July - September 1982".
(BNL-NUREG-32512) "Quarterly Progress Report, October - December 1982".
(BNL-NUREG-33012) "Quarterly Progress Report, January - March 1983".
(BNL-NUREG-33603) "Quarterly Progress Report, April - June 1983".
(BNL-NUREG-33940) "Quarterly Progress Report, July - September 1983".
(BNL-NUREG-34220) "Quarterly Progress Report, October - December 1983".
(Informal Report) "Quarterly Progress Report, January - March 1984".
(Informal Report) "Quarterly Progress Report, April - June 1984".
(Informal Report) "Quarterly Progress Report, July - September 1984".
- NUREG/CR-2333
(BNL-NUREG-51458) Nuclear Waste Management Technical Support in the Development of Nuclear Waste Form Criteria for the NRC, Brookhaven National Laboratory Report,
Volume 1, "Waste Package Overview,"
February 1982.
Volume 2, "Alternate TRU Technologies,"
February 1982.
Volume 3, "Waste Inventory Review,"
February 1982.
Volume 4, "Test Development Review,"
February 1982.
Volume 5, "National Waste Package Program,"
February 1982.
- NUREG/CR-2482
(BNL-NUREG-51494) Review of DOE Waste Package Program, Subtask 1.1 National Waste Package Program, Brookhaven National Laboratory Report,
Volume 1, February 1982.
Volume 2, "Semiannual Report, September 1981 - March 1982," April 1983.

- Volume 3, "April 1982 - September 1982,"
March 1983.
- Volume 4, "October 1982 - March 1983,"
September 1983.
- Volume 5, "April 1983 - September 1983,"
August 1984.
- Volume 6, "October 1983 - March 1984,"
March 1985.
- Volume 7, "April 1984 - September 1984,"
March 1985.
- NUREG/CR-2737 Evaluation of Bulk Properties of Radwaste Glass and Ceramic Container Materials to Determine Long-Term Stability, Catholic University of America Report, June 1982.
- NUREG/CR-2755
(BNL-NUREG-51544) Packing Material Testing Required to Demonstrate Compliance with 1000-Year Radionuclide Containment: Semiannual Report on Waste Package Verification Tests, Brookhaven National Laboratory Report, January 1983.
- NUREG/CR-3091
(BNL-NUREG-51630) Review of Waste Package Verification Tests, Brookhaven National Laboratory Report,
Volume 1, Semiannual Report Covering the Period April 1982 - September 1982, April 1983.
Volume 2, Semiannual Report Covering the Period October 1982 - March 1983, August 1983.
Volume 3, Semiannual Report Covering the Period April 1983 - September 1983, February 1984.
Volume 4, Semiannual Report Covering the Period October 1983 - March 1984, June 1985.
Volume 5, Semiannual Report Covering the Period April 1984 - September 1984, June 1985.
Volume 6, Semiannual Report Covering the Period October 1984 - March 1985, July 1985.
- NUREG/CR-3187
(BNL-NUREG-51653) Crevice Corrosion of Titanium Alloy TiCode-12 in Simulated Rock Salt Brine at 150°C, Brookhaven National Laboratory Report, March 1983.
- NUREG/CR-3219
(BNL-NUREG-51658)
Volume 1 Draft Technical Position Subtask 1.1: Waste Package Performance After Repository Closure, Brookhaven National Laboratory Report, August 1983.
- NUREG/CR-3219
(BNL-NUREG-51658)
Volume 2 Draft Technical Position Subtask 1.2: Post-Emplacement Monitoring, Brookhaven National Laboratory Report, May 1983.
- NUREG/CR-3282
(BNL-NUREG-51671) Internal Hydrogen Embrittlement of Titanium Alloy TiCode-12 at Room Temperature, Brookhaven National Laboratory Report, May 1983.

- NUREG/CR-3405
(BMI-2105) Long-Term Performance of Materials Used for High-Level Waste Packaging, Battelle Columbus Laboratories Report,
Volume 1, "Annual Report, March 1982 - April 1983," July 1983.
- NUREG/CR-3427
(BMI-2113) Long-Term Performance of Materials Used for High-Level Waste Packaging, Battelle Columbus Laboratories Report,
Volume 1, "First Quarterly Report, Year Two, April 1983 - June 1983," August 1983.
Volume 2, "Second Quarterly Report, Year Two, July 1983 - September 1983," December 1983.
Volume 3, "Third Quarterly Report, Year Two, October 1983 - December 1983," March 1984.
Volume 4, "Annual Report, Year Two," April 1983 - April 1984," June 1984.
- NUREG/CR-3472 Surface Properties and Performance Predictions of Alternative Waste Forms, University of Florida Report,
Volume 1, "Annual Report - October 1, 1981 through September 30, 1982," September 1983.
- NUREG/CR-3699 A Summary of Computer Codes for Waste Package Performance Assessment, CoSTAR Research Report, March 1984.
- NUREG/CR-3900
(BMI-2127) Long-Term Performance of Materials Used for High-Level Waste Packaging, Battelle Columbus Laboratories Report,
Volume 1, "First Quarterly Report, Year Three, April 1984 - June 1984," September 1984.
Volume 2, "Second Quarterly Report, Year Three, July 1984 - September 1984," January 1985.
Volume 3, "Third Quarterly Report, Year Three, October 1984 - December 1984," March 1984.
Volume 4, "Annual Report, Year Three," April 1984 - April 1985," June 1985.
- NUREG/CR-4026 Performance of Engineered Barriers in Deep Geologic Repositories for High Level Waste (HLW), Golder Associates Report,
(813-1180) Volume 1, "Summary and Recommendations, Final Report (Task 5)," September 1984.
(813-1177) Volume 2, "Technical Review, Final Report (Task 2)," September 1984.
(813-1178) Volume 3A, "Basalt: Barrier System Design, Final Report (Task 3)," September 1984.
(813-1179) Volume 3B, "Basalt: Barrier System Analysis, Final Report (Task 4)," September 1984.
(813-1179) Volume 3C, "Basalt: Appendices, Final Report (Task 4)," September 1984.

- (813-1178/1179) Volume 4, "Bedded Salt,
Final Report (Tasks 3 and 4)," September 1984.
- (813-1178/1179) Volume 5, "Tuff,
Final Report (Tasks 3 and 4)," September 1985.
- NUREG/CR-4134
(ORNL/TM-9522) H.C. Claiborne et al., Repository Parameters Relevant
to Assessing the Performance of High-Level Waste
Packages, Oak Ridge National Laboratory Report,
May 1985.
- NUREG/CR-4198 Fracture in Glass/High-Level Waste Cannister, Iowa
State University Report, May 1985.
- NUREG/CR-4379 Long-Term Performance of Materials Used for High-
Level Waste Packaging, Battelle Columbus Laboratories
Report,
Volume 1, "First Quarterly Report, Year Four,
April - June 1985," September 1985.