

Department of Energy

Office of Civilian Radioactive Waste Management Office of Repository Development 1551 Hillshire Drive Pr Las Vegas, NV 89134-6321

QA: N/A Project No. WM000-11

JUL 0 2 2004

OVERNIGHT MAIL

Attn: Document Control Desk
Director, Division of High-Level Waste Repository Safety
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852-2738

TRANSMITTAL OF APPENDIX K, *TECHNICAL BASIS DOCUMENT NO. 6: WASTE PACKAGE AND DRIP SHIELD CORROSION*, REVISION 01, ADDRESSING KEY TECHNICAL ISSUE (KTI) AGREEMENTS RELATED TO CONTAINER LIFE AND SOURCE TERM (CLST) 2.02, 2.08, AND 2.09

Reference: Ltr, Ziegler to Chief, High-Level Waste Branch (NRC), dtd 12/9/03 (Transmittal of Technical Basis Document No. 6: Waste Package and Drip Shield Corrosion Addressing KTI Agreements)

This letter transmits Appendix K (enclosure 1) of the *Technical Basis Document No. 6: Waste Package and Drip Shield Corrosion*, Revision 01 which was previously provided in the referenced letter. Also, a compact disk (CD) of the appendix is provided in Enclosure 2. The CD file is in pdf format and can be made publicly available. The Appendix K file is 8,940 KB, and dated June 29, 2004.

The Technical Basis Document contains a summary of the current conceptual understanding of the degradation modes of the waste package and drip shield materials and provides the context within which individual KTI agreements are related to the long-term material behavior. Appendices A - H of the Technical Basis Document were submitted as part of the referenced letter. Appendices I - V are being transmitted individually under separate cover letters. Appendix K, Point-Loading Rockfall Evaluations and the Effects of Seismic Excitation on the Drip Shield and Waste Package, Revision 1, the subject of this transmittal, provides a direct response to CLST 2.02, 2.08 and 2.09.

Appendix K relates to the results of calculations for point-loading rockfall evaluations for both the waste package and drip shield, effects of variations in material properties for such rockfall calculations, departures from a point-loading rockfall scenario, and the effect of vibratory ground motion due to seismic excitation.



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The U.S. Department of Energy considers the KTI agreements CLST 2.02, 2.08, and 2.09 to be addressed in Appendix K and pending review and acceptance by the U.S. Nuclear Regulatory Commission, they should be closed.

There are no new regulatory commitments in the body or the enclosures to this letter. Please direct any questions concerning this letter and its enclosures either to David C. Haught at (702) 794-5474 or e-mail at david_haught@ymp.gov, or to Kirk D. Lachman at (702) 794-5096 or e-mail at kirk_lachman@ymp.gov.

OLA&S:DCH-1565

Enclosures:

- Appendix K, Point-Loading Rockfall Evaluations and the Effects of Seismic Excitation on the Drip Shield and Waste Package, Revision 1 (Response to CLST 2.02, 2.08, & 2.09)
- 2. CD of Enclosure 1

cc w/encls 1 and 2:

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