

Department of Energy

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QA: N/A

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OVERNIGHT MAIL

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TRANSMITTAL OF INFORMATION ADDRESSING KEY TECHNICAL ISSUE (KTI) AGREEMENT ITEM CONTAINER LIFE AND SOURCE TERM (CLST) 1.17

This letter provides information to support resolution and closure of Agreement Item CLST 1.17, which states:

"Provide additional detail on quality assurance acceptance testing."

"DOE stated that it would provide guidance and criteria in the next revision of the Technical Guidance Document (TGD) for LA. The development of the LA sections and associated programs and process controls for the procurement and fabrication of waste package materials and components will be included. This will include consideration of the controls for compositional variations in Alloy C-22. The TGD revision will be issued by June 2001, contingent upon NRC publication of the final 10 CFR 63 and the Yucca Mountain Review Plan."

The intent of this agreement item is to ensure that procurement and fabrication of waste package materials will be in accordance with quality controls and processes to maintain design specifications and prevent alteration of waste package materials characteristics.

The resolution of this agreement was to include guidance and criteria in a future revision of the TGD for license application (LA). Prior to issuance of the Yucca Mountain Review Plan (YMRP), the TGD was intended to provide format and content guidance for development of a potential LA. However, the TGD is no longer being considered in the current Yucca Mountain Site Characterization Project plan and the information to satisfy this agreement is provided in this letter as discussed at the April 15-16, 2002, U.S. Nuclear Regulatory Commission (NRC)/U.S. Department of Energy (DOE) Technical Exchange and Management Meeting on KTIs. The text for a LA will be prepared based on 10 CFR Part 63 requirements and guidance

NM 5507

provided in NRC's YMRP. The DOE will provide information in the LA consistent with review methods and acceptance criteria identified in the YMRP.

Type 316 NG and Alloy C-22 are the two barrier materials proposed to be used in the waste package design. For the structural integrity aspects associated with preclosure conditions, the quality requirements of American Society of Mechanical Engineers Boiler and Pressure Vessel code, Section III, Division 1, will be implemented. In accordance with the quality assurance program, DOE will implement quality assurance/controls and processes for the procurement of waste package materials and fabrication of the packages. These controls will ensure that the variability in material composition and the characteristics of the as-fabricated waste packages are within the ranges used in the Total System Performance Assessment analysis. Data from the ongoing testing programs and those from the performance confirmation programs will be used for updating the fabrication specifications. Also, procurement documents will establish specific quality assurance requirements for the waste package materials. These documents will be available for inspection by NRC.

This letter contains no new regulatory commitments. Please direct any questions concerning this letter to Paige R.Z. Russell at (702) 794-1315 or Timothy C. Gunter at (702) 794-1343.

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