



Department of Energy
Office of Civilian Radioactive Waste Management
Yucca Mountain Site Characterization Office
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QA: N/A

OVERNIGHT MAIL

JUL 05 2002

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High-Level Waste Branch
Division of Waste Management
Office of Nuclear Materials Safety
and Safeguards
U.S. Nuclear Regulatory Commission
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Rockville, MD 20852

**TRANSMITTAL OF INFORMATION ADDRESSING KEY TECHNICAL ISSUE (KTI)
AGREEMENT ITEMS CONTAINER LIFE AND SOURCE TERM (CLST) 1.05, 1.06, 1.07, AND 2.07**

Reference: Ltr, Reamer to Brocoum, dtd 12/21/01

This letter transmits the report entitled, *Agreements CLST 1.05, 1.06, 1.07, and 2.07* which addresses the subject KTI agreements.

Agreement Items CLST 1.05, 1.06, and 1.07 seek information concerning the sensitivities and resolution of measurements of silica deposits on waste packages, the effects of silica deposits on corrosion rates, and alternative methods to measure corrosion rates of the container materials, respectively. Agreement Item CLST 2.07 concerns the waste package manufacturing steps and control of the process. Resolution of these agreement items was originally planned to be documented in future revisions of relevant Analysis and Model Reports prior to submittal of a license application. However, the information necessary to address these agreement items is available now and is being submitted early to facilitate the U.S. Nuclear Regulatory Commission (NRC) staff review, as agreed during the NRC/U.S. Department of Energy (DOE) Technical Exchange and Management Meeting on KTIs held April 15-16, 2002.

Details of the DOE approach and bases for closure of Agreement Items CLST 1.05, 1.06, 1.07, and 2.07 are provided in the enclosure. Alternative testing methods (i.e., high sensitivity probes, silica-free environment, and alternative methods for corrosion rates) covered under these agreement items are no longer part of the Yucca Mountain Site Characterization Project test plans. DOE believes that the information and testing plans discussed in the enclosure satisfy the underlying concerns of Agreement Items CLST 1.05, 1.06, and 1.07 and that they should be considered complete. The information provided in the enclosure also partially addresses agreement items CLST 1.03 and 1.04 concerning confirmation of linear polarization measurements with corrosion rate measurements using other techniques and the use of high sensitivity probes as an alternative method, respectively. However, complete information to support addressing both CLST 1.03 and 1.04 will not be available until completion of planned activities in Fiscal Year (FY) 2003 and FY 2004.

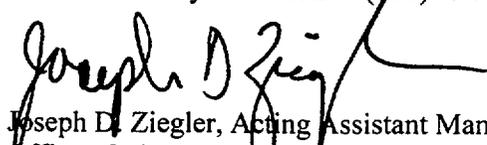
The referenced letter identified additional information required by NRC to complete Agreement Item CLST 2.07. Subsequent discussions with your staff, including those at the April 2002 NRC/DOE Technical Exchange and Management Meeting on KTIs, identified that the additional information is already covered by the work included under Agreement Item CLST 2.04, due for completion in FY 2003. DOE suggests that Agreement Item CLST 2.07 should be closed, and the remaining information be tracked as part of CLST 2.04.

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Several Total System Performance Agreement and Integration (TSPAI) agreement items are also partially related to Agreement Items CLST 1.05, 1.06, and 1.07 as discussed the enclosure. These are Agreement Items TSPAI 3.01, 3.04, and 3.05, mainly concerning sources of uncertainty and bases for representativeness of uncertainty/variability in corrosion rates and waste package and drip shield performance. The results from the examination of 5-year exposed samples, when available, are expected to provide the bases for addressing these TSPAI agreement items. Also, parts of Agreement Item TSPAI 2.02 (Comment #35) concerning the juvenile and early failure of waste containers are related to Agreement Item CLST 2.07. Resolution of all related TSPAI agreement items noted above will be documented in future submittals, as the supporting information becomes available.

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


Joseph D. Ziegler, Acting Assistant Manager
Office of Licensing & Regulatory Compliance

OL&RC:TCG-1379

Enclosure:

*Agreements CLST 1.05, 1.06, 1.07, and
2.07*

cc w/encl:

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cc w/o encl: (continued)

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