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April 4, 2003 E&L-012-03

Ms. Julia M. Barto, Project Manager Licensing Section Spent Fuel Project Office Office of Nuclear Material Safety and Safeguards U.S. Nuclear Regulatory Commission Washington, DC 20555

- References: 1. February 5, 2003 letter to P. Paquin, Duratek from J. M. Barto, US NRC
  - 2. November 26, 2002 Letter (E&L-056-02) to E. William Brach, US NRC from P. Paquin, Duratek

Dear Ms. Barto:

Subject: Response to Request for Additional Information for Model No. 8-120B, CofC No. 9168

In response to your Request for Additional Information (RAI) (Reference 1), Duratek respectfully re-submits its application for revision to the 8-120B Safety Analysis Report (SAR) (Reference 2). This application has been amended to address the comments provided in the RAI.

The following documents are included as attachments to this submittal:

- 1. Title Page: Revision 6 title page for the SAR dated April 2003.
- 2. TOC: A revised Table of Contents for the SAR dated April 2003
- 3. Chapter 2, Structural: As a result of the RAI, SAR pages 2-105, 2-106 and 2-130 have been revised and these pages are included herein. In addition, Appendix 2.10.6 is included, which is a finite element analyses and evaluation of the bolted connection between the 8-120B cask primary lid and bolt ring with a raised seal surface for Normal Transport and Hypothetical Accident Conditions. These analyses along with analyses and evaluation currently in the SAR of the same connection with an imbedded seal surface within the bolt ring reflect the configurations depicted in Revision 12 of SAR Drawing No. C-110-E-0007. Note that this drawing revision incorporates previously approved design details that were inadvertently omitted on past drawing revisions. These details, specific to the first cask unit fabricated (8-120B-1) are reflected as "optional" configurations.

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NOTE: Revision 12 of SAR Drawing No. C-110-E-0007 was previously transmitted under Reference 2 and is therefore not included in this submittal. Please reference Revision 12 in the approval of this application.

NOTE: To facilitate your review of the structural analyses, Duratek is also enclosing ANSYS modeling information on a data CD. This data is for reviewer information only and is not intended to be included in the SAR.

- 4. Chapter 4, Containment: As a result of the RAI, Chapter 4 has been revised to correct the equations of L<sub>MIX</sub>(T) on pages 4-17 and 4-25 for R-12 and R-134a test gases, respectively. The corrected Chapter 4 is being included herein in its entirety and is marked as Revision 6 dated April 2003.
- 5. Chapter 8, Acceptance Tests and Maintenance: This section, marked as Revision 6 dated April 2003, is being resubmitted with no additional changes.

As noted previously, no change to packaging contents is being requested, and no changes to the operating section (Chapter 7) are required as a result of the proposed changes.

Also attached is a guide page for incorporating Revision 6 into the Model CNS 8-120B Safety Analysis Report.

Should you or members of your staff have questions about this submittal, please contact me at (803) 758-1824.

Sincerely,

Patrick L. Paquin

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General Manager - Engineering and Licensing

Attachments: As stated (5 copies) Enclosure: As stated (1 copy)