

# Washington

TRU Solutions LLC

CP:10:03008

UFC:5822.00

February 12, 2010

ATTN: Document Control Desk  
Director, Spent Fuel Project Office  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Subject: REVISION 5 OF THE RH-TRU 72-B SHIPPING PACKAGE APPLICATION,  
DOCKET NO. 71-9212

Dear Sir or Madam:

Washington TRU Solutions LLC, on behalf of the U.S. Department of Energy, hereby submits Revision 5 of the application for a Certificate of Compliance (CoC) for the RH-TRU 72-B Packaging, U.S. Nuclear Regulatory Commission (NRC) Docket No. 71-9212.

The amendment consists of the following documents:

- RH-TRU 72-B Safety Analysis Report (SAR), Revision 5
- Remote-Handled Transuranic Waste Authorized Methods for Payload Control (RH-TRAMPAC), Revision 1
- RH-TRU Payload Appendices, Revision 1.

The application seeks the addition of new authorized payload canisters (Neutron Shielded Canister, NS15 and NS30 designs) that incorporate internal neutron shielding for shipment in the RH-TRU 72-B packaging. The RH-TRU 72-B SAR has been revised to incorporate the NS15 and NS30 into the RH-TRU 72-B packaging design basis and to add a SAR drawing for the new payload assembly configuration. Revisions to the RH-TRAMPAC and RH-TRU Payload Appendices are those required to define the payload controls necessary for the Neutron Shielded Canister. A new Appendix 5.1 of the RH-TRU Payload Appendices provides a detailed description and summary of the design basis for use of the Neutron Shielded Canister with the RH-TRU 72-B packaging.

The application incorporates revisions to establish comprehensive qualification test requirements for containment O-ring seal materials. Revisions to the RH-TRU 72-B SAR, particularly Appendix 3.6.4, establish the worst-case compressions and temperatures applicable to containment O-ring seals in the RH-TRU 72-B. Appendix 3.6.4 presents material formulation and batch qualification tests that rigorously demonstrate the ability of seal materials to achieve and maintain a leaktight seal when subject to those worst-case conditions.

The application includes revisions to the RH-TRU 72-B SAR and associated drawings to request changes that facilitate packaging fleet repair and maintenance activities, enhance operational effectiveness, and provide for implementation of lessons-learned improvements.

NM5501

RH-TRU Payload Appendix 2.3, *Shipping Period – General Case*, has been revised to clarify the allowance of intersite shipments in addition to shipments to WIPP. RH-TRAMPAC Section 6.2.3, *Shipments Designated as Controlled Shipments*, and RH-TRU Payload Appendix 2.4, *Shipping Period – Controlled Shipments*, have been revised to allow intersite shipments in addition to shipments to WIPP and to reallocate the time associated with the transportation and unloading of controlled shipments such that the two activities must be completed within the remaining total time allowed following the 1-day loading activity.

Minor editorial revisions have also been made to the RH-TRU 72-B SAR, RH-TRAMPAC, and RH-TRU Payload Appendices. Changes are indicated by right-bars in the margin of the documents (“|”).

This letter includes the following attachments:

- Attachment A – Summary of Requested Changes
- Attachment B – Revised Documents
- Attachment C – Supplementary References.

To facilitate implementation, it is requested that the current package CoC be valid for use one year from the date of issuance of the revised CoC.

If you have any questions regarding this submittal, please contact Mr. B. A. Day of my staff at (575) 234-7414.

Sincerely,



T. E. Sellmer, Manager  
Packaging Integration

TES:clm

cc: D. Gadbury, CBFO