



MIT NUCLEAR REACTOR LABORATORY

AN MIT INTERDEPARTMENTAL CENTER

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

Re: Certificate of Compliance no. 9341, docket 71-9341, Package USA/9341/B(U)F-96, BEA Research Reactor (BRR) Package

Dear Sir or Madam:

The following item is a follow-up to my letter of January 25, 2012 regarding the above mentioned package and is in the format specified in 10CFR71.95.

Abstract: As a result of the fabrication drawing specifying the incorrect seal size, the BRR cask lower drain seals that were supplied were not of the correct size. The correct size seals were acquired from a different manufacturer and the shipment proceeded without incident. The fabrication drawing has been modified and seals of the correct size and manufacturer have been ordered for subsequent shipments.

Description: On November 30, 2011, the above mentioned cask was received at MIT for our initial use in shipping spent fuel to Savannah River Site. Over the next few days, the cask was inspected, processed, and fuel was loaded in preparation for shipment. Upon preparation for final leak checking, it was determined that the drain O-ring seals that were supplied (Rainier NAS1523C9N) were not of the size specified in the cask safety analysis report (Rainier NAS1523C10N) and would not pass the required leak check. Subsequent investigation found that the incorrect part number was specified on the cask fabrication drawing and that the seal with the correct dimensions was not available from the manufacturer. A seal with the correct dimensions was obtained from a different manufacturer (Parker-Hannifin), was installed and passed the leak check satisfactorily. The shipment then proceeded on December 9, 2011, without incident. Shipment details are as follows: 8 MIT fuel assemblies, 618 TBq of mixed fission products, physical form: solid, chemical form: enriched uranium.

Safety consequences: The safety significance of this change is minor, if any. The Parker-Hannifin seals are of the exact dimensions as the correctly specified Rainier seals and appear to have the same material specifications.

Corrective Actions: The drawings have been updated to specify the correct size seals. In addition, a number of these seals have been ordered and will be supplied for subsequent shipments.

Radiation Exposure: None.

Please do not hesitate to contact me if you require further information.

Sincerely,

Thomas H. Newton, Jr., Ph.D.
Director of Reactor Operations

Cc: AREVA Federal Services, LLC

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