



Letterbook No.: ES/NRC 15-013

Docket No. 71-9168

September 16, 2015

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

Subject: Request to Amend Certificate of Compliance No. 9168, Revision 21 for the EnergySolutions 8-120B Type B Shipping Package

References: (1) Certificate of Compliance No. 9168, Revision 21, Docket No. 71-9168, Package Identification No. USA/9168/B(U)-96, Dated April 8, 2015.

Dear Sir or Madam:

EnergySolutions hereby submits an application to amend the Certificate of Compliance (CoC) for the Model 8-120B Shipping Package (Reference 1) to include SAR Drawing No. C-110-E-007, Revision 22, which adds Item 57 (Secondary Lid Test Port Tube) to line the secondary lid O-ring test port. The secondary lid O-ring test port with the tube installed was an approved configuration in Revision 18 of the CoC, but the tube was inadvertently omitted from the O-ring test port of the new secondary lid design approved in Revision 19 of the CoC.

Currently, the tubes are installed in four of the eight 8-120B casks (8-120B-5, -6, -7, and -8). The remaining four units (8-120B-1, -2, -3, and -2S) do not have the tubes. EnergySolutions plans to add tubes to the remaining four units so that all 8-120B units will have them installed within 12 months of issuance of the revised CoC.

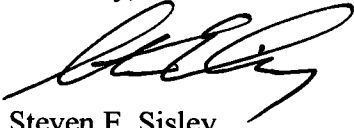
Attachment 1 contains an evaluation of the operational and safety consequences of the secondary lid O-ring test port tube. The evaluation concludes that the presence or lack of the tubes does not affect the use of the casks, nor their safety.

Enclosure 1 contains one (1) paper copy of the non-public version of SAR Drawing No. C-110-E-007, Revision 22 that contains security-related sensitive information that should be withheld under 10 CFR 2.390.

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Should you or your staff have questions, please contact the undersigned.

Sincerely,



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Attachments:

- (1) Operational and Safety Evaluation of 8-120B Secondary Lid Vent Tube

Enclosures:

- (1) SAR Drawing No. C-110-E-0007, Revision 22, Non-Public Version (1 paper copy),
(Security-Related Information – Withhold Under 10 CFR 2.390),

cc: Mr. Pierre Saverot, Division of Spent Fuel Storage and Transportation
Mr. Dan Shrum, EnergySolutions

Attachment 1

Operational and Safety Evaluation of 8-120B Secondary Lid Vent Tube

The purpose of the secondary lid test port tube is to isolate the pre-shipment test volume from the interspace between the two 3-1/4" thick plates that make up the secondary lid. The tube was shown as a design feature in the original 8-120B SAR drawings, but not credited with any safety function in the SAR. The tube was inadvertently omitted when the lids were redesigned for operational enhancements in CoC Revision 19.

For cask shipment operations, the function and performance of secondary lids is unchanged whether the tube is installed or not because the test port inner diameter is approximately equal in both cases. The presence of the tubes is not readily distinguishable from outward appearances. The tubes therefore have no significant impact on operations.

The tube indirectly impacts safety, because the required time for the pre-shipment leak rate test is dependent on the test volume. If the free volume between the plates is negligible, then the isolation function of the tube is not necessary. The tube also performs a secondary function by preventing moisture between the plates, which provides operational benefits during annual leak testing and long-term cask maintenance.

The four lids without the tubes comply with the lid configuration authorized by the current CoC. EnergySolutions identified that the tubes were inadvertently omitted from the lid design via our corrective action system while the lids were still in fabrication. A corrective action was assigned to measure the as-built test volumes. The volumes were determined to be negligible (i.e., compliant with the licensing basis). The lids were released for use based on completion of the corrective action and closure of the condition report.

The four lids with the tubes were manufactured at a later date, and similarly tested during fabrication. They were found not to have negligible test volumes, so the tubes were installed, and the lids were tagged out using EnergySolutions' noncompliance procedure because they did not meet the lid configuration authorized by the current CoC. EnergySolutions subsequently cleared the tags and released the lids for use, believing that prior authorization was not required because the tubes had been part of the original NRC-approved 8-120B cask design and were inadvertently omitted from the new secondary lid design. The tubes were restored to the SAR drawings as part of a broader license amendment request in May 2014, but the request was withdrawn for unrelated reasons. This request is to reintroduce the tubes to the secondary lid design.