

SAFETY EVALUATION REPORT
Docket No. 71-9168
Model No. 8-120B
Certificate of Compliance No. 9168
Revision No. 22

SUMMARY

By letter dated September 16, 2015, EnergySolutions (ES) submitted an amendment request to the U.S. Nuclear Regulatory Commission (NRC) for the Model No. 8-120B package.

ES submitted Drawing No. C-110-E-0007, Revision 22, which adds Item 57, i.e., the secondary lid test port tube. The tube had been inadvertently omitted from the last revision of the licensing drawings.

Currently, the secondary lid test port tubes are installed on four packages. Test port tubes will be installed on all packages within 12 months of issuance of this certificate of compliance (CoC).

The NRC staff reviewed the applicant's amendment request and found that the presence or absence of the tubes does not affect either the use of the package or its safety. The package meets the requirements of 10 CFR Part 71.

1.0 GENERAL INFORMATION

The design of the package, its overall dimensions, as well as the authorized contents, remain unchanged.

The staff reviewed Drawing No. C-110-E-0007, sheets 1-6, Revision 22. The revised drawing includes Item 57, a secondary lid test port tube.

EnergySolutions Drawing No. DWG-CSK-12CV01-EG-0001-01 was not modified.

2.0 STRUCTURAL EVALUATION

The structural evaluation of the package remains unchanged.

The staff has reasonable assurance that the structural design of the Model No. 8-120B package has been adequately described and evaluated and that the package meets the structural requirements of 10 CFR Part 71.

3.0 THERMAL EVALUATION

The thermal evaluation is not affected. The staff has reasonable assurance that the thermal design of the Model No. 8-120B package has been adequately described and evaluated, and that the package meets the thermal requirements of 10 CFR Part 71.

4.0 CONTAINMENT EVALUATION

The containment evaluation remains unchanged. The staff has reasonable assurance that the containment design of the Model No. 8-120B package has been adequately described and evaluated, and that the package meets the containment requirements of 10 CFR Part 71.

5.0 SHIELDING EVALUATION

The shielding evaluation is not affected. The staff has reasonable assurance that the shielding design has been adequately described and evaluated and that the package meets the external radiation requirements of 10 CFR Part 71.

6.0 CRITICALITY EVALUATION

Not applicable.

7.0 PACKAGE OPERATIONS

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 is included in the design of the package but is not credited with any safety function.

For package shipment operations, the function and performance of the secondary lids are unchanged, because the test port inner diameter is approximately equal whether the test port tube is installed or not. The presence of the test port tubes is not readily distinguishable from the exterior of the package and thus has 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 the annual leak test and long-term cask maintenance operations.

The staff has reasonable assurance that the operating procedures meet the requirements of 10 CFR Part 71 and are adequate to assure the package will be operated in a manner consistent with its evaluation for approval

8.0 ACCEPTANCE TESTS AND MAINTENANCE PROGRAM

The acceptance tests and maintenance program of the package remain unchanged.

CONDITIONS

The conditions specified in the CoC have been revised to incorporate several changes, as indicated below:

Condition No. 5(a)(3) has been revised to include Revision 22 of *EnergySolutions* Drawing No. C-110-E-0007, sheets 1-6.

Condition No. 10 was modified to state that the package may be used until September 30, 2016, with the drawings authorized in Revision No. 21 of this certificate.

The expiration date of the certificate was not changed.

The references section was updated to include the supplement dated September 16, 2015.

CONCLUSION

Based on the statements and representations in the application, as supplemented, and the conditions listed above, the staff concludes that the Model No. 8-120B package design has been adequately described and evaluated and that these changes do not affect the ability of the package to meet the requirements of 10 CFR Part 71.

Issued with Certificate of Compliance No. 9168, Revision No. 22, on September 23, 2015.