

**CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIAL PACKAGES**

a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE	PAGES
9246	9	71-9246	USA/9246/AF	1 OF	2

2. PREAMBLE

- a. This certificate is issued to certify that the package (packaging and contents) described in Item 5 below meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."
- b. This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported.

3. THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION

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|---|---|
| a. ISSUED TO (<i>Name and Address</i>)
National Institute of Standards and
Technology
Gaithersburg, MD 20899 | b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION
National Institute of Standards and Technology
application dated October 17, 2011. |
|---|---|

4. CONDITIONS

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable, and the conditions specified below.

5.

(a) Packaging

- (1) Model No.: ST
- (2) Description

A closed steel pipe for the transport of an unirradiated research reactor fuel element. The pipe is a 5-1/2-inch OD carbon steel pipe, approximately 71 inches in length, with a closed bottom end and flanged top end. The top end is closed by a cover plate, which is 1/4-inch thick, and 6-1/2 inches in diameter, and a gasket. The cover plate is secured to the pipe flange by 8 cap screws. A wooden nozzle support, bottom support, and top support position the fuel element within the pipe. The package weighs approximately 75 pounds, including the fuel element.

(3) Drawing

The packaging is constructed and assembled in accordance with National Institute of Standards and Technology Drawing No. D-04-048, Sheet 1, Rev. 4, and Sheet 2, Rev. 4.

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5. (b) Contents

(1) Type and form of material

Unirradiated NBSR fuel element composed of enriched uranium and aluminum.

(2) Maximum quantity of material per package

One fuel element containing not more than 360 grams U-235. The total quantity of radioactive material within a package may not exceed a Type A quantity.

(c) Criticality Safety Index 50.0

6. In addition to the requirements of Subpart G of 10 CFR Part 71, the package shall be prepared for shipment, operated, and maintained by written procedures prepared to meet the requirements and make the determinations specified in Chapter 7 of the package application. Additionally, the acceptance tests and maintenance program shall comply with Chapter 8 of the application.

7. Transport by air is not authorized.

8. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR 71.17.

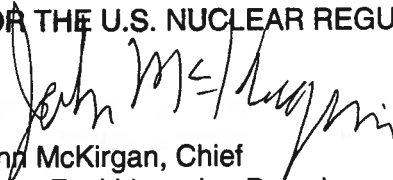
9. Revision No. 8 of this certificate may be used until March 31, 2018.

10. Expiration date: January 31, 2022.

REFERENCES

National Institute of Standards and Technology application dated October 17, 2011, supplement dated December 13, 2016.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION


John McKirgan, Chief
Spent Fuel Licensing Branch
Division of Spent Fuel Management
Office of Nuclear Material Safety
and Safeguards

Date: March 17, 2017



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

**SAFETY EVALUATION REPORT
Docket No. 71-9246
Model No. ST
Certificate of Compliance No. 9246
Revision No. 9**

SUMMARY

By letter dated December 13, 2016, National Institute of Standards and Technology (NIST) requested a revision to Certificate of Compliance (CoC) No. 9246 for the Model No. ST package.

No CoC changes were requested. All original analyses for the currently approved package are still valid. The safety analysis report (SAR) was not changed.

EVALUATION

By letter dated December 13, 2016, National Institute of Standards and Technology (NIST) requested renewal of CoC No. 9246 for the Model No. ST package. No changes were requested to the CoC, and no changes were made to the SAR.

Based on the information provided in the application, the staff concludes that the Model No. ST package continues to meet the requirements of 10 CFR Part 71.

CONDITIONS

The revision number was changed to Revision No. 9.

Condition No. 9 was modified to allow the previous revision (8) of the certificate to be used for a period of approximately one year.

Condition No. 10 was modified to reflect the new expiration date of January 31, 2022.

The References section was revised to include the December 13, 2016, request for renewal.

CONCLUSION

CoC No. 9246 has been revised as specified above. Based on the statements and representations in the application, the staff finds the package to meet the requirements of 10 CFR Part 71.

Issued with Certificate of Compliance No. 9246, Revision No. 9,
on 3/17/17.