

**CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIAL PACKAGES**

¹ a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE	PAGES
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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>)
Babcock & Wilcox Nuclear Operations
Group, Inc.
P.O. Box 785
Lynchburg, VA 24505-0785 | b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION
BWX Technologies, Inc., application dated
April 10, 2008. |
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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.: UBE-2
- (2) Description

A steel drum for the transport of uranium and uranium-beryllium waste materials of solid form. The waste may be contained within compacted 55-gallon drums. The packaging is a 70-gallon, open-head steel drum with a minimum 18-gauge shell and bottom head, and a minimum 18-gauge closure lid. The lid is closed by a 12-gauge bolted locking ring with drop forged lugs, one of which is threaded, having a 5/8 inch bolt and nut. The closure includes a gasket. The gross weight of the package, including the maximum weight of contents, is approximately 1000 pounds.

(3) Drawings

The packaging is constructed and assembled in accordance with Babcock & Wilcox Company Drawing. No. LP3024C, Rev. 1.

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5. (b) Contents

(1) Type and form of material

Uranium and uranium-beryllium waste of solid form. The waste may be contained within compacted 55-gallon drums.

(2) Maximum quantity of material per package:

950 pounds, including compacted secondary containers. The uranium may be of any enrichment, and the beryllium may be present in any concentration. The maximum fissile mass is 100 grams U-235 per package, and the maximum average fissile mass density in the package is 0.5 gram U-235 per liter. Fission and activation products may be present, provided that the total quantity is less than $1 \times 10^{-3} A_2$ per package.

(c) Criticality Safety Index

<u>Maximum Fissile Mass Per Package (grams U-235 per package)</u>	<u>Criticality Safety Index</u>
2.0	0.5
5.0	1.0
6.0	1.2
10.0	2.0
20.0	4.0
25.0	5.0
50.0	10.0
100.0	20.0

6. In addition to the requirements of Subpart G of 10 CFR Part 71:

- (a) The package must be prepared for shipment and operated in accordance with the Operating Procedures in Section 7 of the application.
- (b) Each packaging must be acceptance tested in accordance with the Acceptance Tests in Section 8 of the application.

7. Transport by air of fissile material 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.

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9. Revision No. 5 of this certificate may be used until November 30, 2009.
10. Expiration date: August 31, 2013.

REFERENCES

BWX Technologies, Inc., application dated April 10, 2008;
Supplement dated: May 30, 2008.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

/RA/

Eric J. Benner, Chief
Licensing Branch
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards

Date: November 12, 2008

