

71-9795



DEPARTMENT OF ENERGY
NATIONAL NUCLEAR SECURITY ADMINISTRATION
1000 INDEPENDENCE AVENUE SW
WASHINGTON DC 20585-1000

NR:RR:JRSloane G#12-04231
September 20, 2012

Catherin Haney
Director, Office of Nuclear Material Safety and Safeguards
Nuclear Regulatory Commission
Washington, DC 20555

**NUCLEAR REGULATORY COMMISSION CERTIFICATE OF COMPLIANCE FOR THE
IRRADIATED COMPONENT DISPOSAL CONTAINER [USA/9795/B(U)-96]; REQUEST
FOR RENEWAL**

Background: Irradiated Component Disposal Containers (ICDCs) are used to ship irradiated module support housings and hardware removed during refueling of NIMITZ-class aircraft carriers. After loading the containers at the shipyard, they are sent to a waste processing facility where both the containers and contents are processed for disposal. Since the last renewal of this Certificate of Compliance (CoC), there have been eight shipments of loaded ICDCs from Newport News Shipyard to Savannah River Nuclear Solutions in Aiken, South Carolina.

Request for NRC Renewal: This letter requests renewal of the Nuclear Regulatory Commission (NRC) CoC for the ICDC, USA/9795/B(U)-96. The NRC CoC expires on April 30, 2013. Since the last issuance of the CoC, there have been no operational experience or container modifications that would preclude continued use of the container. Enclosure (1) to this letter provides a draft revision 4 of the DOE-NR CoC for your review. There are no changes to the CoC. If you have any questions, please do not hesitate to call me at (202) 781-6166.

A handwritten signature in black ink, reading "B. K. Miles".

B. K. Miles
Naval Reactors

Copy to & Enclosure: See page 2

NM5801

Enclosure: (1) DOE-NR CERTIFICATE OF COMPLIANCE FOR THE IRRADIATED
COMPONENT DISPOSAL CONTAINER, USA/9795/B(U)-96,
REVISION 4 (DRAFT)

Copy to:

M. Lombard, Director, Spent Fuel Storage & Transportation (SFST), NMSS, NRC
M. Waters, Chief, Licensing Branch, SFST, NMSS, NRC
B. White, Senior Project Manager, Licensing Branch, SFST, NMSS, NRC

KAPLADSARS

NRLFO-P

NRLFO-S

General Manager, Bettis,

Manager, Refueling Engineering and Operations, Bettis

Manager, Shipping Containers, REO, Bettis

Manager, Shipping Container Analysis, Shipping Containers, REO, Bettis

K. G. Thompson, Shipping Container Analysis, Shipping Containers, REO, Bettis

ENCLOSURE (1)

**DOE-NR CERTIFICATE OF COMPLIANCE FOR THE IRRADIATED COMPONENT
DISPOSAL CONTAINER, USA/9795/B(U)-96, REVISION 4 (DRAFT)**

The enclosed draft Certificate of Compliance shows additions and deletions from the current version of the certificate. Minor formatting and editorial changes are not highlighted.

Enclosure (1) to
Ser 08G#12-04231

U. S. DEPARTMENT OF ENERGY
CERTIFICATE OF COMPLIANCE
For Radioactive Materials Packages

1a. Certificate Number	1b. Revision No.	1c. Package Identification No.	1d. Page No.	1e. Total No. Pages
USA/9795/B(U)-96 (DOE-NR)	34 (DRAFT)	USA/9795/B(U)-96 (DOE-NR)	1	2

2. PREAMBLE

- 2a. This certificate is issued under the authority of 49CFR Part 173.7(d).
- 2b. The packaging and contents described in item 5 below meets the safety standards set forth in subpart E, "Package Approval Standards," and subpart F, "Package, Special Form, and LSA-III Tests," Title 10, Code of Federal Regulations, Part 71.
- 2c. 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

- | | | |
|--|--|-----------------------|
| (1) Prepared by (Name and address):
Bettis Atomic Power Laboratory
P. O. Box 79
West Mifflin, PA 15122-0079 | (2) Title and Identification of report or application:
Safety Analysis Report for Packaging for
the Irradiated Component Disposal
Container | (3) Date
July 1997 |
|--|--|-----------------------|

4. CONDITIONS

This certificate is conditional upon the fulfilling of the applicable Operational and Quality Assurance requirements of 49CFR Parts 100-199 and 10CFR Part 71, and the conditions specified in item 5 below.

5. Description of Packaging and Authorized Contents, Model Number, Criticality Safety Index for Criticality Control, Other Conditions, and References:
Irradiated Component Disposal Container (ICDC)**a. Description of Packaging**

The ICDC is a cylindrical container, made primarily of Type 304 stainless steel, having an internal height of approximately 135 inches, and an internal diameter of 91 inches. The main structural components are the container body (with an 11-inch thick bottom plate, 10-inch thick lower side wall, and 5-inch thick upper side wall), closure lid (5 inches thick), energy absorber, and centering plate. Pedestals, welded to the inside bottom plate of the container, provide positioning and support for the cargo. The energy absorber, attached to the container by 21 tiedown studs, is a Type 304 stainless steel ring installed on top of the ICDC. A weather cover is also welded to the top of the energy absorber. The container closure lid and desiccant port penetration are full penetration welded before shipment of the loaded ICDC to provide an airtight and water tight containment boundary. The weight of the loaded ICDC (with energy absorber and energy absorber tiedown studs) is approximately 195,000 pounds.

The ICDC is used to ship and dispose of cell support housings and miscellaneous components from spent reactor cores. Transport of the loaded ICDC will be in a vertical orientation via a 175-ton depressed-center flatcar. The overall ICDC height and railcar width are within the maximum allowable shipping envelope identified in the Association of American Railroads Plate F requirements.

6a. Date of Issuance: May 13, 2009

6b. Expiration Date: April 30, 2013

FOR THE U.S. DEPARTMENT OF ENERGY

7a. Address (of DOE Issuing Office)

Naval Reactors
U. S. Department of Energy
Washington, D. C. 20585

7b. Signature, Name and Title (of DOE Approving Official)

S. J. Trautman
Deputy Director, Naval Reactors

5. (Continued)

b. Authorized Contents

The contents of the container consist of irradiated core structural components, activated corrosion products, and some residual water (less than 6 gallons) assumed to be contaminated with activated corrosion products. The authorized contents are as follows:

(1) A1G cell support housings (containing miscellaneous core components). See the ICDC Safety Analysis Report for Packaging for the maximum number of these components that can be shipped in the ICDC.

or

(2) A1G cell support housings (containing miscellaneous core components) and one miscellaneous component cylinder (containing more of these core components). See the ICDC Safety Analysis Report for Packaging for the maximum number of these components that can be shipped in the ICDC.

c. Criticality Safety Index

Not applicable.

d. Other Conditions (Restrictions)

The ICDC shall be shipped no earlier than 50 days after core shutdown.

e. References

None.

f. Additional Information

Nuclear Regulatory Commission review of the SARP for shipment of the ICDC is contained in their memorandum NRC Docket #71-9795 dated April 23, 1998.

Nuclear Regulatory Commission review of Revisions 3 and 4 of the SARP for shipment of the ICDC is contained in their memorandum NRC Docket #71-9795 dated May 19, 1999.

Nuclear Regulatory Commission review of Revision 5 of the SARP for shipment of the ICDC is contained in their memorandum NRC Docket #71-9795 dated April 15, 2009.