Form NRC-618
(12-73)
10 CFR 71

U.S. NUCLEAR REGULATORY COMMISSION

CERTIFICATE OF COMPLIANCE

For Radioactive Materials Packages

1.(a) Certificate Number	1.(b) Revision No.	1.(c) Package Identification No.	1.(d) Pages No.	1.(e) Total No. Pages
5026	5	USA/5026/B( )	1	3

2. PREAMBLE

2.(a) This certificate is issued to satisfy Sections 173.393a, 173.394, 173.395, and 173.396 of the Department of Transportation Hazardous Materials Regulations (49 CFR 170-189 and 14 CFR 103) and Sections 146-19-10a and 146-19-100 of the Department of Transportation Dangerous Cargoes Regulations (46 CFR 146-149), as amended.

2.(b) The packaging and contents described in item 5 below, meets the safety standards set forth in Subpart C of Title 10, Code of Federal Regulations, Part 71, "Packaging of Radioactive Materials for Transport and Transportation of Radioactive Material Under Certain Conditions."

2.(c) 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—

3.(a) Prepared by (*Name and address*):

Chem-Nuclear Systems, Inc.
P.O. Box 1866
Bellevue, WA 98009

3.(b) Title and identification of report or application

ATCOR, Inc. Application dated February 7, 1974, as supplemented.

3.(c) Docket No. 71-5026

4. CONDITIONS

This certificate is conditional upon the fulfilling of the requirements of Subpart D of 10 CFR 71, as applicable, and the conditions specified in item 5 below.

5. Description of Packaging and Authorized Contents, Model Number, Fissile Class, Other Conditions, and References:

(a) Packaging

(1) Model No.: BC-48-220

(2) Description

The packaging is a steel-encased, concrete shielded shipping cask. The cask is 94-1/4 inches in diameter by 103-3/4 inches in length. Reinforced concrete occupies the seven inch annular space between the shells and the two base plates. The lid is a 4-3/4 inches thick laminated steel cover held in place by thirty-two, high strength 1-1/4-inch diameter bolts. A silicone O-ring is used to seal the joint between the lid and the cask body. The outer shell and base plate are 1/4 inch thick, while inner shell and base plate are 2 inches thick. The cask is reinforced at the top and bottom with steel rings and is equipped with lifting lugs. The lid is provided with two access ports. Gross weight is about 71,000 pounds.

(3) Drawings

The package is constructed in accordance with the following ATCOR, Inc. Drawings Nos.: 1000-D-0049; 0146-B-0004, Rev. E; 0146-B-0009; 0146-D-0025, Rev. A; 0146-D-0020-1, Rev. A; and 0146-C-0018, Rev. E.

(b) Contents

(1) Type and form of material

(i) Byproduct material in the form of solids and solidified waste contained within secondary container(s).

(ii) Radioactive material in the form of activated reactor components packaged in secondary containers.

(2) Maximum quantity of material per package

Greater than Type A quantities of radioactive material, not to exceed 20 thermal watts and 23,000 pounds including weight of the contents, secondary container(s) and shoring.

6. The dose rate from the loaded cask shall not exceed 10 mrem/hr at six feet from the surface of the cask.

7. The access plugs shall be appropriately plugged and sealed prior to transport.

8. Shoring shall be placed between the secondary container(s) and the cask cavity to prevent movement during normal and accident conditions of transport.

9. Prior to each shipment, the packaging lid silicone O-ring shall be inspected. The O-ring shall be replaced with a new silicone O-ring if inspection shows any defects or every six (6) months, whichever occurs first.

10. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12(b).

11. Expiration date: December 31, 1979.

REFERENCES

ATCOR, Inc., application dated February 7, 1974.

Supplements dated: June 28 and July 29, 1974; November 16, 1977; and March 22, 1978.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Charles E. MacDonald, Chief
Transportation Certification Branch
Division of Fuel Cycle and
Material Safety

Date: SEP 05 1979