

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
6601	6	USA/6601/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):	3.(b) Title and identification of report or application:
Chem-Nuclear Systems, Inc. P.O. Box 1866 Bellevue, WA 98009	ATCOR, Inc. application dated January 29, 1974, as supplemented.
	3.(c) Do 71 -6601

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.: LL-50-100
- (2) Description

The packaging is a steel-encased, lead shielded shipping cask which weighs approximately 70,000 pounds when loaded. The cask is 73.5 inches in diameter by 92 inches high, with an effective cavity 62 inches in diameter by 75 inches long. Gamma shielding equivalent to 4.5 inches of lead is provided by lead and steel. The outer shell is fabricated of two, 3/4 inch thick steel plates and the inner shell of 1/2- and 1/4-inch thick plates. The cavity is closed and sealed by thirty-two, 1-3/4 inch bolts and a silicone O-ring within a recessed groove on the flange of the cask. A steel collar encircles the outer shell in the lid area. Shackles are used for lifting the packaging and the lid. Tie-down is accomplished through a steel structure which is not attached to the package. The lid provides several threaded and sealed access plugs and the base has a drain line.

(3) Drawings

The package is constructed in accordance with the following ATCOR, Inc. Drawings Nos.: 1042-D-0001, Rev. A; 1042-C-0002, Rev. C; 1042-B-0004, Rev. C; and 1042-D-0021, Rev. C.

POOR
ORIGINAL

124
390151

7909210486

(b) Contents

(1) Type 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.

(2) Maximum quantity of material per package

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

6. Wood shoring shall be placed between the secondary container(s) (or activated components) and the cask cavity to prevent movement during normal conditions of transport.
7. 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.
8. The external dose rate at 3 feet from the surface of the package shall not exceed 125 mrem/hr.
9. The drain line and access plugs shall be appropriately plugged and sealed prior to transport.
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.

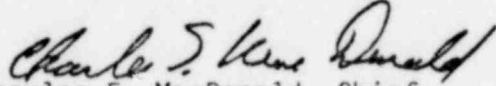
165
990162

REFERENCES

ATCOR, Inc. applicated dated January 29, 1974.

Supplements dated: June 28 and July 29, 1974; October 21 and November 23 and 29, 1977; and March 9, 1978.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION


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

Date: AUG 30 1979

166
990163