

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 |
|--------------------------|--------------------|----------------------------------|-----------------|-----------------------|
| 9108 | 2 | USA/9108/A | 1 | 2 |

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 analysis report of the package design or application--

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| 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 May 30, 1978, as supplemented. 71-9108 | 3.(c) Docket No. |
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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.: AL-33-90

(2) Description

The packaging is a steel encased, lead shielded right circular cylinder for low specific activity radioactive material. The outside dimensions are 62 inches in diameter by 86-5/8 inches long and the cavity dimensions are 53 inches in diameter by 74 inches long. The 3-1/4-inch annulus between the outer 3/4-inch and inner 1/2-inch steel shells is filled with lead. The base plate consists of a 64-3/4-inch square 1-inch outer plate, 3 inches of lead and a 1/4-inch outer plate. The cover consists of a 1-inch steel outer and a 1/2-inch thick steel inner plate with 2-7/8 inches of lead shielding. A secondary cover, plugging the 20-inch central opening in the cover, is constructed of a 1/4-inch outer plate, 1-1/2 inches of lead, a 1/2-inch plate, 1-3/4 inches of lead and a 1/4-inch inner plate. The covers are neoprene gasketed and secured by sixteen, 3/4-inch and eight, 5/8-inch bolts, respectively. The cavity is vented through a 1/8-inch plugged tube through the cover and drained through a 1/2-inch plugged tube at the bottom. Three lugs on the cask sides, cover ribs and secondary cover are provided for lifting. Four lugs on the cask shell are used for tie-down. Package gross weight is about 41,300 pounds.

(3) Drawing

The packaging is fabricated according to ATCOR, Inc., Drawing No. 1036-D-01, Revision J.

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(b) Contents

(1) Type and form of material

Dewatered or solidified waste meeting the requirements of low specific activity radioactive material in secondary containers which meet the requirements for Type A (49 CFR §173.389(j)) packaging.

(2) Maximum quantity of material per package

Greater than Type A quantities of radioactive material with the weight of the contents, secondary containers and shoring not exceeding 10,300 pounds. The decay heat load shall not exceed 20 watts.

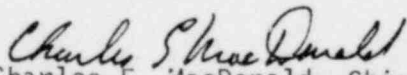
6. Shoring shall be placed between the secondary containers and the cask cavity to prevent movement during normal conditions of transport.
7. The cover lifting lugs shall not be used for lifting of the cask and shall be plugged or covered in transit.
8. The package authorized by this certificate shall be transported on a motor vehicle, railroad car, aircraft, inland water craft, or hold or deck of a seagoing vessel assigned for sole use of the licensee.
9. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12(b)
10. Expiration date: June 30, 1983.

REFERENCES

ATCOR, Incorporated, Application dated May 30, 1978.

Chem-Nuclear Systems supplement dated: March 28, 1980.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION


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

Date: MAY 06 1980