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. USA/9113/A	1.(d) Pages No.	1.(e) Total No. Pages
9113	4	USA/9113/A	1	3

## 2. PREAMBLE

- 2.(a) This certificate is issued to satisfy Sections 173.393a, 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.(5) The packaging and contents described in item 5 below, meets the safety standards set forth in Subpert 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):
Nuclear Packaging, Incorporated
1733 South Fawcett
Tacoma, Washington 98402

3.(b) Title and identification of report or application: Nuclear Packaging, Incorporated, application dated March 20, 1978, as supplemented.

3.(c) Docket No. 71-9113

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: 7-100

1528 046

(2) Description

A steel encased, lead shielded cask for low specific activity material. The cask is a right circular cylinder 54-1/2 inches high by 84 inches in diameter. The cask cavity is 40-3/4 inches high by 75-1/2 inches in diameter. The cask side wall consists of a 3/8-inch thick inner steel shell, a 3-inch lead shell, and a 3/4-inch thick outer steel shell. The base is comprised of two steel plates welded together to form a 5-1/2-inch thick base which is integrally welded to the inner and outer steel shells of the side wall. A steel flange is welded to the inner and outer shells of the side wall at the top. The 5-1/2-inch thick lid is comprised of two steel plates, which are stepped and welded to mate with the steel flange. The cask closure is sealed by a gasket located between the lid and steel flange. Positive closure is accomplished by eight ratchet binders. The lid contains a 6-1/2-inch thick centrally located secondary lid, comprised of three steel plates stepped and welded. The shield plug is sealed by a gasket, and eight 3/4-inch bolts and nuts are used to provide positive closure. A plugged drain line in the base and a stainless steel cavity sleeve is optionally provided.

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5. (a) Packaging (Continued)

Tie-down is accomplished by four tie-down lugs welded to the cask body. There are four cask lifting lugs, three lid lifting lugs, and one secondary lid lifting lug. The package gross weight is approximately 42,000 pounds.

(3) Drawing

The packaging is fabricated in accordance with Nuclear Packaging Incorporated Drawing No.: BA-20-200D, Revision B, Sheets 1 and 2.

- (b) Contents
  - (1) Type and form of material
    - (i) Greater than Type A quantities of byproduct material contained in process sclids, either dewatered, solid or solidified, meeting the requirements for low specific activity radioactive material, in secondary containers, or
    - (ii) Greater than Type A quantities of byproduct material contained in solid reactor components that meet the requirements for low specific activity radioactive material.
  - (2) Maximum quantity of material per package

The maximum weight of the contents and secondary containers shall not exceed 7,000 pounds.

- Shoring shall be placed between the secondary containers (or activated components) and cask cavity to prevent movement during normal conditions of transport.
- Lid lifting lugs shall not be used for lifting the cask, and shall be covered in transit; and the secondary lid lifting lug shall not be used for lifting the primary lid.
- 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 the sole use of the licensee.
- 9. The drain line shall be appropriately plugged and sealed prior to transport.
- 10. The packaging authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12(b).
- 11. Exciration date: May 31, 1983.

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## REFERENCES

Nuclear Packaging, Incorporated application dated March 20, 1978.

Supplement dated: May 1, 1978.

Chem-Nuclear Systems, Inc. supplement dated June 29, 1979

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Charles E. MacDonald, Chief

Transportation Certification Branch Division of Fuel Cycle and Material

Safety

Date: NOV 2 0 1979