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

## U.S. NUCLEAR REGULATORY COMMISSION

## CERTIFICATE OF COMPLIANCE

For Radioactive Materials Packages

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1.(a) Certificate Number	1.(b) Revision No.		1.(d) Pages No. 1.(e) Total No. Pages
9096	3	USA/9096/A	1 1 6

## 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 170-129 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 Chem-Nuclear Systems, Inc. application dated April 14, 1980.

3.(c) Do ket No.

71-9096

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 In in , Model Number, Fissile Class, Other Conditions, and References:
  - (a) Packaging
    - (1) Model No.: CNS 21-300
    - (2) Description

A steel encased lead shielded cask for low specific activity radioactive material. The cask is a right circular cylinder with 86-3/4-inch OD by 117-1/4-inch height, and a cavity 83-inch ID by 109-1/4-inch height. The 1-inch thick lead shield is supported by outer and inner stainless steel shells 3/4-inch and 1/8-inch thick. The inner plates of the lid and base are laminated steel plates with a total thickness of 1/2-inch. Positive closure of the silicone rubber-sealed lid is provided by twelve, 1-1/4-inch diameter cap screws. A secondary lid with a Neoprene seal uses eighteen, 3/4-inch diameter bolts for closure. The cask is welded to a 96-inch square base plate and has two lifting trunnions, three lid lift rings and one secondary lid lift ring. Package gross weight is 57,450 pounds.

(3) Drawing

The packaging is fabricated in accordance with Chem-Nuclear Systems, Inc. Drawing No. 1-298-101, Rev. J.

Page 2 - Certificate No. 9096 - Revision No. 3 - Docket No. 71-9096

- 5. (Continued)
  - (b) Contents
    - (1) Type and form of material
      - (i) Process solids, either dewatered, solid or solidified in secondary containers, meeting the requirements for low specific activity radioactive material, or
      - (ii) Solid reactor components in secondary containers, as required that meet the requirements for low specific activity radioactive material.
    - (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 27,250 pounds.

- Shoring shall be placed between secondary containers (or accivated components) and the cask cavity to prevent movement during normal conditions of transport.
- 7. The lid lifting lugs shall not be used for lifting the cask and shall be covered in transit.
- 8. Prior to each shipment the lid gaskets shall be inspected. The gaskets shall be replaced if inspection shows any defects or every twelve (12) months, whichever occurs first.
- 9. Packagings fabricated (10 CFR \$71.53(c)) after April 14, 1980, shall be constructed of A-516, Grade 70 carbon steel instead of A-36 carbon steel.
- 10. 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.
- 11. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12(b).
- 12. Expiration date: May 31, 1985.

## REFERENCE

Chem-Nuclear Systems, Inc. application dated April 14, 1980.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Charles E. MacDonald, Chief

Transportation Certification Branch

Division of Fuel Cycle and

Material Safety

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