

U.S. NUCLEAR REGULATORY COMMISSION
CERTIFICATE OF COMPLIANCE
For Radioactive Materials Packages

1.(a) Certificate Number 9080	1.(b) Revision No. 5	1.(c) Package Identification No. USA/9080/A	1.(d) Pages No. 1	1.(e) Total No. Pages 3
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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): Hittman Nuclear & Development Corporation 9190 Red Branch Road Columbia, MD 21045	3.(b) Title and identification of report or application: Hittman Nuclear & Development Corporation application dated January 12, 1977, as supplemented.
	3.(c) Docket No. 71-9080

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.: 9080
- (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 40-1/4 or 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 welded together, which are stepped to mate with the steel flange. The cask closure is sealed by a Neoprene gasket located between the lid and steel flange. Positive closure is accomplished by eight (8) ratchet binders. The lid contains a 6-1/2-inch thick centrally located shield plug, comprised of three steel plates stepped and welded. The shield plug is sealed by a Neoprene gasket, and eight, 3/4-inch studs and nuts or bolts are used to provide positive closure. A plugged drain in the base and a stainless steel cavity sleeve is optionally provided.

5. a) Packaging (continued)

(2) Description (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 shield plug lifting lug. The package gross weight is approximately 48,000 pounds.

(3) Drawings

The packaging is fabricated in accordance with Hittman Nuclear & Development Corporation Drawing Nos.: C001-4-9600, Sheet 1, Rev. C; C001-4-9601, Sheet 1, Rev. B and Sheet 2, Rev. 0; C001-4-9602, Sheet 1, Rev. B and Sheet 2, Rev. 0; C001-4-9603, Sheet 1, Rev. A; and C00159604, Sheet 1, Rev. 0; or

The packaging is fabricated in accordance with Nuclear Packaging, Incorporated Drawing No.: BA-20-2000, Sheets 1 and 2, Revision 2.

(b) Contents

(1) Type and form of material

(i) Dewatered, solids, or solidified waste, meeting the requirements for low specific activity radioactive material as defined in 10 CFR §71.4(g), in secondary containers; or

(ii) Activated solid components meeting the requirements for low specific activity radioactive material as defined in 10 CFR §71.4(g).

(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 13,000 pounds.

6. Shoring shall be placed between secondary containers (or activated components) and the cask cavity to prevent movement during normal conditions of transport.

7. The lid and shield plug 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. Prior to each shipment, the packaging lid seals shall be inspected. The seals shall be replaced with new seals if inspection shows any defects or every twelve (12) months, whichever occurs first.

9. The drain line shall be appropriately plugged and sealed prior to transport.

10. Packagings fabricated (10 CFR §71.53(c)) after August 31, 1980, shall be constructed of A-516, Grade 70 carbon steel instead of A-36 carbon steel.
11. 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.
12. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12(b).
13. Expiration date: May 31, 1983.

REFERENCES

Hittman Nuclear & Development Corporation application dated January 12, 1977 (including SAR dated 1/13/77).

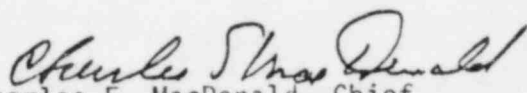
Supplements dated: June 6 and 21, 1977; August 18, 1978; and March 17, 1980.

Nuclear Packaging, Incorporated application dated March 20, 1978.

Supplements dated: May 1, 1978; and May 9, 1980.

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

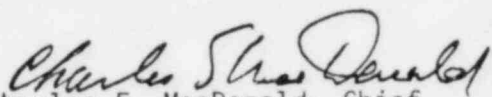
FOR THE U.S. NUCLEAR REGULATORY COMMISSION


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

Date: AUG 27 1982

U.S. Nuclear Regulatory Commission
Transportation Certification Branch
Approval Record
Model No. 9080 Packaging
Docket No. 71-9080

It was recently brought to our attention that when Certificate of Compliance Nos. 9113 and 9080 were combined on July 21, 1980, the revised certificate (No. 9080, Rev. 4) failed to consider a slight difference in cask heights. The Description section of Certificate of Compliance No. 9080 has been revised to acknowledge the difference (40-1/4" vs 40-3/4"). Also, the description has been modified to acknowledge the use of a Neoprene gasket seal on packages built to this design.


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

Date: AUG 27 1982