

**CERTIFICATE OF COMPLIANCE  
FOR RADIOACTIVE MATERIALS PACKAGES**

U.S. NUCLEAR REGULATORY COMMISSION

1. a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. PACKAGE IDENTIFICATION NUMBER	d. PAGE NUMBER	e. TOTAL NUMBER PAGES
9071	6	USA/9071/B( )	1	3

2. PREAMBLE

- This certificate is issued to certify that the packaging and contents described in Item 5 below, meets the applicable safety standard set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."
- 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

a. ISSUED TO (Name and Address)

ANEFco, Incorporated  
P.O. Box 171  
Moodus, CT 06469

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION

ANEFco application received June 14, 1976,  
with report, "Safety Analysis Report Cask  
AP-101," as supplemented.

c. DOCKET NUMBER

71-9071

4. CONDITIONS

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable, and the conditions specified below.

5.

(a) Packaging

- (1) Model No.: AP-101
- (2) Description

A steel encased, lead shielded cask for non-fissile radioactive material. The overall dimensions of the cask are 40 inches in diameter by 193 inches long. The cask consists of two concentric stainless steel cylindrical shells. The inner shell is 5/8-inch thick by 28-inch ID; the outer stainless steel shell is 1-1/2-inch thick by 39-1/4-inch OD and a 3-1/2-inch poured lead shield fills the space between. The outer shell is surrounded by a 0.140-inch thick stainless steel thermal shield separated by a 0.125-inch thick stainless steel spacer wire. The cavity is 28 inches in diameter by 167 inches long. The base is a welded stainless steel construction with 3 inches of poured lead. The flanged lid is of stainless steel and lead. Closure is provided by twenty, 1-1/2-inch diameter bolts and a gask-o-seal closure seal. There are two penetrations into the containment vessel for drain lines which are plugged and gasketed with a neoprene seal. The cask is equipped with removable, canned balsa impact limiters at each end. The overall dimensions of the cask with impact limiters in place are 84 inches in diameter by 236 inches long. The cask has four lifting trunnions, two redundant pairs for lifting. Three of the trunnions are used for tie-down of the cask for shipment. The package gross weight is approximately 62,000 pounds.

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5. (a) Packaging (Continued)

(3) Drawings

The packaging is fabricated in accordance with ANEFCO, Incorporated Drawing Nos. SC-101, Rev. A; SC-102; SC-103, Rev. A; SC-104, Rev. B; SC-107, Rev. A; SC-108; SC-110, Rev. A; and SC-111.

(b) Contents

(1) Type and form of material

Greater than Type A quantity of byproduct material in the form of dry, solid, metallic waste material and activated reactor components.

(2) Maximum quantity of material per package

Weight of contents not to exceed 10,000 pounds. Internal decay heat of contents not to exceed 300 watts.

6. The package must be shipped dry. In preparation for shipment, the cask cavity must be drained of all excess water. A vacuum pump must be used to reduce the cavity pressure below the vapor pressure corresponding to the measured temperature of the drained water. The cavity pressure must be held below the vapor pressure determined for at least 90 minutes. A dry loaded package need not be vacuum dried provided the "empty" cask cavity and drain lines are verified not to contain liquid prior to each loading.
7. Except for close fitting contents, appropriate shoring must be used in the cask cavity to limit movement of the contents during accident conditions of transport.
8. In addition to the requirements of Subpart G of 10 CFR Part 71:
  - a. The package must be operated and maintained in accordance with procedures in supplement dated December 12, 1991.
  - b. Prior to each shipment the gask-o-seal closure seal must be inspected. The gask-o-seal closure seal and the cavity drain O-ring seals must be replaced with new seals within the 12-month period prior to shipment, or earlier if inspection shows any defect.
  - c. The package must be leak tested prior to each shipment in accordance with operating procedures in supplement dated December 12, 1991.
9. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12.
10. Expiration date: January 31, 2002.

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REFERENCES

ANEFco, Incorporated Safety Analysis Report Cask AP-101, received June 14, 1976.

Supplements dated: July 21, August 6, and October 21, 1976; April 2 and September 12, 1986; September 26 and December 12, 1991; and November 25, 1996.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

*Cass R. Chappell*

Cass R. Chappell, Chief  
Package Certification Section  
Spent Fuel Project Office  
Office of Nuclear Material  
Safety and Safeguards

Date: 01/17/97



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

APPROVAL RECORD  
Model No. AP-101 Package  
Certificate of Compliance No. 9071  
Revision No. 6

By application dated November 25, 1996, ANEFCO, Inc. requested renewal of Certificate of Compliance No. 9071, for the Model No. AP-101 package. No changes in the package design or contents were requested. The applicant stated that the operating procedures, acceptance tests, and maintenance program had been reviewed, and were found to be complete and current.

The certificate has been renewed for a five year period which expires January 31, 2002.

A handwritten signature in cursive script, reading "Cass R. Chappell", is positioned above the printed name and title.

Cass R. Chappell, Chief  
Package Certification Section  
Spent Fuel Project Office  
Office of Nuclear Material Safety  
and Safeguards

Date 01/17/97