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

## U.S. NUCLEAR REGULATORY COMMISSION

# CERTIFICATE OF COMPLIANCE

#### For Radioactive Materials Packages

1.(a)		ate Number 5275	1.(b) Revision No. 5	1.(c) Pack USA/62	age Identification No. 275/B( )	1.(d) Pages No. 1	1.(e) Total No. Page 2
2. PI	PREAMBLE						
	2.(a)	This certificate is issued to satisfy Sections 173.393a, 173.394, 173.395, and 173.396 of the Department of Transportation Hazard 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 116–149), 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. T	his certif	ficate is issued on the basis of	f a safety analysis report	of the package	design or application-		
	3.(a)	Prepared by (Name and add	ress): 3.(b)	3.(b) Title and identification of report or application:			
Chem-Nuclear Systems, Inc. P. O. Box 1866 Bellevue, WA 98009				ATCOR, Inc. application dated March 11, 1974, as supplemented.			
De			3.(c)	Docket No.	71-6275		

in item 5 below.

5. Description of Packaging and Authorized Contents, Model Number, Fissile Class, Other Conditions, and References:

## (a) Packaging

- (1) Model No.: LL-28-4
- (2) Description

The packaging is a steel-encased, lead shielded shipping cask. The basic cask body is a cylinder, 67 inches long by 39-1/8 inches in diameter, formed by two concentric steel shells whose annular region is filled with eleven inches of lead.

The outer shell is made of two plates, namely a 3/8-inch thick stainless steel plate on the inside and a 5/8-inch thick mild steel plate on the outside. The 1/4-inch thick inner stainless steel shell is 14-7/8 inches inside diameter by 40 inches inside length. The base of the outer shell is welded to the bottom plates of the same construction and the base of the inner shell is welded to a 1/4-inch thick circular plate. The cask lid is a flanged, recessed, steel weldment having eleven inches of lead shielding. The cask lid is secured in place by twenty, 3/4-inch diameter bolts.

Cask features include drain and vent couplings, removable lifting lugs and removable lifting eyes for the lid. The weight of the packaging is 28,150 pounds. The maximum weight of the package is 30,000 pounds.

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(3) Drawings

The packaging is constructed in accordance with ATCOR, Inc. Drawings Nos.: 1000-B-0061; 1000-E-0040-0; 1000-E-0041-0; and 1000-R-0043-0, Rev. F.

(b) Contents

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The contents consist of either: (1) maximum of 10,000 curies of cobalt-60 as metal encapsulated to meet the requirements of special form or, (2) a maximum of 40 curies of primarily cobalt-58 and cobalt-60 contained in dry spent filter elements.

- The cobalt source secondary liner as shown on ATCOR Drawing No. 0399-D-0001-0, Rev. 0, or 106-D-01, Rev. 0, shall be used for shipment of cobalt-60 sources.
- 7. A steel secondary liner, shown on ATCOR Drawing No. 0146-C-0001-0, Rev. A, or 106-D-01, Rev. 0, shall be used for shipment of the spent filter elements. The filter shall be encased in concrete within the liner.
- 8. Shoring shall be placed between the secondary liner and the cask cavity to prevent movement during normal and accident conditions of transport.
- The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12(b).
- 10. Expiration dated: December 31, 1979.

### REFERENCES

ATCOR, Inc. application dated March 11, 1974.

Supplements dated: June 28 and July 29, 1974; November 10, 1977; and March 22, 1978.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

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

SEP 0 5 1979

Date:

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