

CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIALS PACKAGES

U.S. NUCLEAR REGULATORY COMMISSION

1. CERTIFICATE NUMBER	2. REVISION NUMBER	3. PACKAGE IDENTIFICATION NUMBER	4. PAGE NUMBER	5. TOTAL NUMBER PAGES
9156	4	USA/9156/B(U)	1	2

2. PREAMBLE

- This certificate is issued to certify that the packaging and contents described in Item 5 below, meets the applicable safety standards 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):

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION:

Industrial Nuclear Company
2515 Williams Street
San Leandro, CA 94577

Industrial Nuclear Company application
dated December 23, 1981, as supplemented.

c. DOCKET NUMBER:

71-9156

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.: IR-50

(2) Description

The Model No. IR-50 shipping container is designed for use as a source changer, storage container, and Type B shipping container for radiographic sources in special form. The Model No. IR-50 source changer measures 8.875 inches long, 4.5 inches wide, and 8.5 inches high. The radioactive source assembly is housed in Zircalloy or titanium "S" tube. The "S" tube is surrounded by depleted uranium metal as shielding material. The depleted uranium shield assembly is encased in a stainless steel housing. The void space between the depleted uranium shield assembly and the inner container is filled with a rigid polyurethane foam. The 45 pound source changer is centered by plywood supports within a 10 gallon (min 20 gauge) steel drum with a 12-gauge steel closure ring. The gross weight of the source changer and overpack is 70 pounds.

(3) Drawings

The packaging is constructed in accordance with Industrial Nuclear Company Drawing Nos.: 2A, Rev. 1, dated November 4, 1992; 2B, Rev. 1, dated August 31, 1992; 50-4, Rev. 2, dated November 4, 1992; and 50-4(A), Rev. 2, dated August 31, 1992.

(b) Contents

(1) Type and form of material

Iridium 192 as sealed sources that meet the requirements of special form radioactive material.

(2) Maximum quantity of material per package

120 curies

6. The sources must be secured in the shielded position of the packaging of the shipping plug, source assembly, and locking device. The shipping plug, source assembly used must be fabricated of materials capable of resisting a 1475°F fire environment for one-half hour and maintaining their positioning function. The ball stop of the source assembly must engage the locking device. The flexible cable of the source assembly and shipping plug must be of sufficient length and diameter to provide positive positioning of the source in the shielded position.
7. The name plate on overpack must be fabricated of materials capable of resisting the fire test of 10 CFR Part 71 and maintaining its legibility. The two vent holes in the side of the overpack must be covered with tape or rubber (plastic) plugs to prevent entry of rain water.
8. In addition to the requirements of Subpart G of 10 CFR Part 71, each package must meet the acceptance tests and maintenance program, and shall be operated and prepared for shipment in accordance with the operating procedures in the application document entitled "Operating Procedures, Acceptance Test, and Maintenance Program," Revision 1, dated November 4, 1992.
9. The packaging authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12.
10. Expiration date: January 31, 1998.

REFERENCES

Industrial Nuclear Company application dated December 23, 1981.

Supplements dated: May 28, 1982; October 13, 1983; and March 20, June 25, September 4, and November 4, 1992.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Charles E. MacDonald

Charles E. MacDonald, Chief
Transportation Branch
Division of Safeguards and
Transportation, NMSS

JAN 7 1993

Date: _____



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

APPROVAL RECORD

Model No. IR-50
Certificate of Compliance No. 9156
Revision No. 4

By application dated March 20, 1992, as supplemented June 25, September 4, and November 4, 1992, Industrial Nuclear Company, Inc. requested renewal of Certificate of Compliance No. 9156 for the Model No. IR-50 shipping package. The only change to the package has been the addition of a probe to check for the presence of a radioactive source when shipping an empty package.

The Certificate of Compliance has been conditioned to require that the package be operated, acceptance tested, and maintained in accordance with the "Operating Procedures, Acceptance Test, and Maintenance Program," Revision 1, dated November 4, 1992. In the Certificate of Compliance, drawing 2B was added to the list of drawings because it is referenced in drawing 2A, and the company address has been updated.

The Certificate of Compliance has been renewed for a five year period which expires January 31, 1998.

A handwritten signature in cursive script, reading "Charles E. MacDonald", is positioned above the typed name.

Charles E. MacDonald, Chief
Transportation Branch
Division of Safeguards
and Transportation, NMSS

Date: JAN 7 1993