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

U.S. NUCLEAR REGULATORY COMMISSION

CERTIFICATE OF COMPLIANCE

For Radioactive Materials Packages

1.(a) Certificate Number 9126	1.(b) Revision No.	1.(c) Package Identification No. USA/9126/B()	1.(d) P	ages No. 1.(e) Total No. Pages
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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):.

3.(b) Title and identification of report or application:

Gamma Industries 2255 Ted Dunham Avenue P.O. Box 2543 Baton Rouge, LA 70821 Gamma Industries application dated May 20, 1978.

3.(c) Docket No. 71_01

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 Nos.: 20, 20A, 50 and 50A
 - (2) Description

A steel encased, uranium shielded radiographic device. The shipping container is approximately 21 inches long, 23 inches wide and 42 inches high. The radioactive source assembly is housed in a Zircaloy or titanium "S" tube. The tube is surrounded by depleted uranium metal as shielding material. The depleted uranium shield assembly is encased in a steel housing. The void space between the depleted uranium shield assembly and the outer container is filled with a polyurethane foam. The gross weight of the container is 325 pounds.

(3) Drawings

The packaging is constructed in accordance with Gamma Industries Drawings Nos. 821-1001-128, 821-1001-129 and 180-01.

- (b) Contents
 - (1) Type and form of material

Cobalt-60 as sealed sources that meet the requirements of special form as defined in 10 CFR §71.4(o).

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(b) (2) Maximum quantity of material per package

Model No. Quantity

20 and 20A 20 curies
50 and 50A 50 curies

- 6. The source shall be secured in the shielded position of the packaging by the safety plug assembly, source assembly and lockbox assembly. The components used to secure the source 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 safety plug assembly must be of sufficient length and diameter to provide positive positioning of the source in the shielded position.
- 7. The can and side plates must be a minimum of 1/4-inch thick carbon steel. The can and side plates shall be joined by full penetration welds. All other welds shall be fillet welds having sufficient throat thickness to develop strength equal to or greater than the metals being joined.
- 8. The nameplates shall be fabricated of materials capable of resisting the fire test of 10 CFR Part 71 and maintaining their legibility.
- 9. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12(b).
- 10. Expiration date: October 31, 1983.

REFERENCES

Gamma Industries application dated May 20, 1973.

Supplement dated: October 25, 1978.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Charles E. MacDonald, Chief

Transportation Branch

Division of Fuel Cycle and

Material Safety

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Date: APR 0 6 1979