

CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIALS PACKAGES

1. a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. PACKAGE IDENTIFICATION NUMBER	d. PAGE NUMBER	e. TOTAL NUMBER PAGES
9028	6	USA/9028/B(U)	1	2

2. PREAMBLE

a. 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."

b. 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

Amersham Corporation
40 North Avenue
Burlington, MA 01803

Technical Operations, Inc. application
dated September 27, 1979, as supplemented.

c. DOCKET NUMBER 71-9028

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 Nos.: 684 and 684E
- (2) Description

A steel encased uranium shielded Gamma Ray Projector. Primary components consist of an outer steel shell, internal bracing, polyurethane potting material, depleted uranium shield, and an "S" tube. The contents are securely positioned in the "S" tube by a source cable locking device and shipping plug. Tamper-proof seals are provided on the packaging, and a 1/4-inch thick steel shipping plate is bolted over the source locking mechanism for additional protection during transport. The total weight of the package is approximately 225 pounds.

(3) Drawings

The packaging is constructed in accordance with the following Technical Operations, Inc., Drawing Nos.:

- 68490, Sheets 1 through 5, Rev. C
- 66025, Sheets 2 and 3 of 3, Rev. A

CONDITIONS (continued)

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5. (b) Contents

(1) Type and form of material

Cobalt-60 or iridium-192 as sealed sources which meet the requirements of special form radioactive material.

(2) Maximum quantity of material per package

11 curies of cobalt-60; or
240 curies of iridium-192

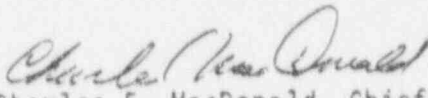
6. The source shall be secured in the shielded position of the packaging by the shipping plug, source assembly, and locking device. The shipping plug and source assembly must be fabricated of materials capable of resisting a 1475°F fire environment for one-half hour and maintaining their positioning 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 plates shall be fabricated of materials capable of resisting the fire test of 10 CFR Part 71 and maintaining their legibility.
8. In addition to the requirements of Subpart G of 10 CFR Part 71:
- (a) Each packaging must meet the Acceptance Tests and Maintenance Program of Chapter 8 of the application, and
- (b) Each package must be prepared for shipment and operated in accordance with the Operating Procedures of Chapter 7 of the application.
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, 1996.

REFERENCES

Technical Operations, Inc. application dated September 27, 1979.

Supplements dated: November 9, 1979; October 1, 1984, August 14, 1989, and May 4 and August 23, 1990.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION


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

Date: JAN 04 1991



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

APPROVAL RECORD
Model No. 684 and 684E Packages
Certificate of Compliance No. 9028
Revision No. 6

By application dated August 14, 1989, as supplemented May 4, and August 23, 1990, Amersham Corporation requested renewal of Certificate of Compliance No. 9028 for the Model No. 684 and 684E packages. The application included Technical Operations Drawing No. 68490, sheets 1 through 5, Revision C, which clarified external package dimensions. No package design changes were requested. Updated operating procedures, acceptance tests, and maintenance program were provided.

The certificate has been conditioned to require the package to be prepared for shipment in accordance with the Operating Procedures in Chapter 7 of the application and for the packaging to be acceptance tested and maintained in accordance with Chapter 8 of the application. For shipment of an empty package, a specific test was included in Chapter 7 to assure that the package is empty.

Revision No. 6 of the certificate is issued to Amersham Corporation instead of Technical Operations, the previous certificate holder. Amersham Corporation will be responsible for the maintenance of the certificate, safety analysis report for the package design, and the quality assurance records in accordance with 10 CFR §71.91(c). Amersham Corporation has been previously issued quality Assurance Program Approval for Radioactive Material Packages No. 71-0040.

Charles E. MacDonald
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Division of Safeguards and
Transportation, NMSS

Date: JAN 04 1991