

**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
9029	11	USA/9029/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

Amersham Corporation, application dated
September 16, 1991, as supplemented.

c. DOCKET NUMBER

71-9029

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. 676 and 676E, 676A, 676AE, 676B and 676BE
- (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 packaging is approximately 545 pounds.

(3) Drawings

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

- (i) Model No. 676 and 676E - Drawing No. 67690, Sheets 1-5, Rev. H; Drawing No. 66025, Sheets 2 and 3, Rev. A1.
- (ii) Model No. 676A, 676AE, 676B and 676BE - Drawing No. 67690, Sheets 1-5, Rev. H; Amersham Corp. Drawing No. 85790, Sheets 1 and 2, Rev. B.

Model Nos. with an E suffix have an electrical circuit.

5. (b) Contents

(1) Type and form of material

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

(2) Maximum quantity of material per package

330 Curies.

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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 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 nameplates 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) The package shall be prepared for shipment and operated in accordance with the Operating Procedures in Section 7.5.1 (dated September 1991) of the application; and
 - (b) The package must meet the Acceptance Tests and Maintenance Program of Section 8.0 of the application.
9. The package authorized by this certificate is hereby approved for use under the general provisions of 10 CFR §71.12.
10. Expiration date: October 31, 1999.

REFERENCES

Amersham Corporation application dated September 16, 1991.

Supplements dated: February 20, April 16, August 27, September 4 and 11, 1992; September 6, 1994; and February 3, 1995.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Cass R. Chappell

Cass R. Chappell, Section Leader
Cask Certification Section
Storage and Transport Systems Branch
Division of Industrial and
Medical Nuclear Safety, NMSS

Date: FEB 06 1995



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

APPROVAL RECORD

Model Nos. 676, 676E, 676A, 676AE, 676B, and 676BE
Certificate of Compliance No. 9029
Revision No. 11

By application dated February 3, 1995, Amersham Corporation requested an amendment to Certificate of Compliance No. 9029 revising the lock drawings for the Model Nos. 676, 676E, 676A, 676AE, 676B, and 676BE shipping containers. The revisions consist of the following: (1) removal of the specification for the head on the screw used to attach the lock, (2) allowing the use of an alternate material for the loctite use in the screw assembly of the package, and (3) allowing the use of stainless steel as an alternative material in the selector body of the lock. The changes involve parts of the lock that do not perform significant safety functions.

The changes do not affect the ability of the packages to meet the requirements of 10 CFR Part 71.

Cass R. Chappell

Cass R. Chappell, Section Leader
Cask Certification Section
Storage and Transport Systems Branch
Division of Industrial and
Medical Nuclear Safety, NMSS

Date: FEB 06 1995