

**CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIAL PACKAGES**

1. a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE	PAGES
9102	9	71-9102	USA/9102/B()	1	OF 2

2. PREAMBLE

- a. This certificate is issued to certify that the package (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

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| <p>a. ISSUED TO (<i>Name and Address</i>)
Neutron Products, Inc.
22301 Mt. Ephraim Road
Dickerson, MD 20842</p> | <p>b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION
Neutron Products, Inc., application
dated August 31, 1977, as supplemented.</p> |
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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.: NPI-20WC-6

(2) Description

A steel encased lead shielded cask contained within a wooden overpack. The cask is 24 inches in diameter with a 3/8-inch thick steel spherical shell and a cavity formed by an 8-1/4-inch ID by 3/8-inch thick steel tube. Positive closure of the shielded cask is accomplished by bolted end covers at each end of the cavity. The overpack is a 48-inch diameter, 12 gauge steel body with a wooden shell 38-1/4 inches in height made of 3/4-inch thick plywood sheets glued together and reinforced by 16 steel tie rods and 32 lug screws. Positive closure of the overpack lid is accomplished by 3 equally spaced bracket assemblies with attached chains and held together with a 3/8-inch by 4-inch welded ring. The maximum package gross weight is 6,000 pounds.

(3) Drawings

The Model No. NPI-20WC- packaging is constructed in accordance with Neutron Products, Inc. Drawing No. 240010, Rev. C. The overpack is constructed in accordance with Neutron Products Inc., Drawing Nos. 240116, Rev G.

(b) Contents

(1) Type and form of material

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

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5. (b) Contents (continued)

(2) Maximum quantity of material per package

The maximum activity must not exceed 9,500 curies. The maximum internal decay heat must not exceed 150 thermal watts.

6. The contents must be secured in the drum assembly (Item 11) so as to restrict movement in any direction to less than 0.25 inch by lead, steel or tungsten full diameter plugs and spacers.
7. The gross weight of the packaging must not exceed 6,000 pounds and the inner shielded cask shall be snug-fitting within the wooden overpack.
8. In addition to the requirements of Subpart G of 10 CFR Part 71:
- (a) The package must be prepared for shipment and operated in accordance with the operating procedures in the supplement dated October 7, 2003.
 - (b) The package must meet the Acceptance Test and Maintenance program in the supplement dated October 7, 2003.
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: November 30, 2008.

REFERENCES

Neutron Products, Inc., application dated August 31, 1977.

Supplements dated: February 6, 1978; July 31, 1985; August 2 and September 7, 1988; September 21, 1993; September 23, 1998; September 29 and October 7, 2003.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

/RA/
John D. Monninger, Chief
Licensing Section
Spent Fuel Project Office
Office of Nuclear Material Safety
and Safeguards

Date: November 28, 2003