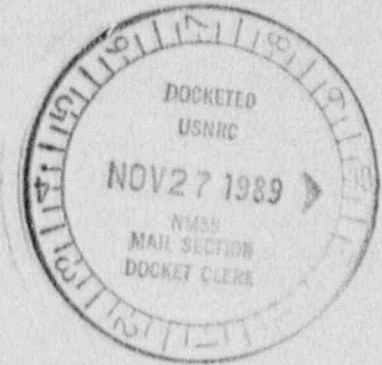


Amersham Corporation
40 North Avenue
Burlington, Massachusetts 01803
Telephone (617) 272-2000

RETURN TO 396-SS

71-6717

P1-37



3 November 1989

Mr. Charles MacDonald, Chief
Transportation Branch
Division of Safeguards and Transportation
NMSS
US Nuclear Regulatory Agency
Washington, DC 20555

Dear Mr. MacDonald:

We request an amendment to USNRC Certificate of Compliance Number 6717 issued for the Model 6717 Type B(U) package.

We request that the gross weight of the package be increased to 100 pounds. This will allow us to ship several heavier source changers that would presently exceed the certificate limit of 75 pounds.

In support of this request we have performed the 30 foot free fall test (71.73 (c)(1)), the puncture test (71.71 (c)(9)) and the compression test (71.73(c)(2)) on a 6717 barrel weighing 100 pounds. Test reports are enclosed, showing the satisfactory completion of these tests on the heavier 6717 barrel.

The increased weight will not adversely affect the ability of the package to meet any of the other normal conditions of transport or hypothetical accident conditions of transport.

The 6717 barrel has already proven to meet all the requirements of a Type B(U) package based on the initial submission by Gamma Industries dated June 1975.

I have enclosed an application fee of \$150.00 to cover the cost of this amendment. Please contact me if you require any additional information.

Sincerely,

Cathleen Roughan

Cathleen M. Roughan
Radiation Safety Officer

CMR86/tjf

Enclosure

8911300328 891103
PDR ADOCK 07106717
PDC

| | |
|-------------------|----------|
| Log | NY-3-90 |
| Remitter | |
| Check No. | 6531 |
| Amount | \$150 |
| Fee Category | 11A |
| Type of Fee | Am. & |
| Date Check Rec'd. | 11/28/89 |
| Date Corrected | 11/28/89 |
| By | Mississ |

Amersham

NT01

26/15

Amersham

TEST REPORT

FROM: Cathleen Roughan (mR)

DATE: 13 October 1989

SUBJECT: Compression Test of 6717 Barrel

A compression test was performed on 13 October 1989 on a Model 6717 barrel to demonstrate that it would successfully pass the compression requirements of 10CFR71.

A load of 500 lbs was uniformly distributed on the horizontally projected area of the 6717 barrel. This was greater than 2 pounds per square inch multiplied by the horizontally projected area (176 in²) or 353 pounds. The load was allowed to stand for 72 hours. At the end of the test there was no impairment of the structural or shielding integrity of the Model 6717 barrel.

CMR87/tjf

TEST REPORT

BY: CATHLEEN ROUGHAN *cmr*
DAVE DUNCANSON

DATE: 13 OCTOBER 1989

SUBJECT: Model 6717 Puncture Test

On 29 September 1989, a prototype Model 6717 package with a gross weight of 100 lbs was subjected to a puncture test in accordance with the requirements of 10 CFR 71.73(c) (2) and IAEA Safety Series No. 6, paragraph 719(b). This test was performed at Valley Tree Service, Groveland, MA.

Immediately following the free drop test, the prototype Model 6717 package was dropped from a height of one meter onto a target. The target consisted of a right circular cylindrical steel billet 152mm (6 inches) in diameter and 203mm (8 inches) high mounted onto the target used in the free drop tests.

During the drop, the package impacted the target squarely on the top of the barrel. There was no observable additional deformation as a result of this drop.

As a result of this test, there was no impairment of any design or safety features of the package. There was no structural damage to the locking assembly or package closure. There was no release of the package contents.

A shielding efficiency test performed subsequent to completion of the Model 6717 test program demonstrated that these puncture tests did not reduce the shielding efficiency of the package.

TEST REPORT

BY: CATHLEEN ROUGHAN *CR*
DAVE DUNCANSON

DATE: 13 OCTOBER 1989

SUBJECT: Model 6717 Free Drop Test

On 29 September 1989, a prototype Model 6717 package with a gross weight of 100 lbs was subjected to a free drop test in accordance with the requirements of 100 CFR 71.73(c) (1) and IAEA Safety Series No. 6, paragraph 719(a). This test was performed at Valley Tree Service, Groveland, MA.

The Model 6717 package was dropped from a height of 9.1 meters (30 feet) onto a target. The target consisted of a concrete cube, each side measuring 1.2m (48 inches) upon which had been wet floated a steel plate 0.9m (36 inches) wide, 0.9m (36 inches) long and 25mm (one inch) thick. This target conforms to the guidance for an essentially unyielding surface as prescribed in paragraph 7.01 of IAEA Safety Series No. 37.

During the drip, the package impacted the target on the top of the barrel. The barrel was deformed approximately 3 inches. The top of the barrel remained secure with the clamp ring attached.

As a result of this test, there was no impairment of any design or safety features of the package. There was no structural damage to the locking assembly or package closure. There was no release of the package contents.

A shielding efficiency test performed subsequent to the completion of the Model 6717 test program demonstrated that the free drop tests did not reduce the shielding efficiency of the package.