NRC FORM 618
(9-86)
10 CFR 71

U.S. NUCLEAR REGULATORY COMMISSION

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
5828	5	USA/5828/B( )F	1	3

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)*

Department of Energy
DP-4
Washington, DC 20545

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION

"Safety Analysis Report for the TREAT Capsule Assembly Shipping Container," Report No. LA-6606-MS, December 1976, as supplemented.

c. DOCKET NUMBER

71-5828

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.: TREAT

(2) Description

Packaging for TREAT capsule assemblies. The inner container is a 1-inch thick plywood box; covered with 14-gauge steel sheet; with an interior "T" beam; and 0.020-inch cadmium lining on the top, bottom, and on each side of the central divider; and a hinged cover. An outer container consists of two cylindrical metal tubes, separated by 3 inches of phenolic foam, and a support assembly for the inner container. The outer container is held within a metal truss framework. The package gross weight is 1,800 lbs.

(3) Drawings

The packaging is as shown in Figures 2, 4, 5 and 6 of Los Alamos Report No. LA-6606-MS, December 1976.

5. (b) Contents

(1) Type and form of material

(i) Fast reactor fuel pin contains plutonium which is hermetically sealed in 316 stainless steel thin wall tube which is further encapsulated in a 1.125 OD, 316 stainless steel with welded or brazed end caps and contained within a 3-inch OD by 1/4-inch thick wall steel pipe. The capsule assembly is as shown in Figures 1 and 3 of Los Alamos Report No. LA-6606-MS, December 1976; or

(ii) Unirradiated ORNL-ORR shim rod assembly containing uranium enriched U-235 isotope within aluminum plates.

(2) Maximum quantity of material per package

(i) For the contents described in 5(b)(1)(i):

Not more than two (2) fast reactor fuel pins. Fissile material not to exceed 60 grams per cm over package length. Total plutonium or other fissile material not to exceed 2.1 kg.

(ii) For the contents described in 5(6)(1)(ii):

Not more than two (2) assemblies. Fissile material not to exceed 7 grams per cm over package length. Total U-235 not to exceed 800 grams.

(c) Fissile Class I

6. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12.

7. Expiration date: October 31, 1992.

REFERENCES

"Safety Analysis Report for the TREAT Capsule Assembly Shipping Container," Los Alamos Scientific Laboratory Report No. LA-6606-MS, December 1976.

Department of Energy, HQ supplement dated: April 7, 1983.

Babcock & Wilcox Company supplement dated: August 6, 1985.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

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

Date: OCT 28 1987

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

Transportation Branch
Approval Record
Model No. TREAT Package
Docket No. 71-5828
Revision No. 5

By application dated October 15, 1987, Department of Energy requested renewal of Certificate of Compliance No. 5828. No changes have been requested or made to the package since approval of the latest supplement dated August 6, 1985.

The certificate of compliance has been renewed for a five year term which expires October 31, 1992.

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

Date: OCT 28 1987