Form NRC-618 (12-73) 10 CFR 71

U.S. NUCLEAR REGULATORY COMMISSION

CERTIFICATE OF COMPLIANCE

For Radioactive Materials Packages

				
1.(a) Certificate Number 6115	1.(b) Revision No.	1.(c) Package Identification No. USA/6115/AF	1.(d) Pages No.	1.(e) Total No. Pages 2

2. PREAMBLE

- 2.(a) This certificate is issued to satisfy Sections 173.393a, 173.394, 173.395, and 173.396 of the Department of Transportation Hazardous Materials Regulations (49 CFR 170-189 and 14 CFR 103) and Sections 146—19—10a and 146—19—100 of the Department of Transportation Dangerous Cargoes Regulations (46 CFR 146—149), as amended.
- 2.(b) The packaging and contents described in item 5 below, meets the safety standards set forth in Subpart C of Title 10, Code of Federal Regulations, Part 71, "Packaging of Radioactive Materials for Transport and Transportation of Radioactive Material Under Certain Conditions."
- 2.(c) 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-
 - 3.(a) Prepared by (Name and address):
 E.I. du Pont de Nemours & Company
 Savannah River Plant
 Aiken, SC 29801

3.(b) Title and identification of report or application:
E.I. du Pont de Nemours & Company Report
No. DPSPU 75-124-1, June 1975.

3.(c) Docket No. 71-6115

4. CONDITIONS

This certificate is conditional upon the fulfilling of the requirements of Subpart D of 10 CFR 71, as applicable, and the conditions specified in item 5 below.

- 5. Description of Packaging and Authorized Contents, Model Number, Fissile Class, Other Conditions, and References:
 - (a) Packaging
 - (1) Model No.: R1010-0032
 - (2) Description

Packaging for an instrumented, unirradiated test fuel bundle. The contents are held within an inner container by six cushioned aluminum clamp assemblies bolted to six 1/2-inch thick steel supports welded to the bottom and sides of the inner container. The 338-1/4-inch by 10-inch by 7-1/2-inch inner container is constructed from 1/4-inch thick 304 stainless steel plate. The inner container is held within a 455-inch by 24-1/2-inch by 18-1/4-inch carbon steel outer container, and is supported by urethane foam cushioning material. Positive closure is accomplished for the inner and outer containers by bolted cover plates. The package gross weight is 8,350 pounds.

(3) Drawings

The packaging is fabricated in accordance with Argonne National Laboratories (ANL) Drawing Nos. R1010-0032-DC, Rev. 4; EB-39887-E, Rev. 0; and R1010-9927-DE, Rev. 0.

- 5. (b) Contents
 - (1) Type and form of material

Unirradiated, instrumented, fast test reactor (FTR) type fuel, containing sintered UO, pellets with maximum 93.2 w/o enrichment in the U-235 isotope. The fuel element bundle consists of 19 FTR type fuel elements arranged in a triangular array in a hexagonal can, 0.056-inch separation maintained by wire wrap, and 0.028-inch separation between the outer fuel elements and shroud can maintained by wire wrap. The fuel element is 0.230-inch diameter, has a 36-inch active length, and 0.015-inch wall 316 stainless steel clad with welded end plugs.

(2) Maximum quantity of material per package

Not to exceed type A quantity of radioactive material, and total U-235 content not to exceed 3.0 kg.

(c) Fissile Class

III

Maximum number of packages per shipment

One (1)

- Prior to shipment each of the 18 eye bolts in the outer container cover plates 6. shall be replaced with 1/2-inch diameter bolts.
- 7. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12(b).
- Expiration date: September 30, 1987. 8.

REFERENCE

E,I. du Pont de Nemours & Company Report No. DPSPU 75-124-1, June 1975.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Charles E. MacDonald, Chief Transportation Certification Branch

Division of Fuel Cycle and

Material Safety

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Date

U.S. Nuclear Regulatory Commission
Transportation Certification Branch
Approval Record
Model No. R1010-0032 Packaging
Docket No. 71-6115

By application dated September 7, 1982, Department of Energy, Chicago Operations Office, requested renewal of Certificate of Compliance No. 6115. No changes have been requested or made to the package since approval of E.I. duPont de Nemours and Company Report No. DPSPU-75-124-1 dated June 1975.

The staff concludes that the statements of the original application satisfies the requirements for renewal of the Certificate of Compliance.

Charles E. MacDonald, Chief Transportation Certification Branch Division of Fuel Cycle and Material Safety, NMSS

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