U.S. NUCLEAR REGULATORY COMMISSION

CERTIFICATE OF COMPLIANCE

For Radioactive Materials Packages

1.(a) Certificate Number 6678	. 1.(b) Revision No.	1.(c) Package Identification No. USA/6678/B()	1.(d) Pages No. 1.(e) Total No. Pages

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 cafety 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-74-124-5, April 1975, Rev. 1, 4/78.

3.(c) Docket No. 71-6678

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.: LP-50
 - (2) Description

Packaging for large quantities of tritium. The containment vessel is a nominal 50 liter 304L stainless steel vessel fitted with stainless steel vacuum valve assembly. The containment vessel is 13-5/8-inch 0.D. by 25 inches high with 0.078 inch wall thickness. The containment vessel is held within a closed aluminum bucket with a 14 inch 0.D., 30 inches high and minimum 15/64 inch walls. The aluminum bucket is centered and supported within a 16-gage, 23-1/2 inch 0.D. by 40 inch steel drum using celotex insulation. The drum is closed using a bolted locking ring. The package gross weight is 260 pounds.

(3) Drawings

The packaging is fabricated in accordance with DuPont Drawing Nos.: \$5-2-5733, Rev. 16; \$5-2-5734, Rev. 9; \$5-2-5735, Rev. 1; \$4-2-596, Rev. 0; \$5-2-186, Rev. 58; \$5-2-187, Rev. 22; \$4-2-633, Rev. 1; and Figure 4 of DuPont Report No. DPSPU-74-124-5, April 1975, Rev. 1, 4/78.

- 5. (b) Contents
 - Type and form of material
 Tritium in mixture with other gases.
 - (2) Maximum quantity of material per package

 Not more than 75,300 cm³ of tritium at STP (1 atm, 25°C), and a maximum activity of 193,500 Curies.
- 6. The maximum internal fill pressure in the primary containment vessel shall not exceed 23.2 psia at 25°C (77°F).
- Acceptance, maintenance and use of the package shall be in accordance with the procedures and requirements of Chapters 6 and 7 of DuPont Report No. DPSPU-74-124-5, April 1975, Rev. 1, 4/78.
- 8. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12(b).
- 9. Expiration date: September 30, 1987.

REFERENCE

E. I. DuPont de Nemours and Company Report No. DPSPU-74-124-5, April 1975, Rev. 1, 4/78.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

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

	SEP	17	1982	
Date:				

U.S. Nuclear Regulatory Commission
Transportation Certification Branch
Approval Record
Model No. LP-50 Packaging
Docket No. 71-6678

By application dated August 13, 1982, Department of Energy, Safety Engineering and Analysis Division, requested renewal of Certificate of Compliance No. 6678. No changes have been requested or made to the package since approval of Revision 1 dated April 1978 to the Safety Analysis Report No. DPSPU-74-124-5 dated April 1975.

The staff concludes that the statements of the original application as supplemented by the April 1978 revision satisfies the requirement for renewal of the Certificate of Compliance.

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

Date: SEP 17 1982