Form NRC-518 (12-73) 10 CFR 71

U.S. NUCLEAR REGULATORY COMMISSION CERTIFICATE OF COMPLIANCE

For Radioactive Materials Packages

1.(a) Certificate Number 6568	1.(b) Revision No.	1.(c) Package Identification No. USA/6568/B()	1.(d) Pages No. 1.(e) Total No. Pages
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2. PREAMBLE

- 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."
- 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): Tennessee Valley Authority 500C Chestnut Street, Tower II Chattanooga, TN 37401

3.(b) Title and identification of report or application: Tennessee Valley Authority application dated August 16, 1976, as supplemented.

3.(c) Docket No. 71-6568

4. CONDITIONS

This certificate is conditional upon the fulfilling of the requirements of Suppart D of 10 CFR 71, as applicable, and the conditions specified

- 5. Description of Packaging and Authorized Contents, Model Number, Fissile Class, Other Conditions, and References:
 - (a) Packaging
 - (1) Model No.: LL-60-150
 - (2) Description

The cask is cylindrical in shape 93 inches long and 82.5 inches in diameter. Lead shielding, 3-1/2 inches thick, is encased within the inner and outer steel shells that are welded to a laminated steel base plate assembly. The cover is a steel plate assembly secured to the top flange by 36 steel bolts. Encircling the top of the cask is a partial length steel shell of 1/2 inch thickness. Silicone O-rings provide seals at the top cover and at all plugs. The inner container is a right circular steel cylinder with a capacity of 150 cu. ft. The total weight, when loaded, is approximately 73,000 pounds.

(3) Drawings

The packaging is constructed in accordance with the following ATCOR Inc. Drawing Nos.: 0568-B-0005, Rev. H; 0568-C-0008, Rev. E; 0568-B-0010, Rev. E; 0568-B-0016, Rev. D; 0568-B-0018, Rev. A; 0568-B-0025; 0568-R-0001, Rev. J.

5. (b) Contents

(1) Type and form of material

Process solids, either dewatered, solid, or solidified, capable of compressing at least 30% on impact in secondary containers constructed in accordance with: ATCOR, Inc. Drawing No. 0568-D-002; TVA Drawing No. CH-14-2081, Rev. 2, or 49 CFR §178.350 (Specification 7A).

(2) Maximum quantity of material per package

The package contents and secondary containers shall be limited to 12,500 pounds with a curie content not to exceed 1,300 curies, and the decay heat not to exceed 20 watts.

- 6. Operating procedures shall be followed to assure that:
 - (i) All threaded pipe plugs in the cask and liner are sealed, using an appropriate sealant.
 - (ii) The liner (drums) is inspected and/or tested to assure leak tightness.
 - (iii) The space between the liner (drums) and cask cavity is dry prior to delivery to a carrier for transport.
 - (iv) Dunnage shall be provided in the shipping cask cavity sufficient to prevent significant movement of the secondary container(s) relative to the outer packaging under normal or accident conditions.
 - (v) Prior to each shipment the silicone 0-ring lid gasket shall be inspected. This gasket shall be replaced if inspection shows any defects or every twelve (12) months, whichever occurs first.
- 7. The external dose rate shall not exceed 125 mrem/hr at 3 feet from the surface of the cask at the time it is delivered to a carrier for transport.
- 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: October 31, 1981.

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REFERENCES

Tennessee Valley Authority application dated August 16, 1976.

Supplement dated: October 8, 1976; October 5, 1979; and October 23, 1980.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Charles E. MacDonald, Chief

Transportation Certification Branch

Division of Fuel Cycle and

Material Safety

Date:

OCT 24 1980