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

U.S. NUCLEAR REGULATORY COMMISSION

CERTIFICATE OF COMPLIANCE

For Radioactive Materials Packages

1.(a) Certificate Number	1.(b) Revision No.	1.(c) Package Identification No.	1.(d) Pages No. 1.(e) Total No. Pages
9021	5	USA/9021/B()	

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):

Technical Operations, Inc. Northwest Industrial Park Burlington, Massachusetts 01803 3.(b) Title and identification of report or application:

Technical Operations, Inc. application dated July 25, 1979.

3.(c) Docket No. 71-9021

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 tem 5 below.

- 5. Description of Packaging and Authorized Contents, Model Number, Fissile Class, Other Conditions, and References:
 - (a) Packaging
 - (1) Model Number: 750
 - (2) Description

A portable container which utilizes depleted uranium for shielding. The depleted uranium shielding surrounds a titanium "U" tube which is crimped at the middle of the "U". The tianium source tube is reinforced with a titanium sleeve (2 inches long) located on the upper ends of the "U" tube where the source tube leaves the uranium. The shielding and the "U" tube are encased in a steel bottom housing. The space between the shielding and the bottom steel housing is potted with a polyurethane foam. During transport, the contents are securely positioned in the source tube by the source drive cable locking device. An outer steel top cover is bolted to the bottm steel housing to provide protection to the locking device and containment of the coiled drive cable. Tamper-proof seals are provided on the package. Shipping weight is 70 pounds.

- 5. (a) Packaging (continued)
 - (3) Drawings

The packaging is constructed in accordance with the following Technical Operations, Inc. Drawing No. 75090, Sheets 1, 2 and 3 of 3, Revision 0.

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

Iridium-192 as sealed sources which meet the requirements of special form as defined in § 71.4(0) of 10 CFR Part 71.

(2) Maximum quantity of material per package

240 Curies

- 6. The source shall be secured in the shielded position of the packaging by the source assembly. The source assembly must be fabricated of materials capable of resisting a 1475°F fire environment for one-half hour and maintaining their positioning function. The cable of the source assembly must engage the lock retainer clip. The flexible cable of the source assembly must be of sufficient length and diameter to provide positive positioning of the source at the crimp of the "U" tube.
- 7. The name plate shall be fabricated of materials capable of resisting the fire test of 10 CFR Part 71 and maintaining their legibility.
- 8. The package authorized by this certificate is hereby approved for use under the general license provisions of Paragraph 71.12(b) of 10 CFR Part 71.
- 9. Expiration date: September 30, 1984.

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REFERENCE

Technical Operations, Inc. application dated July 25, 1979.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Charles E. MacDonald, Chief

Transportation Certification Branch

Division of Fuel Cycle and

Material Safety

Date: SEP 0 7 1979