

U.S. NUCLEAR REGULATORY COMMISSION
CERTIFICATE OF COMPLIANCE
For Radioactive Materials Packages

1.(a) Certificate Number 9032	1.(b) Revision No. 2	1.(c) Package Identification No. USA/9032/B()	1.(d) Pages No. 1	1.(g) Total No. Pages 2
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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. Radiation Products Division Northwest Industrial Park Burlington, Massachusetts 01803	3.(b) Title and identification of report or application: Technical Operations, Inc. application dated August 8, 1979.
	3.(c) Docket No. 71-9032

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.: Model 650
- (2) Description

A steel encased, uranium shielded, Iridium-192 source changer. Primary components consist of an outer steel shell, polyurethane potting material, uranium shield, Titanium "U" tube, and source holdown assembly. The source holdown assembly secures the source assembly in position within the crimped "U" tube. Tamper-proof seals and a padlock are provided on the packaging. Total weight of the package is approximately 70 pounds.

(3) Drawings

The packaging is constructed in accordance with the Technical Operations, Inc. Drawing No. 65002, Rev. A, Sheets 1, 2 and 3 of 3.

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5. (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(o) 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 source holdown assembly. The flexible cable of 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 nameplates 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.

REFERENCE

Technical Operations, Inc. application dated August 8, 1979. *

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Charles E. MacDonald
Charles E. MacDonald, Chief
Transportation Certification Branch
Office of Nuclear Material
Safety and Safeguards

SEP 17 1979

Date: _____

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