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

U.S. NUCLEAR REGULATORY COMMISSION CERTIFICATE OF COMPLIANCE

For Radioactive Materials Packages

1.(a) Certificate Number 9072	1.(b) Revision No.	1.(c) Package Identification No. USA/9072/B()F	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 safety analysis report of the package design or application—

3.(a) Prepared by (Name and address):

Coneral Atomic Company P.O. 20x 81608 San Diego, CA 92138 3.(b) Title and identification of report or application:

General Atomic Company application dated October 1, 1976, as supplemented.

3.(c) Docket No. 71-9072

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.: GAHC-1
 - (2) Description

Steel encased lead shielded shipping cask. The cask is provided with recessed plug-type lid and gasketed, bolted closure, lifting and tie-down devices and drain line penetrations. Containment for the contents is provided by inner can assemblies. The cask has dimensions, weight, and shielding as follows:

Exterior height, in	64.2
Exterior diameter, in	26.0
Cavity height, in	42.5
Cavity diameter, in	6.0
Lead shielding, in	8.5
Loaded weight, 1bs	12,500

(3) Drawing

The packaging is constructed in accordance with Battelle Memorial Institute Drawing No. BCL4-01, Sheet 2, Rev. A.

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5. (b) Contents

Type and form and maximum quantity of material per package

Plutonium in excess of twenty (20) curies per package must be in the form of metal, metal alloy, or reactor elements; and byproduct material, source material and special nuclear material not to exceed 200 watts decay heat in solid metal or oxide form packaged with inner can assembly and limitations on fissile loading for the Fissile Class as follows:

Inner can assembly:

Gulf General Atomic Drawing No. 4C-178, Issue C

Fissile Class I

650*

Fissile Class III

2000*

* (grams U235 equivalent mass)

(c) Fissile Class

I and III

Maximum number of packages per shipment for Class III

One (1)

6. The U-235 equivalent mass shall be determined by the following method:

U-235 equivalent mass equals U-235 mass plus 1.75 times U-233 mass plus 1.60 times Pu mass.

- 7. At the time of delivery of the loaded cask to a carrier for transport, the cask contents shall be: (1) dry (contents of inner can assembly shall not decompose up to a temperature of 750°F) and the fissile material unmoderated (H to X atomic ratio less than 2) and (2) so limited that the dose rate will not exceed 4 millirem per hour at three (3) feet from the external surface of the package.
- 8. The maximum gross weight of the cavity contents shall not exceed 180 pounds (inner can assembly, radioactive material, etc.).
- The package authorized by this certificate is hereby approved for under the general license provisions of 10 CFR §71.12(b).
- 10. Expiration date: May 31, 1981.

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REFERENCES

General Atomic Company application dated October 1, 1976, for Model No. GAHC-1 shipping package.

Gulf Oil Corporation supplement dated: October 14, 1971.

Battelle Memorial Institute supplements dated: September 20 and October 29, 1968; January 8 and February 19, 1969; and May 9, 1975.

FOR U.S. NUCLEAR REGULATORY COMMISSION

Charles E. MacDonald, Chief Transportation Certification Branch

Division of Fuel Cycle and

Material Safety

Date:

MAY 2 0 1980