

METALOGIC

A Division of RTI, Inc.

Inspection and
NDE Specialists

275 S. Black Canyon Hwy.
Phoenix, Arizona 85009

QUALITY CONTROL PROGRAM
WTL-QA-2

CONTROLLED DOCUMENT
ISSUE NUMBER -2-

8602190188 860124
PDR ADOCK 07100580
C PDR

QUALITY ASSURANCE PROGRAM APPLICABLE TO PROCUREMENT
USE, MAINTENANCE AND REPAIR OF PACKAGES DESIGNED TO
TRANSPORT RADIOGRAPHIC EXPOSURE DEVICES

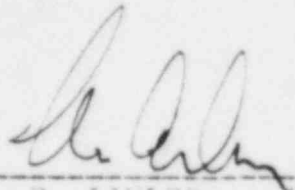
FOR

METALOGIC, A DIVISION OF WTL, INC.


275 SOUTH BLACK CANYON HIGHWAY

PHOENIX, ARIZONA 85009

PREPARED BY: 1-24-86
DATE


W. D. LAWLER
Radiation Safety Officer

APPROVED BY: 1-24-86
DATE


J. A. GENERAL
General Manager

DISTRIBUTION OF CONTROLLED COPIES

<u>COPY NUMBER</u>	<u>LOCATION</u>
1	MetaLogic - East Coast
2	US Nuclear Regulatory Commission
3	Arizona Radiation Regulatory Agency

QA Department
Washington, DC
Tempe, AZ

REVISION STATUS

<u>REVISION LETTER</u>	<u>TYPE OF REVISION</u>	<u>REQ</u>	<u>LTN</u>	<u>DATE</u>
ORIG.	Original Issue	79	123	12-17-85

QUALITY ASSURANCE PROGRAM

12-17-85
REV. ORIG.

Contents

<u>Section</u>	<u>Subject</u>	<u>Page</u>
-	Cover	1
-	Contents	2
1.0	Organization	3
2.0	Quality Assurance Program	4
3.0	Document Control	5
4.0	Handling, Storage and Shipping	6
5.0	Inspection, Test and Operating Status	7
6.0	Quality Assurance Records	8
7.0	Audits	9

Exhibits

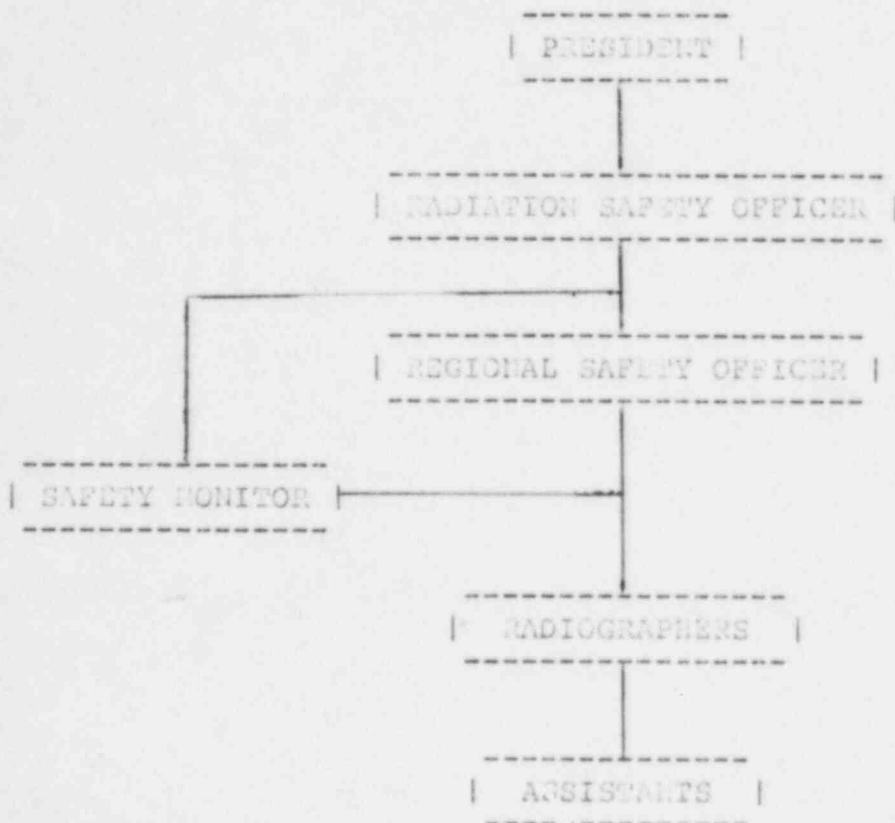
<u>Exhibit Number</u>	<u>Subject</u>	<u>Page</u>
F-51	Shipper's Certification	10
F-53	Receiving/Shipping Record	11
F-58	Audit Record	12
F-59	Shipper's Declaration	13
-	Cert. of Comp. Authority - 0166	14
-	Cert. of Comp. Authority - 9135	15
-	Cert. of Comp. Authority - 9160	16
-	Cert. of Comp. Authority - 9127	17
-	Cert. of Comp. Authority - 6717	18

QUALITY ASSURANCE PROGRAM

12-17-85
REV. ORIG.

1.0 Organization

The final responsibility for the Quality Assurance Program for Part 71 Requirements rests with MetaLogic. Design and fabrication shall not be considered under this QA Program. The QA Program is implemented using the following organization:



The Radiation Safety Officer is responsible for overall administration of the program, training and certification, document control and auditing.

The radiographers are responsible for handling, storing, shipping, inspection, test and and operating status and recordkeeping.

QUALITY ASSURANCE PROGRAM

12-17-85
REV. ORIG.**2.0 Quality Assurance Program**

The management of MetaLogic establishes and implements this QA program. Training, prior to engagement, for all QA functions is required in accordance with Section C, WTL-RS-1, Radiation Safety Manual. QA Program revisions will be made in accordance with procedures defined in WTL-QA-1, Quality Assurance Manual. This QA Program will ensure that all defined QC procedures, engineering procedures and specific provisions of the package design approval are satisfied. This QA Program will emphasize control of the characteristics of the package which are critical to safety.

The Radiation Safety Officer shall assure that all radioactive material shipping packages are designed and manufactured under a QA Program approved by the Nuclear Regulatory Commission. Evidence of Commission approval in the form of Certificates of Competent Authority are attached as pages 14 through 18 for the following:

<u>Item</u>	<u>Certificates</u>	<u>Page</u>
Iridium 192 sealed source	9166	14
Cobalt 60 sealed source	9166	14
Century SA exposure device	9135	15
Gulf Nuclear exposure device	9168	16
GI 180A exposure device	9127	17
Type "B" overpack	3717	18

QUALITY ASSURANCE PROGRAM

12-17-85
REV. ORIG.

3.0 Document Control

All documents related to a specific shipping package will be controlled through the use of procedures as defined in WTL-QA-1, Quality Assurance Manual. All document changes shall be performed in accordance with procedures established in WTL-QA-1, Quality Assurance Manual.

The Radiation Safety Officer shall ensure that all QA functions are conducted in accordance with the latest revisions of this manual, WTL-QA-2, the Quality Assurance Manual, WTL-QA-1 and the Radiation Safety Manual, WTL-RS-1.

QUALITY ASSURANCE PROGRAM

12-17-85
REV. ORIG.

4.0 Handling, Storage and Shipping

Written safety procedures concerning the handling, storage and shipping of radiography sources are defined in Section B, Operating and Emergency Procedures, Radiation Safety Manual, WTL-RS-1. All radiography personnel performing critical handling, storage and shipping operations shall have in their possession a copy of WTL-RS-1, Section B.

Shipments of radiography sources shall not be made unless all tests, certifications, acceptances and final inspections have been completed.

Only radiography personnel shall perform the critical handling, storage and shipping operations.

QUALITY ASSURANCE PROGRAM

12-17-85
REV. ORIG.

5.0 Inspection, Test and Operating Status

Inspection, test and operating status of radiography sources and packages shall be as described in the Radiation Safety Manual, WTL-RS-1. Status shall be indicated by a log entry.

Radiography personnel shall perform the regulatory required inspections and tests in accordance with WTL-RS-1. The Radiation Safety Officer shall ensure that these functions are performed.

QUALITY ASSURANCE PROGRAM

12-17-85
REV. ORIG.

6.0 Quality Assurance Records

Records of package approvals (including references and drawings), procurement, inspections, tests, operating logs, audit results, personnel training and qualifications and records of shipments shall be maintained indefinitely. Descriptions of equipment and written procedures are found in the Radiation Safety Manual, WTL-RS-1.

These records are maintained in accordance with WTL-QA-1 and WTL-RS-1. The Radiation Safety Officer shall be responsible for storage and retrieval of these records.

QUALITY ASSURANCE PROGRAM

12-17-85
REV. ORIG.

7.0 Audits

An audit schedule as established in WTL-RS-1 shall be followed. Audit checklists shall be maintained by the Radiation Safety Officer. Non conforming items shall be dealt with as provided for in the Quality Assurance Manual, WTL-QA-1. Audit frequency shall be at least once per year.

QUALITY ASSURANCE PROGRAM

RECEIVING/SHIPPING RECORD

12-17-85

REV. ORIG.

RECEIVING

Sealed Source S/N _____
Sealed Source Strength _____ Curies
C-19 Shipping S/N _____
Sealed Source Type _____
Sealed Source Model _____
Sealed Source Size _____ X _____

Date Received _____ Leak Test Date _____
Date Inspection _____ Leak Test By _____

Survey

C-19 Source Changer _____ or Exposure Device _____
At 6" _____ HR/HR Req't: Less than 50 HR/HR
from surface

Shipping Barrel
Surface _____ HR/HR Req't: Less than 200 HR/HR
At 3 feet _____ HR/HR Req't: Less than 10 HR/HR

If any readings are exceeded follow Emergency Procedures in
Radiation Safety Manual, Section B, Paragraph 9.3.

Receiving Performed By _____

SHIPPING

Date of Shipment _____
Method of Shipment _____
Carrier Name _____
Source Strength _____ Curies

Survey

C-19 Source Changer _____ or Exposure Device _____
At 6" _____ HR/HR Req't: Less than 50 HR/HR
from surface

Shipping Barrel
Surface _____ HR/HR Req't: Less than 200 HR/HR
At 3 feet _____ HR/HR Req't: Less than 10 HR/HR

If any readings are exceeded follow Emergency Procedures in
Radiation Safety Manual, Section B, Paragraph 9.3.

Shipping Performed by _____

QUALITY ASSURANCE PROGRAM AUDIT RECORD

12-17-85

REV. ORIG.

Performed by _____ Date _____

1. Training verification
2. Experience verification
3. Testing verification
4. Radiographer yearly audio verification (Practical Test)
5. Personnel Exposure Records
6. Monitoring device calibration/records
7. Quarterly Maintenance/Inventory verification in all Quarters
8. Receiving records
9. Leak Test records
10. Utilization records
11. Shipping records
12. Emergency situation properly reported
13. Documentation - NRC/State - Up to Date and properly disbursed

Comments:

Corrective Action:

General Manager Signature _____ Date _____

Shipper

QUALITY ASSURANCE PROGRAM

Air Waybill No.

12-17-85
REV. ORIG.

Page of Pages

Shipper's Reference Number
(optional)

Consignee

Two completed and signed copies of this Declaration must
be handed to the operator

WARNING

Failure to comply in all respects with the applicable
Dangerous Goods Regulations may be in breach of
the applicable law, subject to legal penalties. This
Declaration must not, in any circumstances, be
completed and/or signed by a consolidator, a
forwarder or an IATA cargo agent.

TRANSPORT DETAILS

This shipment is within the
limitations prescribed for:
(delete non-applicable)

Airport of Departure

PASSENGER
AND CARGO
AIRCRAFTCARGO
AIRCRAFT
ONLY

Airport of Destination:

Shipment type: (delete non-applicable)

NON-RADIOACTIVE RADIOACTIVE

NATURE AND QUANTITY OF DANGEROUS GOODS

Dangerous Goods Identification

Proper Shipping Name	Dangerous Goods Identification			Quantity and type of packing	Packing Inst.	Authorization
	Class or Divi- sion	UN or ID No.	Subsidiary Risk			

Additional Handling Information

I hereby declare that the contents of this consignment are fully and
accurately described above by proper shipping name and are classified,
packed, marked and labelled, and are in all respects in the proper
condition for transport by air according to the applicable International and
National Government Regulations.

Name/Title of Signatory

Place and Date

WTL-QA-2
Page 13 of 18

Signature

(see warning above)



U.S. Department
of Transportation

Research and
Special Programs
Administration

400 Seventh Street, S.W.
Washington, D.C. 20590

IAEA CERTIFICATE OF COMPETENT AUTHORITY

Special Form Radioactive Material Encapsulation

Certificate Number USA/0166/S
(Revision 3)

This certifies that the encapsulated sources, as described, when loaded with the authorized radioactive contents, have been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in IAEA 1/ and USA 2/ Regulations for the transport of radioactive materials.

I. Source Description - The sources described by this certificate are identified as the following Gamma Industries models which are constructed according to the listed drawing numbers:

<u>Model No.</u>	<u>Drawing No.</u>
VD and VD(HP)	602-7001-004
NB, NBG and NB(HP)	602-7001-005
Single Encapsulation Universal Source	602-7001-006
Double Encapsulation Universal Source	602-7001-007
Single Encapsulation Side Weld	602-7001-008

All models are welded encapsulations constructed of 300 series of ARMOO Type 17-4PH stainless steel.

II. Radioactive Contents - The authorized radioactive contents of these sources consist of not more than:

<u>Model No.</u>	<u>Contents</u>
VD and VD(HP)	300 curies of:
	Barium-131 Manganese-54
	Cadmium-109 Phosphorus-32
	Calcium-45 Rubidium-86
	Calcium-47 Selenium-75
	Cesium-137 Strontium-85
	Chlorine-36 Thallium-204
	Chromium-51 Thulium-170
	Iridium-192 Tin-113
	Cobalt-60 Ytterbium-169
	Iron-59 Zinc-65

QUALITY ASSURANCE PROGRAM

12-17-85
REV. ORIG.

WTL-QA-2
Page 14 of 18


II. Radioactive Contents (continued)

<u>Model No. (con'd)</u>	<u>Contents (cont'd)</u>
NB, NBG and NB(HP)	25 Curies Americium-241 30 millicuries Ra-226 500 millicuries Americium-241 and Cesium-137 mixture
Single Encapsulation Universal Source	500 curies Iridium-192 20 curies Cobalt-60
Double Encapsulation Universal Source	5000 curies Iridium-192 2000 curies Cobalt-60
Single Encapsulation Side Weld	500 curies Iridium-192 20 curies Cobalt-60

III. This certificate, unless renewed, expires July 30, 1987.

This certificate is issued in accordance with paragraph 803 of the IAEA Regulations and in response to the June 7, 1982 petition by Gamma Industries, Baton Rouge, Louisiana, and in consideration of the associated information therein.

Certified by:


R. R. RAWL
Chief, Radioactive Materials Branch
Office of Hazardous Materials Regulations
Materials Transportation Bureau

August 10, 1982
(DATE)

1/ "Safety Series No. 6, Regulations for the Safe Transport of Radioactive Materials, 1973 Revised Edition," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

2/ Title 49, Code of Federal Regulations, Part 170-178, USA

Revision 0 issued in response to the September 7, 1979, petition by Gamma Industries, Baton Rouge, Louisiana.

Revision 1 issued to add Cesium-137 to Models VD and VD(HP)

Revision 2 issued to list alternate stainless steel type.

Revision 3 issued to extend expiration date.



IAEA CERTIFICATE OF COMPETENT AUTHORITY

Type B Radioactive Materials Package Design

Certificate Number USA/9135/B(U)T
Revision 0

This establishes that the packaging design described herein, when loaded with the authorized radioactive contents, has been certified by the National Competent Authority of the United States as meeting the regulatory requirements for Type B packaging for radioactive materials as prescribed in IAEA Regulations and in accordance with 49 CFR Sections 173.393b and 173.394(b)(3) of the USA Regulations for the transport of radioactive materials.

I. Package Identification - Model Nos: Century S, Century SA, Century Universal S, and Centry Universal SA.

II. Packaging Description - Packaging authorized by this certificate consists of a zircalloy or titanium "S" tube which is surrounded by depleted uranium shielding which is encased in an outer steel housing. The void between the shielding and housing is filled with polyurethane foam. External dimensions are 7.0 inches long by 5.5 inches in diameter with a gross weight of 45 pounds.

III. Authorized Radioactive Contents - The authorized contents consist of special form encapsulations meeting the requirements of 49 CFR 173.389(g) and containing not more than 120 curies of iridium-192.

Contents must be of a design which has been tested and demonstrated to be leaktight to a sensitivity of 10^{-5} atm-cm³/sec or less.

IV. General Conditions -

- a. Each user of this certificate must have in his possession a copy of this certificate.
- b. Each user of this certificate, other than Gamma Industries, Baton Rouge, LA shall register his identity in writing to the Office of Hazardous Materials Regulation, Materials Transportation Bureau, U.S. Department of Transportation, Washington, D. C. 20590.
- c. This certificate does not relieve any consignor or carrier from compliance with any requirement of the Government of any country through or into which the package is to be transported.

QUALITY ASSURANCE PROGRAM

12-17-85
REV. ORIG.

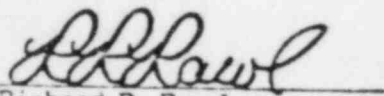
WTL-QA-2
Page 15 of 18

V. Marking and Labeling - The package must bear the marking USA/9135/B(U) as well as the other marking and labels prescribed by the USA Regulations.

VI. Expiration Date - This certificate, unless renewed, expires on April 30, 1987.

This certificate is issued in accordance with the requirements of the IAEA and USA Regulations and in response to the June 21, 1982 petition by Gamma Industries, Baton Rouge, LA and in consideration of the associated information provided in U.S. NRC Certificate of Compliance No. 9135 (Appendix A) and related correspondence.

Certified by:



Richard R. Rawl
Chief, Radioactive Materials Branch
Office of Hazardous Materials Regulation
Materials Transportation Bureau

December 2, 1982
Date

¹"Safety Series No. 6, Regulations for the Safe Transport of Radioactive Materials, 1973 Revised Edition" published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

²Title 49, Code of Federal Regulations, Parts 100-199, USA.

CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIALS PACKAGES

U.S. NUCLEAR REGULATORY COMMISSION

RECEIVED JAN 24 1988

CERTIFICATE NUMBER 9160	REVISION NUMBER 0	PACKAGE IDENTIFICATION NUMBER USA/9160/8(U)	PAGE NUMBER 1	TOTAL NUMBER PAGES 2
----------------------------	----------------------	--	------------------	-------------------------

PREAMBLE

- a. This certificate is issued to certify that the packaging and contents described in Item 5 below, meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, Packaging of Radioactive Materials for Transport and Transportation of Radioactive Material Under Certain Conditions.
- b. 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.

THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION

a. PREPARED BY (Name and Address):

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION

Gulf Nuclear, Inc.
202 Medical Center Boulevard
Webster, TX 77598

Gulf Nuclear, Inc. application dated
January 21, 1984, as supplemented.

c. DOCKET NUMBER

71-9160

CONDITIONS

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

(a) Packaging

(1) Model Nos.: 20-VS and 40-VS

(2) Description

Radiographic devices and shipping container for sealed sources. The packages are approximately 12" high x 6" wide x 8" long. The outer case is constructed of 15 gauge 303 stainless steel. The package is provided with a 0.76" diameter handle. The 34 pound uranium shield is held in place by potting epoxy and 2 brackets within the case. The sealed source is held within a Zircaloy or titanium S-tube by a lockblock assembly and a safety plug assembly at the opposite end of the S-tube. The Model Nos. 20-VS and 40-VS are identical except for shielding capability of the uranium shield. The package weighs 42 pounds.

(3) Drawings

The package is constructed in accordance with Gulf Nuclear, Inc. Drawing Nos. A-31, Sheets 3 and 4, Rev. 1; A-31-1, Sheets 1 and 2, Rev. 0; A-31-1, Rev. 1; A-31-12, Rev. 0; A-31-16, Rev. 1; A-31-18, Rev. 1; A-31-20, Rev. 1; A-31-21, Sheets 1, 2, and 3, Rev. 1; A-31-31, Sheets 1, 2, and 3, Rev. 1; A-31-32, Rev. 0; A-31-34, Sheet 3, Rev. 1 and Sheet 4, Rev. 0; 1000-50-14, Rev. 0; and 1000-50-13, Rev. 0.

QUALITY ASSURANCE PROGRAM

12-17-85
REV. ORIG.

WTL-QA-2
Page 16 of 18

Page 2 - Certificate No. 9160 - Revision No. 0 - Docket No. 71-9160

(b) Contents

(1) Type and form of material

Iridium 192 sealed source which must be shown to meet the requirements of special form radioactive material.

(2) Maximum quantity of material per package

One source containing:

(i) Model No. 20-VS package - 120 Ci; or

(ii) Model No. 40-VS package - 220 Ci.

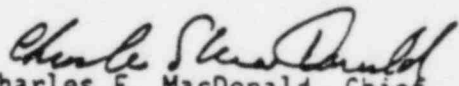
6. The package model designation must be determined by the Initial Acceptance criteria given in Section 5.3 (p 5-3) of the application.
7. The packages authorized by this certificate are hereby approved for use under the general license provisions of 10 CFR §71.12.
8. Expiration date: April 30, 1989.

REFERENCES

Gulf Nuclear, Inc. application dated January 21, 1984.

Supplements dated: March 6 and 20, 1984.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION


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

Date: APR 10 1984

CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIALS PACKAGES

U.S. NUCLEAR REGULATORY COMMISSION

a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. PACKAGE IDENTIFICATION NUMBER	d. PAGE NUMBER	e. TOTAL NUMBER PAGES
9127	3	USA/9127/B(U)	1	2

PREAMBLE

- a. This certificate is issued to certify that the packaging and contents described in Item 5 below, meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, Packaging of Radioactive Materials for Transport and Transportation of Radioactive Material Under Certain Conditions.
- b. 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.

THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION

a. PREPARED BY (Name and Address):

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION:

Gamma Industries
P.O. Box 2543
Baton Rouge, LA 70821

Gamma Industries application dated May 20, 1978,
as supplemented.

c. DOCKET NUMBER

71-9127

CONDITIONS

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

(a) Packaging

(1) Model Nos.: 100, 100A, 200 and 200A

(2) Description

A steel encased, uranium shielded radiographic device. The shipping containers is approximately 21 inches long, 23 inches wide and 42 inches high. The radioactive source assembly is housed in a Zircalloy or titanium "S" tube. The tube is surrounded by depleted uranium metal as shielding material. The depleted uranium shield assembly is encased in a steel housing. The void space between the depleted uranium shield assembly and the outer container is filled with a polyurethane foam. The gross weight of the container is 500 pounds.

(3) Drawings

The packaging is constructed in accordance with Gamma Industries Drawing Nos. 821-1001-128, Rev. 4; 821-1001-129, Rev. 1; and 180-01, Rev. 1.

(b) Contents

(1) Type and form of material

Cobalt 60 as sealed sources that meet the requirements of special form radioactive material.

QUALITY ASSURANCE PROGRAM

12-17-85
REV. ORIG.

WTL-QA-2
Page 17 of 18

(2) Maximum quantity of material per package

<u>Model No.</u>	<u>Quantity</u>
100 and 100A	100 curies
200 and 200A	200 curies

6. The source shall be secured in the shielded position of the packaging by the safety plug assembly, source assembly and lockbox assembly. The components used to secure the source must be fabricated of materials capable of resisting a 1475°F fire environment for one-half hour and maintaining their positioning function. The ball stop of the source assembly must engage the locking device. The flexible cable of the source assembly and safety plug assembly must be of sufficient length and diameter to provide positive positioning of the source in the shielded position.
7. The can and side plates must be a minimum of 1/4-inch thick carbon steel. The can and side plates shall be joined by full penetration welds. All other welds shall be fillet welds having sufficient throat thickness to develop strength equal to or greater than the metals being joined.
8. The nameplates shall be fabricated of materials capable of resisting the fire test of 10 CFR Part 71 and maintaining their legibility.
9. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR §71.12.
10. Expiration date: October 31, 1988.

REFERENCES

Gamma Industries application dated May 20, 1978.

Supplement dated: October 25, 1978.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

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

Date: OCT 06 1983



IAEA CERTIFICATE OF COMPETENT AUTHORITY

Type B Radioactive Materials Package Design

Certificate Number USA/6717/B(U)T

(Revision 1)

This establishes that the packaging design described herein, when loaded with the authorized radioactive contents, has been certified by the National Competent Authority of the United States, as meeting the regulatory requirements for Type B packaging for radioactive materials as prescribed in IAEA 1/ Regulations and §§ 49 CFR 173.393a and 173.394(b) (3) of the USA 2/ Regulations for the transport of radioactive materials.

I. Package Identification - Model No. 6717-B.

II. Packaging Description - Packaging authorized by this certificate consists of an outer 10-gallon steel drum with an inner container which is a metal-walled container meeting the requirements of DOT Specification 7A, surrounded by polyurethane filler and a 1-1/2" asbestos free liner. Gross weight is approximately 75 pounds.

III. Authorized Radioactive Contents - The authorized contents consist of radioactive materials, n.o.s., as not more than 200 curies of iridium-192 as sealed sources which must meet the requirements for special form as set forth in 49 CFR 173.389(g).

Contents must be of a design which has been tested and demonstrated to be leaktight to a sensitivity of 10^{-5} atm-cc/sec or less.

IV. General Conditions -

a. Each user of this certificate must have in his possession a copy of this certificate.

b. Each user of this certificate, other than Gamma Industries, Baton Rouge, Louisiana, shall register his identity in writing to the Office of Hazardous Materials Regulation, U.S. Department of Transportation, Washington, D.C. 20590.

c. This certificate does not relieve any consignor or carrier from compliance with any requirement of the Government of any country through or into which the package is to be transported.

V. Marking and Labeling - The package must bear the marking USA/6717/B(U) as well as the other marking and labels prescribed by the USA Regulations.

VI. Expiration Date - This certificate, unless renewed, expires on July 31, 1985.

This certificate is issued in accordance with the requirements of the IAEA and USA Regulations and in response to the March 5, 1982 petition by Gamma Industries, Baton Rouge, Louisiana and in consideration of the associated information provided in U.S. Nuclear Regulatory Commission Certificate No. 6717 (Appendix A) and related correspondence.

Certified by:



R. R. RAWL
Chief, Radioactive Materials Branch
Office of Hazardous Materials Regulation
Materials Transportation Bureau

April 6, 1982
(DATE)

1/ "Safety Series No. 6, Regulations for the Safe Transportation of Radioactive Materials," 1973 Revised Edition published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

2/ Title 49, Code of Federal Regulations, Parts 100-199, USA.

Revision 1 issued to correct package description.