

DISTRIBUTION:
Matls. Fee File
Quality Assurance Fee File
PDR
ASCabell, LFMB
GJackson, LFMB
LFMB R/F (2)
L. Gordon, FCTC, NMSS

MAY 22 1985

Docket No. 71-0542

Mattingly & O'Reilly Services
and Testing, Inc.
ATTN: Mr. Mark M. Mattingly
Radiation Safety Officer
P.O. Box 3126
Great Falls, Montana 59403

Gentlemen:

This refers to your May 1, 1985 letter transmitting your Quality Assurance Program and requesting registration as user of Gamma Industries radioactive material transport packages, Certificate of Compliance 9135 and 6717.

An application fee of \$150 is required for the evaluation of your quality assurance program as specified in fee Category 10F of Section 170.31 of the enclosed 10 CFR 170.

Applicants in fee Category 10F pay an initial application fee of \$150 and are subsequently billed at six-month intervals for all accumulated NRC costs or upon completion of the review, whichever occurs sooner. The total fee assessed will be based on the actual NRC cost (professional staff-hours) to process the application as well as any contractual cost incurred.

Based on the above, please remit an application fee of \$150 and mail it to my attention. If you have any questions concerning the fee, please let me know.

Sincerely,

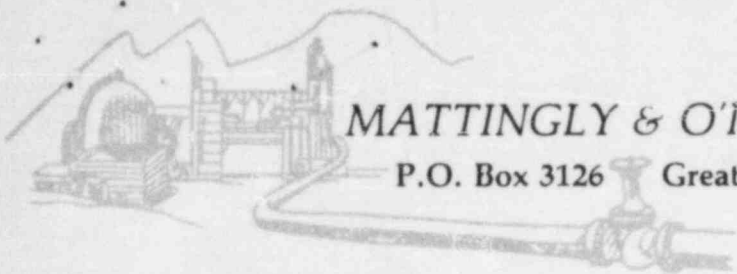
Original Signed By
Glenda Jackson

Glenda Jackson
License Fee Management Branch
Office of Administration

Enclosure:
10 CFR 170 (June 20, 1984)

8507030715 850522
PDR ADOCK 07100542
C PDR

OFFICE	LFMB:ADM 8					
SURNAME	GJackson:pj					
DATE	5/22/85					



MATTINGLY & O'REILLY SERVICES AND TESTING, INC.

P.O. Box 3126 Great Falls, Montana 59403 • (406) 452-8752

71-0542 ✓ 71-6717
71-9135

May 1, 1985

File #850035

Reference: Request for Registration

Director, Office of Nuclear Material Safety and Safeguards
U. S. Nuclear Regulatory Commission
Washington, DC 20555

PDR
return to
396
55

Gentlemen:

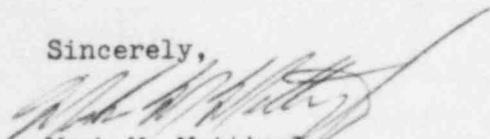
This correspondence refers to certificate users other than Gamma Industries, Baton Rouge, LA to register Mattingly & O'Reilly Services and Testing, Inc as a certificate holder and user for certificate numbers USA/9135/B(U)T Revision 0, USA/6717/B(U)T Revision 1, and USA/0166/S Revision 4.

We request registration of Mattingly & O'Reilly Services and Testing, Inc as a user and shipper of radioactive material. Please list Mr. Mark M. Mattingly for approval.

Copies of the certificates attached.

Thank you.

Sincerely,


Mark M. Mattingly
Radiation Safety Officer



may 85-1

Applicant:	
Check No.	1252
Priority Fee Category	9150-10P
Type of Fee	Application
Date Check Received	6/6/85
Received By	Jackson



8506130559

25238

DOCKET NO. 71-6717
CONTROL NO. 25238
DATE OF DOC. 5/11/85
DATE RCVD. 5/14/85
FCUF _____ PDR ☒
PCAF _____ LPDR ☒
WI _____ ISE REF. ☒
MOR ☒ SAFEGUARDS _____
ETC ☒ OTHER _____

DESCRIPTION:
requesting to be
as user and
shipper of
radio acting national
5/14/85 INITIAL set

U.S. NUCLEAR REGULATORY COMMISSION
QUALITY ASSURANCE PROGRAM APPROVAL
FOR RADIOACTIVE MATERIAL PACKAGES1. APPROVAL NUMBER
0010
REVISION NUMBER
2

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and Title 10, Code of Federal Regulations, Chapter 1, Part 71, and in reliance on statements and representations heretofore made in Item 5 by the person named in Item 2, the Quality Assurance Program identified in Item 5 is hereby approved. This approval is issued to satisfy the requirements of Section 71.101 of 10 CFR Part 71. This approval is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

2 NAME Gamma Industries			3 EXPIRATION DATE February 28, 1990	
STREET ADDRESS 2555 Ted Dunham Avenue			4 DOCKET NUMBER 71-0010	
CITY Baton Rouge	STATE LA	ZIP CODE 70822		
5 QUALITY ASSURANCE PROGRAM APPLICATION DATE(S) January 30, 1985				

6 CONDITIONS

- A. Activities conducted under applicable criteria of Subpart H of 10 CFR Part 71 to be executed with regard to transportation packages.
- B. This approval is limited to sealed sources.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Charles E. MacDonald
Charles E. MacDonald

FEB 12 1985



US Department
of Transportation

Research and
Special Programs
Administration

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

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 Century 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.

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.



U.S. Department
of Transportation

Research and
Special Programs
Administration

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

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.

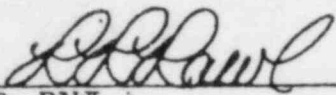
c. This certificate does not relieve any consignor or carrier from compliance with any requirement of the Government of any country through or into which the package is to be transported.

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.

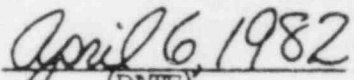
VI. Expiration Date - This certificate, unless renewed, expires on July 31, 1985.

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



(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.



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 4)

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 stainless steel or ARMCO 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: <table><tbody><tr><td>Barium-131</td><td>Manganese-54</td></tr><tr><td>Cadmium-109</td><td>Phosphorus-32</td></tr><tr><td>Calcium-45</td><td>Rubidium-86</td></tr><tr><td>Calcium-47</td><td>Selenium-75</td></tr><tr><td>Cesium-137</td><td>Strontium-85</td></tr><tr><td>Chlorine-36</td><td>Thallium-204</td></tr><tr><td>Chromium-51</td><td>Thulium-170</td></tr><tr><td>Iridium-192</td><td>Tin-113</td></tr><tr><td>Cobalt-60</td><td>Ytterbium-169</td></tr><tr><td>Iron-59</td><td>Zinc-65</td></tr></tbody></table>	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
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																				

Certificate Number USA/0166/S, Revision 4

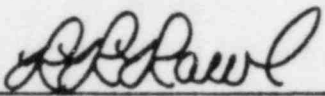
II. Radioactive Contents (continued)

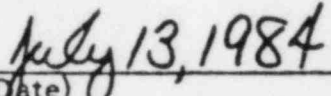
<u>Model No. (cont'd)</u>	<u>Contents (cont'd)</u>
NB, NBG and NB(HP)	25 Curies Americium-241 30 millicuries Ra-226 500 millicuries Americium-241 and Cesium-137 mixture
Single Encapsulation Universal Source	500 curies Iridium-192 20 curies Cobalt-60
Double Encapsulation Universal Source	5000 curies Iridium-192 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 May 14, 1984 petition by Gamma Industries, Baton Rouge, Louisiana, and in consideration of the associated information therein.

Certified by:


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


 (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 4 issued to correct materials of construction specification.



NRC LICENSE #25-21479-01

MAY 1, 1985

QUALITY ASSURANCE PROGRAM

1. ORGANIZATION

The ultimate responsibility for the QA Program in accordance with Part 71 requirements rests with Mattingly & O'Reilly Services and Testing, Inc.

Design and fabrication shall not be accomplished under this QA Program. The Assistant Radiation Safety Officer is designated as the responsible individual for Part 71 quality assurance requirements.

The Radiation Safety Officer is responsible for the overall administration of the QA Program and for training and certification. The Assistant Radiation Safety Officer is responsible for document control and audits.

The Radiographers are responsible for handling, storing, shipping, inspection, test and operating status, and record keeping.

2. QUALITY ASSURANCE PROGRAM

The management of Mattingly & O'Reilly Services and Testing, Inc. establishes and implements this QA Program. Training prior to performing QA activities is required in compliance with written procedures. Revisions to the QA Program shall be made in accordance with written procedures and with management approval. The QA Program will ensure that all defined QA Procedures, engineering procedures, and specific provisions for package design approval are satisfied. The QA Program shall emphasize control of characteristics of the package, which are critical to safety.

The Assistant 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 for all packages designed and fabricated after 1 January 1979. This requirement may be satisfied by receiving a certification to this effect from the manufacturer and/or supplier.

3. DOCUMENT CONTROL

All documents related to a specific shipping package shall be controlled through the implementation of written procedures. All document changes shall be accomplished in compliance with written procedures approved by management.

The Radiation Safety Officer shall assure that all QA functions are conducted in compliance with the latest applicable changes to these documents.



5. INSPECTION, TEST AND OPERATING STATUS

Inspection, test, and operating status of packages for certain radioactive material will be indicated and controlled by written procedures. The status shall be indicated by tag, label, marking, and/or log entry. The status of nonconforming parts and/or packages shall be maintained in compliance with written procedures.

Radiographers shall perform the Commission's required inspections and tests in accordance with written procedures. The Radiation Safety Officer shall assure that these activities are performed.

6. 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. Descriptions of equipment and written procedures shall also be maintained.

- a) The records will be maintained in accordance with a written procedure.
- b) The records will be identifiable and retrievable.
- c) The Radiation Safety Officer shall maintain a list of the records and their storage location.

7. AUDITS

An established schedule for audits of the QA Program shall be implemented in conducting audits using written procedures and/or check-lists. Results of audits shall be maintained. Audit reports shall be evaluated and deficient areas shall be corrected. The audits shall be dependent on the safety significance of the activity being audited, but each activity shall be audited at least once each year. Audit reports shall be maintained as a part of the quality assurance records. The Auditor shall not have direct responsibility for the activity being audited.

Mark M. Mattingly
Radiation Safety Officer
Mattingly & O'Reilly Services and Testing, Inc.