U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

East Building, PHH-23
1200 New Jersey Ave, SE
Washington, D.C. 20590

COMPETENT AUTHORITY CERTIFICATION FOR A TYPE B(U) RADIOACTIVE MATERIALS PACKAGE DESIGN CERTIFICATE USA/9187/B(U)-96, REVISION 13

The Competent Authority of the United States certifies that the radioactive material package design described in this certificate satisfies the regulatory requirements for a Type B(U) package as prescribed in the regulations of the International Atomic Energy Agency[1] and the United States of America[2].

1. Package Identification - Model No. 865.

2. Package Description and Authorized Radioactive Contents - as described in U.S. Nuclear Regulatory Commission Certificate of Compliance No. 9187, Revision 12 (attached).

3. General Conditions -

   a. Each user of this certificate must have in his possession a copy of this certificate and all documents necessary to properly prepare the package for transportation. The user shall prepare the package for shipment in accordance with the documentation and applicable regulations.

   b. Each user of this certificate, other than the original petitioner, shall register his identity in writing to the Office of Engineering and Research, (PHH-23), Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, Washington D.C. 20590-0001.

   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.

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[1] "Regulations for the Safe Transport of Radioactive Material, 2012 Edition, No. SSR-6" published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

[2] Title 49, Code of Federal Regulations, Parts 100-199, United States of America.

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d. Records of Management System activities required by Paragraph 306 of the IAEA regulations[1] shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors in the United States exporting shipments under this certificate shall satisfy the applicable requirements of Subpart H of 10 CFR 71.

4. Marking and Labeling - The package shall bear the marking USA/9187/B(U)-96 in addition to other required markings and labeling.

5. Expiration Date - This certificate expires on March 31, 2024. USA/9187/B(U)-96 Revision 12 may be used until March 31, 2019. All other revisions are not authorized for use.

This certificate is issued in accordance with paragraph(s) 810 of the IAEA Regulations and Section 173.471 of Title 49 of the Code of Federal Regulations, in response to the October 16, 2018 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:

for William Schoonover
Associate Administrator for Hazardous Materials Safety

October 23, 2018
(DATE)

Revision 13 - Issued to endorse U.S. Nuclear Regulatory Commission Certificate of Compliance No. 9187, Revision 12.

CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIAL PACKAGES

a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE		PAGES
9187	12	71-9187	USA/9187/B(U)-96	1	OF	3

2. PREAMBLE

a. This certificate is issued to certify that the package (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 and Transportation of Radioactive Material."

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.

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

a. ISSUED TO *(Name and Address)*

QSA Global, Inc.
40 North Avenue
Burlington, MA 01803

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION

QSA Global, Inc. application dated March 6, 2006, as supplemented.

4. CONDITIONS

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

5.

(a) Packaging

(1) Model No.: 865

(2) Description

A steel encased, uranium shielded radiographic exposure device 5" OD x 12.25" long. The device is provided with 0.88" OD x 9.25" long handle and two 1.38" x 5.5" long triangular shaped legs. Primary components consist of an outer steel shell, internal bracing, depleted uranium shield, and a source tube. The contents are securely positioned in the source tube by a source holder assembly and actuator and locking assembly. Tamper-indicating seals are provided on the packaging and a 0.12-inch thick steel outer cover is bolted over the source actuator and locking assembly for additional protection during transport. The total weight of the package is approximately 59 pounds.

(3) Drawings

The packaging is constructed in accordance with QSA Global Drawing No. R86590, Sheets 1 through 7, Rev. L.

The package user should reference QSA Global, Inc., Drawing No. R865-User, Revision A, sheets 1-2.

5.(b) Contents

(1) Type and form of material:

Iridium-192 as sealed source must meet the requirements of special form radioactive material.

(2) Maximum quantity of material per package:

240 curies (8.9 TBq) (output)

Output curies are determined by measuring the source output at 1 meter and expressing its activity in curies derived from the following: 0.48 R/(h-Ci) Iridium-192 at 1 meter, (Ref: American National Standard N432-1980, "Radiological Safety for the Design and Construction of Apparatus for Gamma Radiography").

6. In addition to the requirements of Subpart G of 10 CFR Part 71:

(a) The package shall be prepared for shipment and operated in accordance with the Operating Procedures in Section 7 of the application, as supplemented.

(b) Each packaging shall be maintained in accordance with the Maintenance Program in Section 8 of the application, as supplemented.

7. The packaging authorized by this certificate is hereby approved for use under the general license provision of 10 CFR 71.17.

8. Revision No. 10 of this certificate may be used until March 31, 2019.

9. Expiration date: March 31, 2024.

REFERENCES

QSA Global, Inc., application dated March 6, 2006.

Supplement(s) dated: August 24, 2006; September 28, 2006; July 14, 2008; February 9, 2009 and March 13, 2009; July 16, 2013; February 1, and April 14, 2017; and July 24, 2018.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

John McKirgan, Chief
Spent Fuel Licensing Branch
Division of Spent Fuel Management
Office of Nuclear Material Safety
and Safeguards

Date: 10/9/18

U.S. Department of
Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

**East Building, PHH-23
1200 New Jersey Ave, SE
Washington, D.C. 20590**

CERTIFICATE NUMBER: USA/9187/B(U)-96

ORIGINAL REGISTRANT(S):

QSA Global, Inc.
30 North Avenue
Burlington, MA, 01803
USA

Source Production and Equipment Company, Inc.
113 Teal Street
St. Rose, LA, 70087
USA