



U.S. Department  
of Transportation  
**Pipeline and  
Hazardous Materials  
Safety Administration**

**COMPETENT AUTHORITY CERTIFICATION  
FOR A TYPE B(U)  
RADIOACTIVE MATERIALS PACKAGE DESIGN  
CERTIFICATE USA/9187/B(U)-96, REVISION 11**

East Building, PHH-23  
1200 New Jersey Avenue Southeast  
Washington, D.C. 20590

This certifies that the radioactive material package design described has been certified by the Competent Authority of the United States as meeting the regulatory requirements for a Type B(U) packaging for radioactive material as prescribed in the regulations of the International Atomic Energy Agency<sup>1</sup> and the United States of America<sup>2</sup>.

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 9 (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 Hazardous Materials Technology, (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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<sup>1</sup> "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency(IAEA), Vienna, Austria.

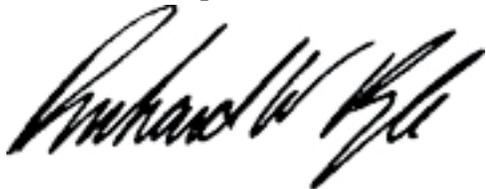
<sup>2</sup> Title 49, Code of Federal Regulations, Parts 100-199, United States of America.

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- d. Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations<sup>1</sup> 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, 2019. On August 30, 2014, this certificate supersedes all previous revisions of USA/9187/B(U)-96.

This certificate is issued in accordance with paragraph 808 of the IAEA Regulations and Section 173.471 of Title 49 of the Code of Federal Regulations, in response to the August 27, 2013 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:



Dr. Magdy El-Sibaie  
Associate Administrator for Hazardous Materials Safety

**Sep 04 2013**  
(DATE)

Revision 11 - Issued to endorse U.S. Nuclear Regulatory Commission Certificate of Compliance No. 9187, Revision 9.

**CERTIFICATE OF COMPLIANCE  
FOR RADIOACTIVE MATERIAL PACKAGES**

a. CERTIFICATE NUMBER <b>9187</b>	b. REVISION NUMBER <b>9</b>	c. DOCKET NUMBER <b>71-9187</b>	d. PACKAGE IDENTIFICATION NUMBER <b>USA/9187/B(U)-96</b>	PAGE <b>1</b>	OF <b>3</b>	PAGES
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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 8, Rev. J.

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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.
- (c) Fabrication of new packagings is not authorized.
- (d) Repair or replacement of welds on existing packagings is not authorized.

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. 8 of this certificate may be used until August 30, 2014.

9. Expiration date: March 31, 2019.

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REFERENCES

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

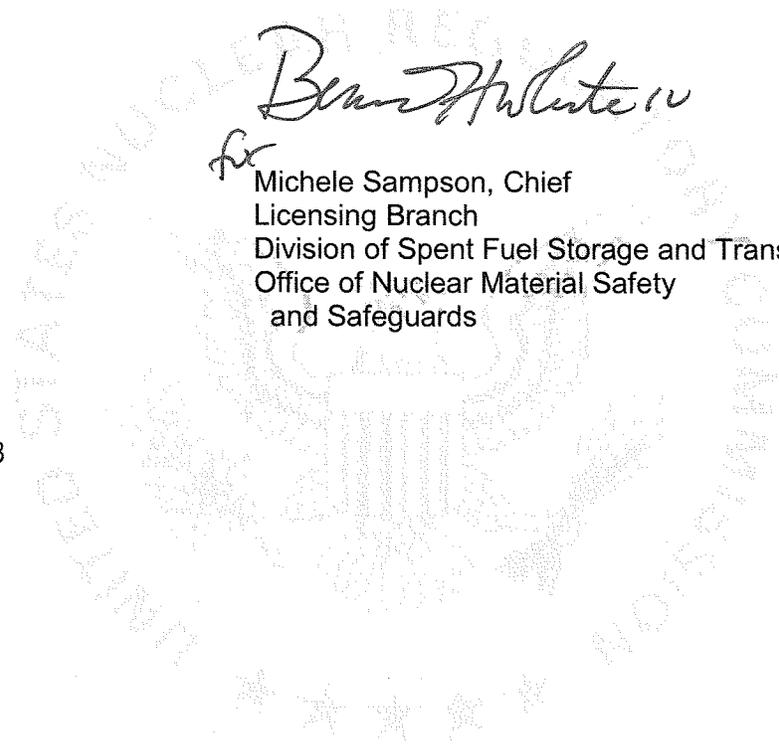
Supplement(s) dated: August 24, 2006; September 28, 2006; July 14, 2008; February 9, 2009 and March 13, 2009; and July 16, 2013.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

*Ben H. White*  
for

Michele Sampson, Chief  
Licensing Branch  
Division of Spent Fuel Storage and Transportation  
Office of Nuclear Material Safety  
and Safeguards

Date: August 22, 2013





UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

**SAFETY EVALUATION REPORT**  
**Docket No. 71-9187**  
**Model No. 865**  
**Certificate of Compliance No. 9187**  
**Revision No. 9**

**SUMMARY**

By application dated July 16, 2013, QSA Global, Inc., requested renewal of Certificate of Compliance No. 9187, for the Model No. 865 transportation package. QSA Global did not request any changes to the package design or its authorized contents. The certificate has been renewed for a five year term.

**EVALUATION**

By application dated July 16, 2013, QSA Global, Inc., requested renewal of Certificate of Compliance No. 9187, for the Model No. 865 transportation package. The staff reviewed the documents referenced in the certificate and determined that the documentation was available and complete.

**CONDITIONS**

Condition No. 8, "Revision No. 7 of this certificate may be used until March 31, 2010," has been revised to, "Revision No. 8 of this certificate may be used until August 30, 2014."

Condition No. 9 has been updated to reflect the new expiration date.

The references section has been updated to include this renewal request.

**CONCLUSION**

The certificate has been renewed for a five year term, which expires on March 31, 2019. Based on the statements contained in the application, and the conditions listed above, the staff concludes that the changes indicated do not affect the ability of the package to meet the requirements of 10 CFR Part 71.

Issued with Certificate of Compliance No. 9187, Revision No. 9,  
on 8/22/13.



U.S. Department  
of Transportation

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

**Pipeline and  
Hazardous Materials  
Safety Administration**

**CERTIFICATE NUMBER:** USA/9187/B(U)-96, Revision 11

**ORIGINAL REGISTRANT(S):**

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**REGISTERED USER(S):**

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