



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

December 20, 2012

Ms. Lori Podolak
QSA Global, Inc.
40 North Avenue
Burlington, MA 01803

SUBJECT: CERTIFICATE OF COMPLIANCE NO. 6613, REVISION NO. 15, FOR THE
MODEL NO. 702 TRANSPORTATION PACKAGE

Dear Ms. Podolak:

As requested by your application dated November 9, 2012, enclosed is Certificate of Compliance No. 6613, Revision No. 15, for the Model No. 702 Transportation Package. Changes made to the enclosed certificate are indicated by vertical lines in the margin. The staff's Safety Evaluation Report is also enclosed.

The approval constitutes authority to use the package for shipment of radioactive material and for the package to be shipped in accordance with the provisions of 49 CFR 173.471.

If you have any questions regarding this certificate, please contact me or Huda Akhavannik of my staff at (301) 492-3273.

Sincerely,

A handwritten signature in black ink, appearing to read "Michele Sampson".

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

Docket No. 71-6613
TAC Nos. L24700 and L24699

Enclosures: 1. Certificate of Compliance
No. 6613, Rev. No. 15
2. Safety Evaluation Report

cc w/encls: R. Boyle, Department of Transportation
J. Shuler, Department of Energy
Registered Users

**CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIAL PACKAGES**

1.	a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE	PAGES
	6613	15	71-6613	USA/6613/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

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|--|---|
| a. ISSUED TO (<i>Name and Address</i>)
QSA Global Inc.
40 North Avenue
Burlington, MA 01803 | b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION
QSA Global Inc., application dated
August 16, 2010, as supplemented. |
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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. 702
- (2) Description

The Model No. 702 is composed of a stainless steel cylinder containing a depleted uranium shield and a cover assembly sealed by a neoprene gasket. The cover assembly flange is anchored to the cask with six bolts. The overall dimensions of the Model No. 702 are 19 3/4" x 21" x 19" (502 mm x 533 mm x 483 mm) and the maximum weight is 410 pounds (186 kg) including contents. The Model No. 702 is mounted on a rectangular carbon steel skid and secured to the skid by a tie-down system. A protective carbon steel cage, placed over the Model No. 702, is also bolted to the skid at each corner.

There is no locking assembly on the Model No. 702. Sources are secured in the shielded position by the cover assembly and two of the six securing bolts of the cover assembly are seal-wired with a tamper indicator seal. Metallic canisters and inserts used for holding special form sources are limited to non-pyrophoric metals with a melting temperature at or above 800°C.

(3) Drawings

The Model No. 702 and other system components are constructed in accordance with QSA Global Drawing No. R70290, sheets 1 to 9, Revision W.

**CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIAL PACKAGES**

1.	a. CERTIFICATE NUMBER 6613	b. REVISION NUMBER 14	c. DOCKET NUMBER 71-6613	d. PACKAGE IDENTIFICATION NUMBER USA/6613/B(U)-96	PAGE 2	PAGES OF 3
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5.
(b) Contents

(1) Type and form of material

Iridium-192, Selenium-75, Cesium-137, and Ytterbium-169 as special form sealed sources.

(2) Maximum quantity of material per package:

Isotopes	Output Activity
Cs-137	500 Ci (18.5 TBq)
Ir-192	15,000 Ci (555 TBq)
Se-75	10,000 Ci (370 TBq)
Yb-169	10,000 Ci (370 TBq)

Output curies are determined by measuring the source output at 1 meter from the device and expressing its activity in curies. (Procedures reference: American National Standards Institute N432-1980, "Radiological Safety for the Design and Construction of Apparatus for Gamma Radiography.")

(3) Maximum decay heat per package:

130 watts

(4) Maximum weight of contents:

0.44 pounds (200 grams)

6. The name plate must be fabricated of material capable of resisting the fire test of 10 CFR Part 71 and maintaining their legibility.

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

- (a) Each package shall be operated and prepared for shipment in accordance with Chapter 7 of the application, as supplemented.
- (b) The package must meet the Acceptance Tests and Maintenance Program of Chapter 8 of the application, as supplemented.

8. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR 71.17.

**CERTIFICATE OF COMPLIANCE
FOR RADIOACTIVE MATERIAL PACKAGES**

1.	a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE	PAGES
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9. Expiration Date: June 30, 2018

REFERENCES

QSA Global Inc., application dated August 16, 2010.

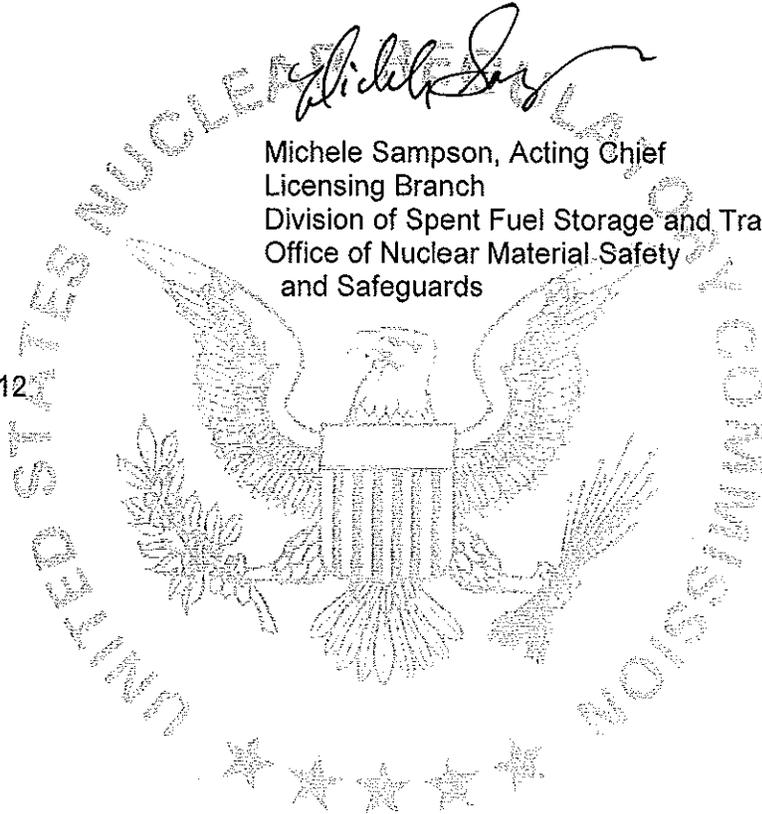
Supplements dated: September 21, October 28, 2010, and November 9, 2012.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION



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

Date: December 10, 2012





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

SAFETY EVALUATION REPORT
Docket No. 71-6613
Model No. 702 Transportation Package
Certificate of Compliance No. 6613
Revision No. 15

SUMMARY

By application dated November 9, 2012, QSA Global, Inc., requested both a renewal of and minor amendment to Certificate of Compliance (CoC) No. 6613, for the Model 702 Transportation Package. The amendment requested revising the forged carbon steel material used for the eyebolt of the inner cask cover to be either forged carbon steel or stainless steel. The certificate has been renewed for a 5-year term that expires on June 30, 2018.

EVALUATION

QSA Global, Inc. requested the use of generic stainless steel as a material for the eyebolt in addition to the already approved forged carbon steel on the Model No. 702 packaging in a renewal request, dated November 9, 2012. The tensile stress placed on the eyebolt during lifting is orders of magnitude below the yield strength of any ferrous alloy. The potential for stress corrosion cracking of a stainless steel eyebolt is minimal, due to the operational environment of the package. Based on this engineering evaluation, the staff finds the use of a generic stainless steel for the eyebolt on the Model No. 702 packaging acceptable.

The staff reviewed the documents referenced in the certificate and determined that the documentation was available and complete.

CONDITIONS

The following changes have been made to the certificate of compliance:

Condition No. 5(a)(3) was updated to include Revision W of QSA Global Drawing No. R70290, sheets 1 to 9.

Condition No. 9, "Revision No. 13 of the certificate may be used until November 30, 2011," has been deleted as it is no longer relevant. Therefore, Condition No. 10 is now Condition No. 9.

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 5-year term that expires on June 30, 2018. This change does not affect the ability of the package to meet the requirements of 10 CFR Part 71.

Issued with Certificate of Compliance No. 6613, Revision No. 15, on December 20, 2012