



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

**IAEA CERTIFICATE OF COMPETENT AUTHORITY**  
**SPECIAL FORM RADIOACTIVE MATERIALS**  
**CERTIFICATE USA/0634/S-96, REVISION 3**

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

This certifies that the source described has been demonstrated to meet the regulatory requirements for special form 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> for the transport of radioactive material.

1. Source Identification - QSA Global, Inc. Model X.8 (Manufactured on or after September 23, 1981).
2. Source Description - Cylindrical double encapsulation made of stainless steel and tungsten inert gas or laser seal welded. Approximate exterior dimensions are 6.1 mm (0.24 in.) in diameter and 8.3 mm (0.33 in.) in length. Minimum wall thickness of the outer encapsulation is 0.4 mm (0.02 in.). Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawing No. RBA62011, Rev. C.
3. Radioactive Contents - No more than either 37.0 GBq (1.0 Ci) of Cesium-137, or 740.0 MBq (20.0 mCi) of Radium-226, or 740.0 MBq (20.0 mCi) of Barium-133. The Cs-137 is in the form of a cesium silicate in a glass matrix or a sulfate as ceramic ion exchange pellets. The Ra-226 is in the form of a low solubility radium sulfate powder. The Ba-133 is in the form of barium silicate as a glass bead or a ceramic pellet.
4. Quality Assurance - 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.
5. Expiration Date - This certificate expires on April 30, 2013.

---

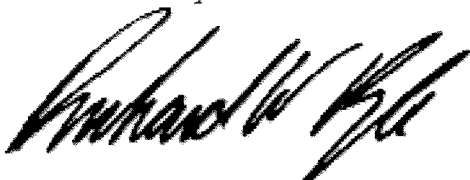
<sup>1</sup> "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

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

**CERTIFICATE USA/0634/S-96, REVISION 3**

This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the April 03, 2008 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:



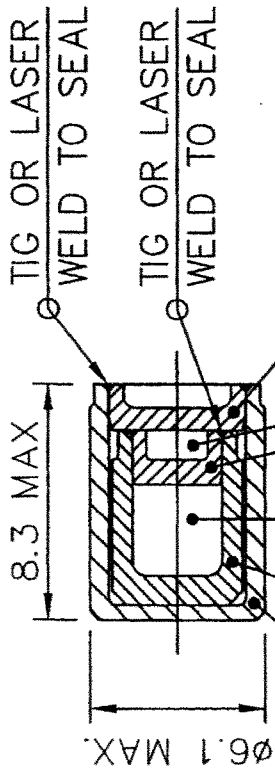
**Apr 21 2008**

(DATE)

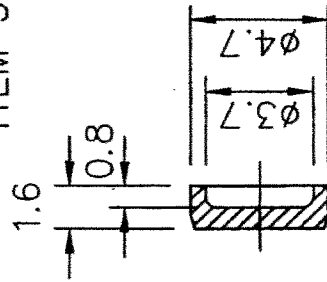
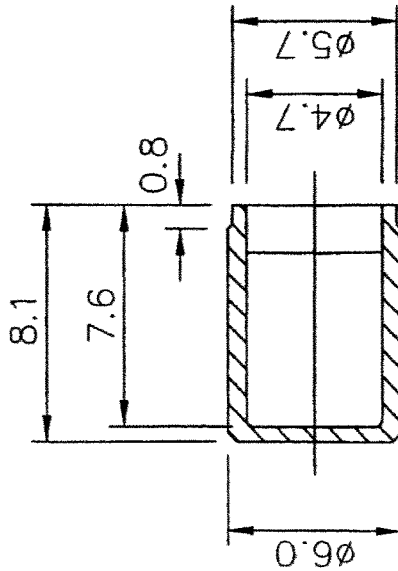
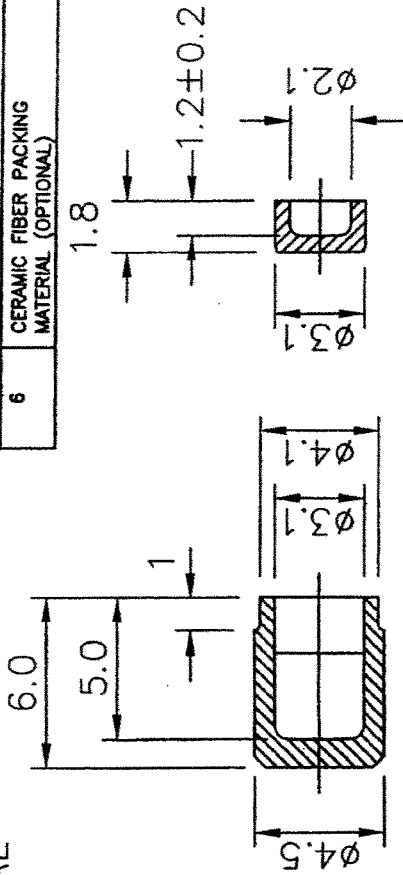
Robert A. Richard

Deputy Associate Administrator for Hazardous Materials Safety

Revision 3 - Issued to extend the expiration date and to update corporate name.



ITEM No.	DESCRIPTION	QTY.
1	SHEATH BODY STAIN.STL.	1
2	SHEATH LID STAIN.STL.	1
3	CELL BODY STAIN.STL.	1
4	CELL LID STAIN.STL.	1
5	ACTIVE MATERIAL AND CERAMIC FIBER PACKING MATERIAL	AR
6	CERAMIC FIBER PACKING MATERIAL (OPTIONAL)	AR



		<b>DESCRIPTIVE DRAWING</b>	
APPROVALS <i>R. Munn</i> 10/03 <i>A. R. Arde</i> 10/03		TITLE X8 CAPSULE ASSY	
DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE STATED TOLERANCES: X ±0.5 XX ±0.1 XXX ±0.05 ANGULAR ±5°		SIZE DWG. NO. RBA62011	REV C
SCALE: NONE		SHEET 1 OF 1	

ERF # 679



U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration

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

**CERTIFICATE NUMBER:** USA/0634/S-96, Revision 3

**ORIGINAL REGISTRANT(S):**

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

Ms. Cathleen Roughan  
Director, Regulatory Affairs and QA  
QSA Global, Inc.  
40 North Avenue  
Burlington, MA 01803

Mr. Michael Fuller  
Regulatory Compliance Associate  
QSA Global, Inc.  
40 North Avenue  
Burlington, MA 01803