



**IAEA CERTIFICATE OF COMPETENT AUTHORITY  
SPECIAL FORM RADIOACTIVE MATERIALS  
CERTIFICATE USA/0751/S-96, REVISION 2**

This certifies that the sources described have 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. (formerly AEA Technology QSA, Inc.) Model Nos. X.8 (Manufactured before September 23, 1981) and X.2084 (Manufactured before July 28, 1983).
2. Source Description - The Model X.8 is a 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.

The Model No. X.2084 is a cylindrical double encapsulation made of stainless steel and tungsten inert gas or laser seal welded. Approximate outer dimensions are 9.1 mm (0.36 in.) in diameter and 12.8 mm (0.5 in.) in length. Minimum wall thickness of the sheath body is 0.95 mm (0.04 in.) and of the cell body is 0.85 mm (0.03 in.). Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawing No. RBA61685, Rev. A.

3. Radioactive Contents - No more than 0.37 GBq (10 mCi) of Cesium-137 for the Model X.8. The Cs-137 is in the form of a cesium silicate in a glass matrix or a sulfate as ceramic ion exchange pellets.

No more than 1.85 GBq (50 mCi) of Americium-241 for the Model X.2084. The Am-241 is in solid oxide form and mixed with beryllium.

4. Special Conditions -

---

<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.

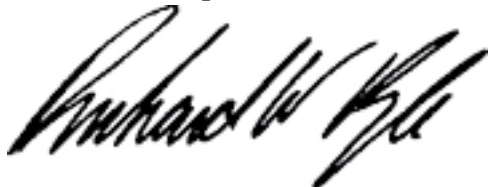
<sup>2</sup> Title 49, Code of Federal Regulations, Parts 100-199, United States of America.

**CERTIFICATE USA/0751/S-96, REVISION 2**

- a. This IAEA Certificate of Competent Authority may only be used by the U.S. Department of Defense.
  - b. Compliance with a current revision of the U.S. Department of Transportation Special Permit DOT-SP 14568 is required.
5. 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.
6. Expiration Date - This certificate expires on January 31, 2011.

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 January 20, 2010 petition by Department of the Army, Fort Monmouth, NJ, and in consideration of other information on file in this Office.

Certified By:



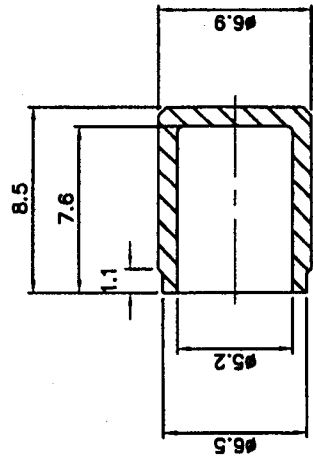
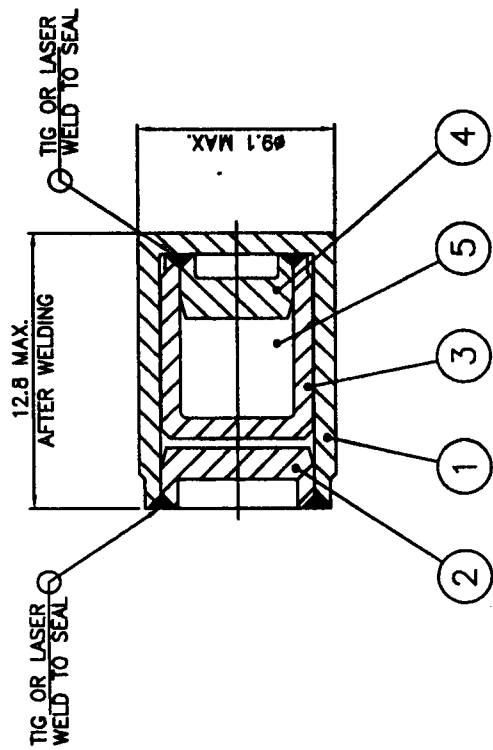
Dr. Magdy El-Sibaie  
Acting Associate Administrator for Hazardous Materials Safety

**Mar 01 2010**  
(DATE)

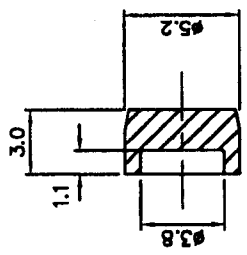
Revision 2 - Issued to renew the expiration date.



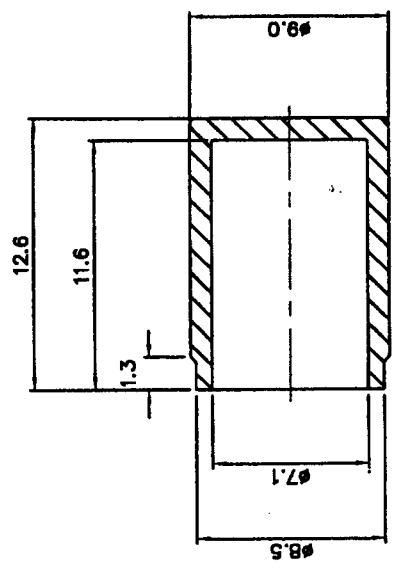
ITEM No.	DESCRIPTION	QTY.
1	SHEATH BODY STAIN.STL.	1
2	SHEATH LID STAIN.STL.	1
3	CELL BODY STAIN.STL.	1
4	CELL LID STAIN.STL.	1
5	ACTIVE MATERIAL	AR



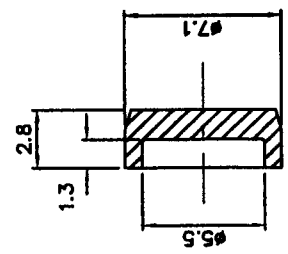
ITEM 3



ITEM 4



ITEM 1



ITEM 2



APPROVALS	
<i>[Signature]</i>	OSMARD 3
<i>[Signature]</i>	3MARD

DESCRIPTIVE DRAWING

TITLE		X2084 CAPSULE ASSEMBLY	
SIZE	DWG. NO.	REV	
A	RBA61685	1	A
SCALE:		SHEET 1 OF 1	

DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE STATED TOLERANCES:	
X ±0.5	INTERNAL $\frac{M}{N}$
XX ±0.1	EXTERNAL $\frac{M}{N}$
XXX ±0.05	ANGULAR ±5°

ERF # 475



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/0751/S-96, Revision 2

**ORIGINAL REGISTRANT(S):**

Mr. Barry J. Silber  
Directorate for Safety  
Department of the Army  
HQ, U.S. Army CECOM Life Cycle Management Command  
Fort Monmouth, 07703  
USA

**REGISTERED USER(S):**

Mr. Joe Dugan  
Safety Specialist  
U.S. Department of Defense  
Military Surface Deployment and Distribution Command  
709 Ward Drive  
Building 19990  
Scott AFB, IL 62225

Ms. Karen Lapajenko McGuire  
TACOM LCMC Safety Office  
U.S. Army TACOM LCMC  
U.S. Army TACOM LCMC  
ATTN: AMSTA-CS-CZ, Mail Stop 485  
Building 230E, 6501 East Eleven Mile Rd  
Warren, MI 48397-5000