



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

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE USA/0694/S-96, REVISION 2**

East Building, PHH-23
1200 New Jersey Avenue Southeast
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 Agency¹ and the United States of America² for the transport of radioactive material.

1. Source Identification - QSA Global, Inc. Model XN46 Capsule in a Model X0876 Holder (Manufactured on or after November 24, 1994).
2. Source Description - The Model XN46 is a cylindrical single encapsulation made of stainless steel and seal welded. Approximate exterior dimensions are 3.6 mm (0.14 in.) in diameter and 83.8 mm (3.3 in.) in length. Minimum wall thickness is 0.15 mm (0.006 in.). The Model XN46 is retained in the Model X0876 slotted cylindrical stainless steel source holder by means of a retaining block at each end of the XN46 that is fastened by welded in-place screws. Approximate exterior dimensions of the Model X0876 with extensions are 12.7 mm (0.5 in.) in diameter and 177.8 mm (7.0 in.) in length. Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawing Nos. RBA63137, Rev. B and RBA62541, Rev. A.
3. Radioactive Contents - No more than 37.0 GBq (1.0 Ci) of Americium-241. The Am-241 is in the form of an oxide incorporated into a ceramic matrix.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations¹ 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 August 31, 2019.

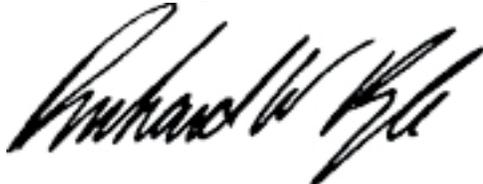
¹ "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

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

CERTIFICATE USA/0694/S-96, REVISION 2

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 August 05, 2014 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:



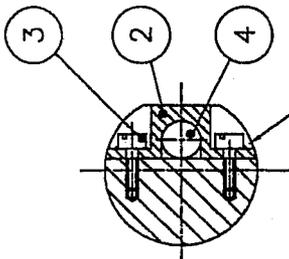
Aug 15 2014

(DATE)

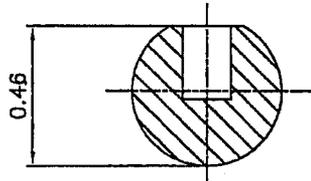
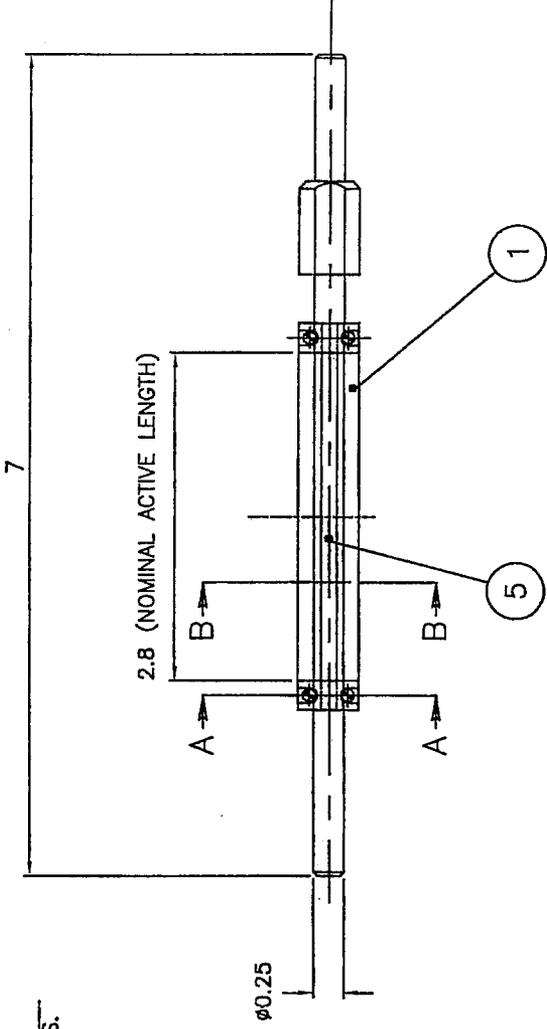
 _____
Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety

Revision 2 - Issued to extend the expiration date.

ITEM	DESCRIPTION	QTY
1	CAPSULE HOLDER X0876	1
2	RETAINER	2
3	SCREW CH. HD. 10BAx1/8" LG. STAIN. STEEL	4
4	ASSY. OF CAPSULE XN46	1
5	ACTIVE MATERIAL	



SECTION A-A



SECTION B-B



DESCRIPTIVE
DRAWING

APPROVALS	
<i>R. J. ...</i>	1 Dec 04
<i>L. P. ...</i>	1 Dec 07

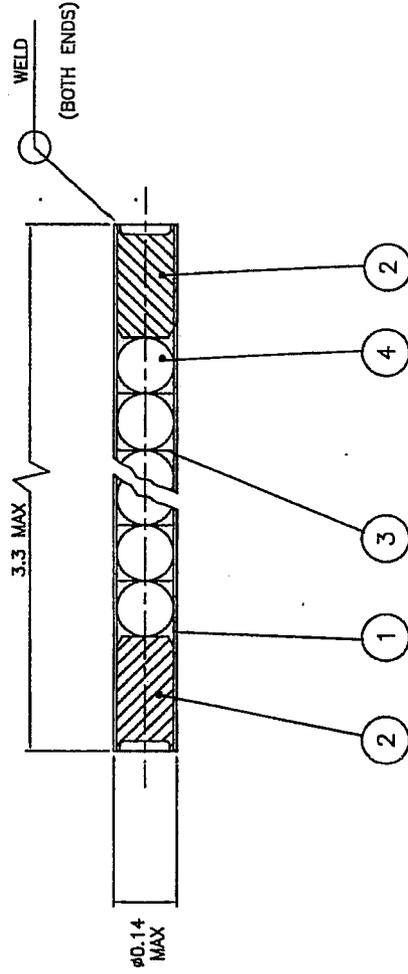
DIMENSIONS IN INCHES

TITLE XN46 CAPSULE IN X0876

SIZE	DWG. NO.	REV
A	RBA63137	B
SCALE: NONE		SHEET 1 OF 1

ERF # 944

ITEM	DESCRIPTION	QTY
1	BODY STAIN. STEEL	1
2	PLUG STAIN. STEEL	2
3	CERAMIC FIBRE PACKING	A/R
4	Am241 GLASS BEADS # 0.108	A/R



 40 NORTH AVE, BURLINGTON, MA 01803		DESCRIPTIVE DRAWING	
APPROVALS <i>[Signature]</i> 22 Nov 04 <i>[Signature]</i> 22 Nov 04		TITLE XN46 CAPSULE ASSEMBLY	
DIMENSIONS IN INCHES		SIZE A	DWG. NO. RBA62541
ERF # 937		SCALE: NONE	REV A
		SHEET 1 OF 1	



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/0694/S-96, Revision 2

ORIGINAL REGISTRANT(S):

Ms. Lori Podolak
Manager, Regulatory Affairs/Quality Assurance
QSA Global, Inc.
40 North Avenue
Burlington, MA 01803

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

Ms. Thuquynh Dinh
Regulatory Affairs/Quality Assurance
QSA Global, Inc.
40 North Avenue
Burlington, MA 01803