



U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration

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

IAEA CERTIFICATE OF COMPETENT AUTHORITY  
SPECIAL FORM RADIOACTIVE MATERIALS

CERTIFICATE USA/0730/S-96, REVISION 4

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 XN46 Capsule in a Model X0845 Holder (Manufactured on or after March 19, 1993).
2. Source Description - The Model XN46 is 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 into the X0845 slotted cylindrical stainless steel source holder by means of a retaining block on each end of the Model XN46 and fastened by welded in-place screws. Approximate exterior dimensions of the Model X0845 source holder are 13.0 mm (0.51 in.) in diameter and 89.4 mm (3.52 in.) in length. Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawing Nos. RBA10113, Rev. A 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.

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<sup>1</sup> "Regulations for the Safe Transport of Radioactive Material, 2012 Edition, No. SSR-6" 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/0730/S-96, REVISION 4**

4. Management System Activities - Records of Management System activities required by Paragraph 306 of the IAEA regulations 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 requirements of Subpart H of 10 CFR 71.
  
5. Expiration Date - This certificate expires on August 29, 2025. Previous editions which have not reached their expiration date may continue to be used.

This certificate is issued in accordance with paragraph(s) 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the July 1, 2020 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:

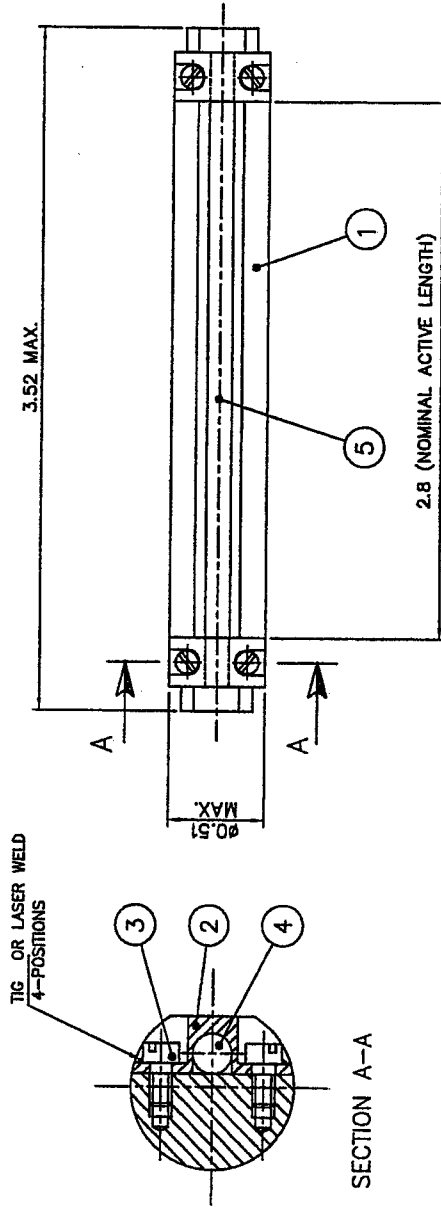


William Schoonover  
Associate Administrator for Hazardous  
Materials Safety

August 05, 2020  
(DATE)

Revision 4 - Issued to extend the expiration date.

ITEM	DESCRIPTION	QTY
1	BODY	1
2	RETAINER	2
3	SCREW CH. HD. 10BAx1/8 LG	4
4	ASSEMBLY OF CAPSULE XN46	1
5	ACTIVE MATERIAL	



APPROVALS	DATE
<i>[Signature]</i>	12 Apr 06
<i>[Signature]</i>	12 Jun 06

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS IN INCHES  
TOLERANCES:  
FRACTIONS ± 1/8  
XX ± 0.12  
X.XX ± 0.06  
X.XXX ± 0.020

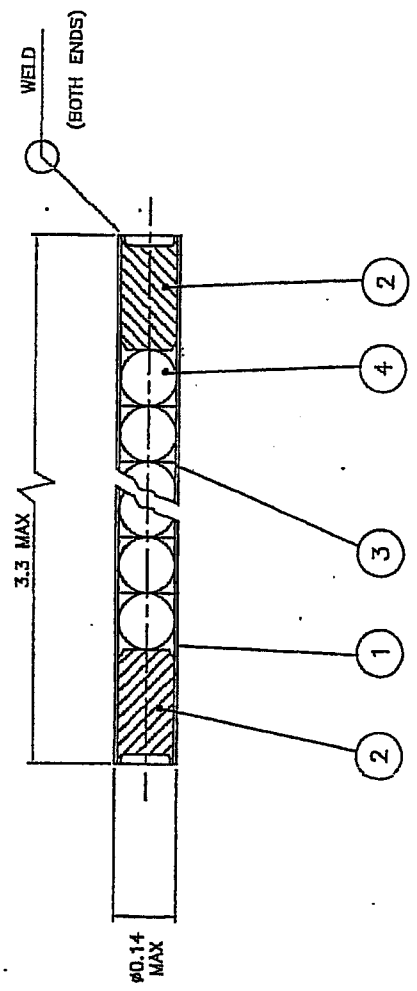


DESCRIPTIVE  
DRAWING

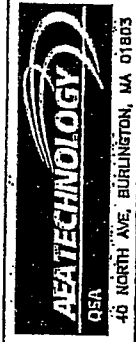
TITLE	X0845 ASSEMBLY	
SIZE	DWG. NO.	REV
A	RBA10113	A
SCALE:	1:1	SHEET 1 OF 1

ERF # 1203

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



APPROVALS	
<i>[Signature]</i>	22 Nov 04
<i>[Signature]</i>	22 Nov 04



DESCRIPTIVE DRAWING	
TITLE XN46 CAPSULE ASSEMBLY	
SIZE A	DWG. NO. RBA62541
SCALE: NONE	
SHEET 1 OF 1	
REV A	

DIMENSIONS IN INCHES	
ERF #	937



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**CERTIFICATE NUMBER:** USA/0730/S-96

**ORIGINAL REGISTRANT(S) :**

QSA Global, Inc.  
30 North Avenue  
Burlington, MA, 01803  
USA