

U.S. Department of Transportation

## IAEA CERTIFICATE OF COMPETENT AUTHORITY SPECIAL FORM RADIOACTIVE MATERIALS

Pipeline and Hazardous Materials Safety Administration CERTIFICATE USA/0730/S, REVISION 5

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 $^1$  and the United States of America $^2$  for the transport of radioactive material.

- 1. <u>Source Identification</u> 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.

<sup>&</sup>lt;sup>1</sup> "Regulations for the Safe Transport of Radioactive Material, 2018 Edition, No. SSR-6 (Rev. 1)" published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

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

## CERTIFICATE USA/0730/S, REVISION 5

- 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 May 16, 2030. 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 April 30, 2025 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

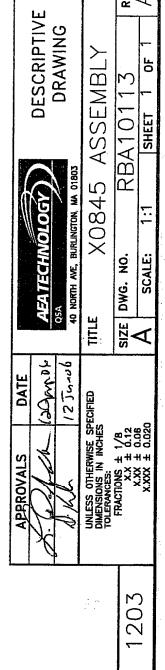
Certified By:

May 14, 2025 William Schoonover (DATE)

Associate Administrator for Hazardous Materials Safety

Revision 5 - Issued to endorse to 2018 edition of the Regulations for the Safe Transport of Radioactive Material, SSR-6 (Rev. 1) and to extend the expiration date.

<u>F-24-1</u>	
STAIN. STL. STAIN. STL. STAIN. STL.	
DESCRIPTION BODY RETAINER SCREW CH. HD. 10BAx1/8 LG ASSEMBLY OF CAPSULE XN46 ACTIVE MATERIAL.	
(TEM	3.52 MAX.  5 (NOMINAL ACTIVE LENGTH)
	FIG.ON XAM
	TIG OR LASER WELD 4-POSITIONS  SECTION A-A



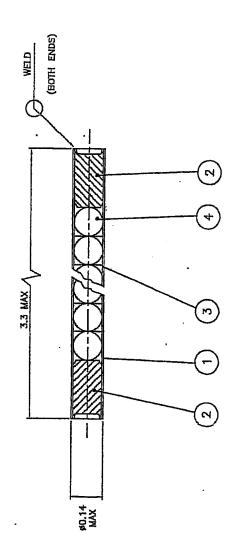
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ITEM	DESCRIPTION		Q1Y
ı.	ВООУ	STAIN. STEEL	٦
2	PLUG	STAIN, STEEL	2
177	CERAMIC FIBRE PACKING		A/R
+	Am241 GLASS BEADS # 0.10B		A/R



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	DESCRIPTIVE	DRAWING	ASSEMBLY			SHEET 4 OF 4
	AEATECHNOLOGY)	OSA 40 NORTH AVE, BURLINGTON, MA O1803	TITLE XN46 CAPSULE ASSEMBLY	SITE NWG NO CITE ON SITE	A KBA6254	A SCALE: NONE SHE
APPROVALS	( norman 122, NW 04	RALL 32 NOW OF	DIMENSIONS IN INCHES			
		Vid	<b>W</b> ID		7 7 5	7

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Pipeline and Hazardous Materials Safety Administration

CERTIFICATE NUMBER: USA/0730/S-96

## ORIGINAL REGISTRANT(S):

QSA Global, Inc. 40 North Avenue Burlington, MA, 01803 USA