



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/0694/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 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.

¹ "Regulations for the Safe Transport of Radioactive Material, 2012 Edition, No. SSR-6" 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 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 February 28, 2029. 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 February 1, 2024 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:

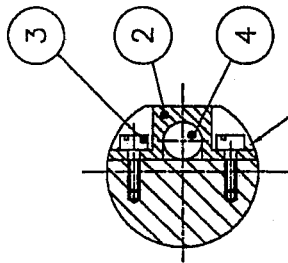


William Schoonover
Associate Administrator for Hazardous
Materials Safety

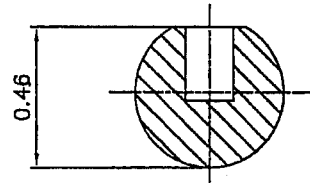
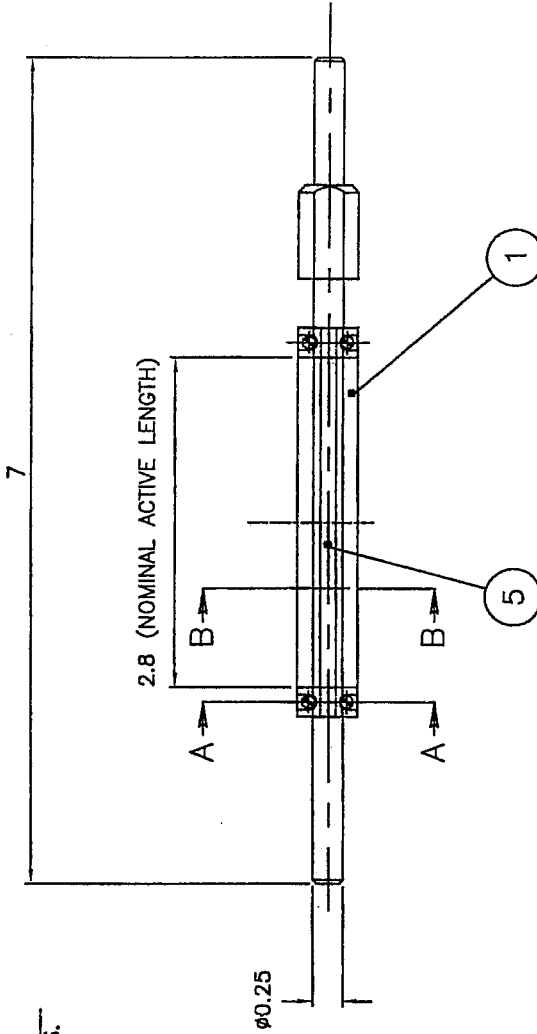
February 28, 2024
(DATE)

Revision 4 - 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

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

DIMENSIONS IN INCHES



DESCRIPTIVE
DRAWING

TITLE

XN46 CAPSULE IN X0876

SIZE

DWG. NO. RBA63137

REV
B

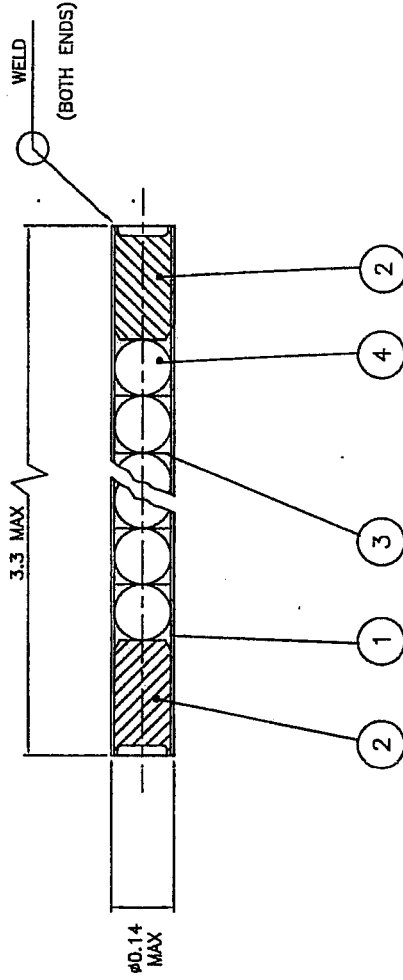
ERF #

944

SCALE: NONE

SHEET 1 OF 1

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



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



U.S. Department of
Transportation

Pipeline and
Hazardous Materials
Safety Administration

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

CERTIFICATE NUMBER: USA/0694/S-96

ORIGINAL REGISTRANT(S) :

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