



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

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

February 10, 2020

Dr. James M. Shuler
Manager, Packaging Certification Program
Department of Energy
U.S. Department of Energy
1000 Independence Ave, SW
EM-60
Washington, DC, 20585
USA

Dear Dr. James M. Shuler,

As your February 5, 2020 letter requested, Department of Energy has been registered as a user of IAEA Certificate of Competent Authority USA/0715/S-96 for the QSA Global, Inc. Model X101 (Manufactured on or after January 4, 1979). The source described in the attached certificate has demonstrated its ability to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the United States of America and the International Atomic Energy Agency.

A copy of the certificate is enclosed. All future revisions of the certificate will be forwarded to Department of Energy at James.Shuler@em.doe.gov.

Sincerely,

Richard W. Boyle, Chief
Radioactive Materials Branch
Office of Engineering and Research



U.S. Department
of Transportation

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IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS

CERTIFICATE USA/0715/S-96, REVISION 3

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 X101 (Manufactured on or after January 4, 1979).
2. Source Description - Cylindrical single encapsulation made of stainless steel and tungsten inert gas or laser seal welded. Approximate outer dimensions are 3.2 mm (0.13 in.) in diameter and 10.4 mm (0.41 in.) in length. Minimum wall thickness is 0.15 mm (0.006 in.). Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawing No. RBA10818, Rev. A.
3. Radioactive Contents - No more than 740.0 MBq (20.0 mCi) of either Americium-241 or Californium-252. The Am-241 is in the form of an oxide incorporated into a ceramic enamel. The Cf-252 is in the form of solid metal or a ceramic.
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.

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/0715/S-96, REVISION 3

5. Expiration Date - This certificate expires on January 31, 2025. USA/0715/S-96 Revision 2 may be used until January 31, 2020. All other revisions are not authorized for use.

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 December 3, 2019 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:

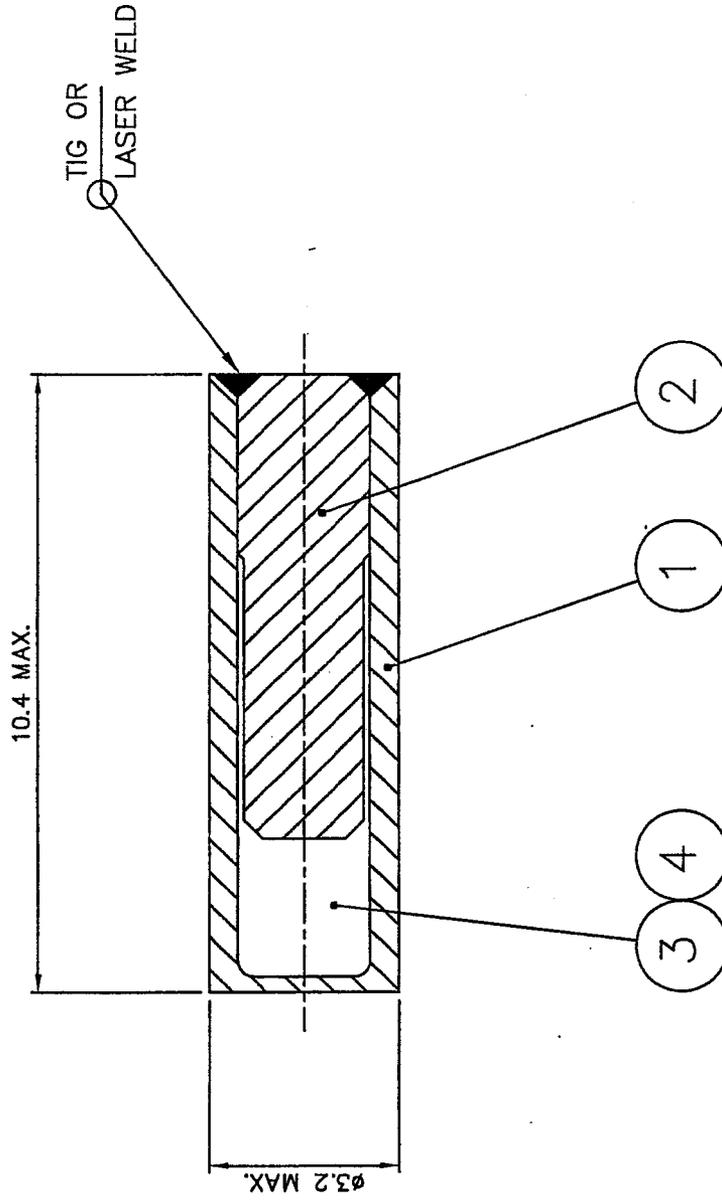


January 17, 2020
(DATE)

 William Schoonover
Associate Administrator for Hazardous
Materials Safety

Revision 3 - Issued to extend the expiration date.

Item No	Description	No off
1	BODY STAIN. STL.	1
2	LID STAIN. STL.	1
3	CERAMIC FIBRE	A/R
4	ACTIVE MATERIAL	A/R



AEATECHNOLOGY QSA		40 NORTH AVE, BURLINGTON, MA 01803	
DESCRIPTIVE DRAWING		TITLE X101 CAPSULE ASSEMBLY	
APPROVALS		DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE STATED TOLERANCES:	
<i>[Signature]</i>	<i>[Signature]</i>	X ±0.5	INTERNAL $\frac{N}{\sqrt{2}}$
<i>[Signature]</i>	<i>[Signature]</i>	XX ±0.1	EXTERNAL $\frac{N}{\sqrt{2}}$
<i>[Signature]</i>	<i>[Signature]</i>	XXX ±0.05	ANGULAR ±5°
SIZE A		DWG. NO. RBA10818	
SCALE: NONE		SHEET 1 OF 1	
REV A		REV A	

ERF # 1106



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CERTIFICATE NUMBER: USA/0715/S-96

ORIGINAL REGISTRANT(S) :

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

REGISTERED USERS:

Department of Energy
U.S. Department of Energy
1000 Independence Ave, SW
EM-60
Washington, DC, 20585
USA