



U.S. Department of Transportation

IAEA CERTIFICATE OF COMPETENT AUTHORITY SPECIAL FORM RADIOACTIVE MATERIALS

Pipeline and Hazardous Materials Safety Administration CERTIFICATE USA/0257/S, REVISION 15

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. Source Identification QSA Global, Inc. Model 849.
- 2. Source Description Cylindrical single encapsulation made of Type 410 stainless steel and seal welded. Approximate exterior dimensions are 12.7 mm (0.5 in.) in diameter and either 38 mm (1.5 in.) or 50.8 mm (2.0 in.) in length. Ceramic fiber packing material and/or metallic spacers, springs or guards with melting point above 800°C may be used. Construction shall be in accordance with attached QSA Global Drawing No. R84901, Rev. D.
- 3. Radioactive Contents No more than 55.5 TBq (1,500 Ci) of Iridium192, in solid metallic form, in the 38 mm (1.5 in.) length capsule
 and no more than 185 TBq (5,000 Ci) in the 50.8 mm (2.0 in.) length
 capsule. No more than either: 74 TBq (2,000 Ci) of Selenium-75, in
 a physically inert and stable metal-selenide compound, or 37 GBq
 (1.0 Ci) of Californium-252, in the form of a metal wire or an oxide
 solid ceramic, in either length capsule. Only the activity of Ir192 in special form may be determined from a measurement of the rate
 of decay or a measurement of the radiation level at a prescribed
 distance from the source.

¹ "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.

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

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- 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.

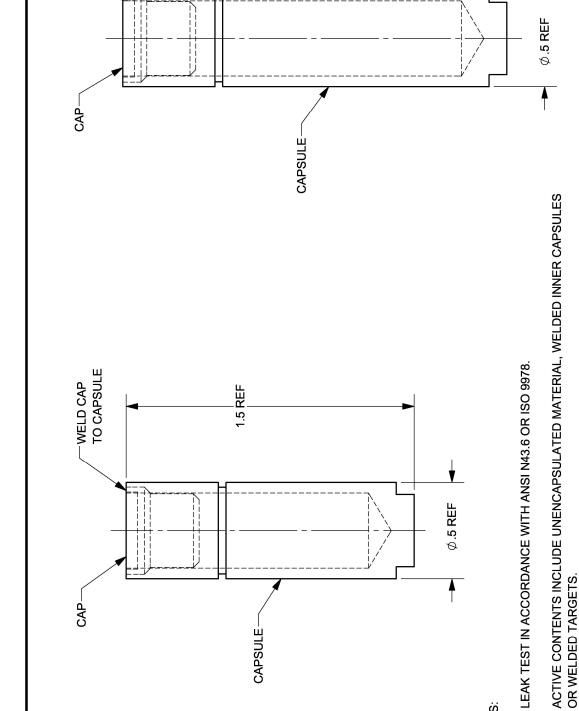
Certified By:

William Schoonover

William Schoonover Associate Administrator for Hazardous Materials Safety May 07, 2025

(DATE)

Revision 15 - Issued to update to the 2018 edition of the IAEA Regulations for the Safe Transport of Radioactive Materials, SSR-6 (Rev.1) and to extend the expiration date.



2.0 REF

TO CAPSULE -WELD CAP

ALL DIMENSIONS ARE INCHES, TOLERANCE ±1/16 UNLESS OTHERWISE SPECIFIED:

MATERIAL MAY INCLUDE CERAMIC FIBER PACKING MATERIAL, METAL SPACERS, METAL

SPRINGS, AND/OR METAL GUARDS.

OPTIONAL ADDITIONAL CONTENTS USED FOR LOCATING OR SECURING ACTIVE

NOTES:

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SPACERS, SPRINGS, AND GUARDS MELTING TEMPERATURE SHALL BE ABOVE 800 °C.

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QSA GLOBAL

DESCRIPTIVE DRAWING

40 NORTH AVE, BURLINGTON, MA 01803

849 CAPSULE ASSEMBLY
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TITLE

DATE

APPROVALS

ERF#

December 07, 2020 December 08, 2020 December 08, 2020

E-SIGNED by Ecin Lynch on 2020-12-08 12:02:06 GMT E-SIGNED by Steve Grenier on 2020-12-07 19:58:08 GMT

4214

SIZE DWG. NO.

NON SCALE:

SHEET 1 OF 1

R84901

REV



U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

CERTIFICATE NUMBER: USA/0257/S-96

ORIGINAL REGISTRANT(S):

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

Industrial Nuclear Company, Inc. 14320 Wicks Blvd. San Leandro, CA, 94577 USA