

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

U.S. Department of Transportation

IAEA CERTIFICATE OF COMPETENT AUTHORITY SPECIAL FORM RADIOACTIVE MATERIALS

Pipeline and CERTIFICATE USA/0530/S-96, REVISION 5 Hazardous Materials Safety Administration

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. <u>Source Identification</u> J.L. Shepherd & Associates Model 8810-AmBe-154.
- Source Description Cylindrical triple encapsulation made of stainless steel and tungsten inert gas seal welded. Approximate exterior dimensions are 29.0 mm (1.14 in.) in diameter and 50.0 mm (1.96 in.) in length. Construction shall be in accordance with attached J.L. Shepherd and Associates Drawing No. A-0503-4225.
- 3. <u>Radioactive Contents</u> No more than 185.0 GBq (5.0 Ci) of Americium-241. The Am-241 is in the form of an oxide mixed with a beryllium powder.
- 4. <u>Management System Activities</u> 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. <u>Expiration Date</u> This certificate expires on December 31, 2028. Previous editions which have not reached their expiration date may continue to be used.

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/0530/S-96, REVISION 5

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 5, 2023 petition by J.L. Shepherd & Associates, San Fernando, CA, and in consideration of other information on file in this Office.

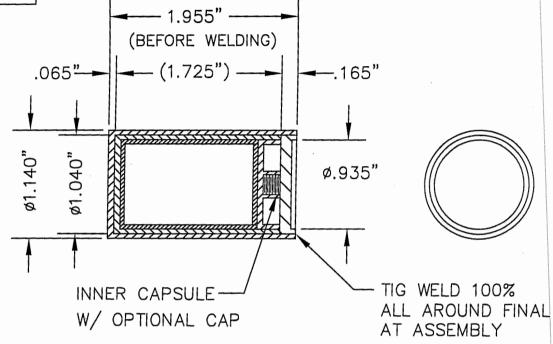
Certified By:

December 14, 2023 (DATE)

William Schoonover Associate Administrator for Hazardous Materials Safety

Revision 5 - Issued to extend the expiration date.

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED INNER CAPSULE	20DEC18	info



NOTE:

- 1. END CAP 304 SS
- 2. SOURCE CERTIFIED "SPECIAL FORM"
- 3. END CAP HAS .002" REGISTER .0005" INTERFERENCE FIT
- 4. REMOVEABLE CONTAMINATION (LEAK TEST) AFTER LOADING $\leq 5 \times 10^{3}$ MCi
- 5. SCRIBE / ENGRAVE 3/32" HIGH LETTERS (MIN.): "JLS 7810-109R 5 Ci 241-AM/BE S/N 1400 AM 29 DATE: 10/31/96"
- WELD PENTRANT TEST REQUIRED AFTER LOADING
 ALL DIM'S +/-.002"

MATL = 304 SS (MACHINE FROM ROD) INNER CAPSULE = NUMEC AM-154 WITH OPTIONAL CAP

J. L. SHEPHERD and Associates				
DRAWN BY DATE D. TRAN 01-15-97	APPROVED BY	SCALE FULL		
TERTIARY "SPECIAL FROM" ENCAPSULATION				
FOR NUMEC AM	-154 A-0503	-4225		



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CERTIFICATE NUMBER: USA/0530/S-96

ORIGINAL REGISTRANT(S):

J.L. Shepherd & Associates 1010 Arroyo Ave. San Fernando, CA, 91340-1822 USA