

U.S. Department of Transportation

### IAEA CERTIFICATE OF COMPETENT AUTHORITY SPECIAL FORM RADIOACTIVE MATERIALS

Pipeline and Hazardous Materials Safety Administration CERTIFICATE USA/0453/S-96, 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> J.L. Shepherd & Associates Model 6810/143-512 BNL Strip.
- 2. Source Description Rectangular triple encapsulation made of Type 304 or 316 stainless steel (outer encapsulation) containing a Type 304 stainless steel double encapsulation BNL Strip Source, all heliarc seal welded. Approximate exterior dimensions are 759.7 mm (29.91 in.) in length, 32.6 mm (1.285 in.) in width, and 12.6 mm (0.498 in.) in thickness. Construction shall be in accordance with attached J.L. Shepherd and Associates Drawing No. A-0527-512, Rev. B.
- 3. Radioactive Contents No more than 74.0 TBq (2000.0 Ci) of Cesium-137. The Cs-137 is in the form of cesium chloride pellets.
- 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.

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<sup>&</sup>lt;sup>1</sup> "Regulations for the Safe Transport of Radioactive Material, 2012 Edition, No. SSR-6" 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/0453/S-96, REVISION 5

5. Expiration Date - This certificate expires on December 31, 2023. Previous editions which have not reached their expiration date may continue to be used.

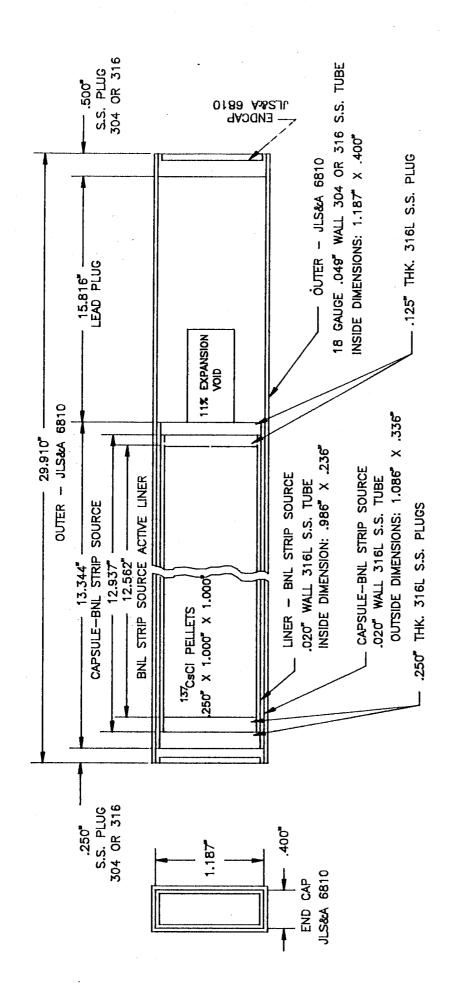
This certificate is issued in accordance with paragraph(s) 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the November 20, 2018 petition by J.L. Shepherd & Associates, San Fernando, CA, and in consideration of other information on file in this Office.

Certified By:

William Schopover

William Schoonover Associate Administrator for Hazardous Materials Safety December 20, 2018 (DATE)

Revision 5 - Issued to extend the expiration date.



# NOTES:

- 1. ALL PLUGS (LINER, CAPSULE AND OUTER) SEALED BY HELIARC WELD-100% WITH 100% PENETRATION.
- 2. FINAL ASSEMBLY LINER, CAPSULE AND OUTER MUST PASS RADIOACTIVE SMEAR TEST  $< 5 \times 10^{-3} \, \mathrm{m}$  ci removable contamination .
- 3. CAPSULE & LINER CERTIFIED TO MEET "SPECIAL FORM"

  PER ORNL 4092 CAPSULES PRIOR TO LOADING & AFTER FINAL WELD

  LINER & CAPSULE MUST PASS HELIUM LEAK TEST—

  SENSATIVITY 1 X 10 CC/MIN. & RADIOACTIVE SMEAR TEST.

	INSIDE DIM'S	WALL
BNI. JNER INNER)	.986" X .236"	.020
BNL CAPSULE (OUTER)	1.046° X .296°	.020
JISSEA OUTER 6810	1.187 X .400	.049

3-7-96 REV. (B) DIMENSIONAL CORRECTION PER US DOT 3/6/96 REQUEST WEA CERT OR COMPLETEN AUTHORITY USA, 6453/S

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APPROVED BY MFS	MODEL 6810-143/152 ENL STRIP SOURCE	A-0527-512
DATE 5-20-91	6810-143/152	
DRAWN BY D. TRAN	MODEL	



## U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

**CERTIFICATE NUMBER:** USA/0453/S-96

### ORIGINAL REGISTRANT(S):

MDS Nordion MDS Nordion 447 March Road Ottawa, Ontario, K2K 1X8 Canada

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