



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

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE USA/0775/S-96, REVISION 1**

East Building, PHH-23
1200 New Jersey Avenue Southeast
Washington, D.C. 20590

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 - Eckert & Ziegler Isotope Products Model No. BP Series (A4163).
2. Source Description - Cylindrical double encapsulation constructed of 17-4PH stainless steel and fusion seal welded. Approximate outer dimensions are 26.62 mm (1.048 in.) in diameter and 134.11 mm (5.28 in.) in length. Construction shall be in accordance with attached Eckert & Ziegler Isotope Products Drawing No. 4163, Rev. B, Sheet 3 of 9.
3. Radioactive Contents - No more than 851 GBq (23 Ci) of Americium-241 (Am:Be). The Am-241 oxide and beryllium powder is in the form of a compressed powder pellet in a metal matrix.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations¹ 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 applicable requirements of Subpart H of 10 CFR 71.
5. Expiration Date - This certificate expires on October 31, 2019.

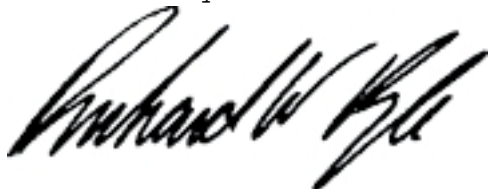
¹ "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency(IAEA), Vienna, Austria.

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

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This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the October 15, 2014 petition by Eckert & Ziegler Isotope Products, Valencia, CA, and in consideration of other information on file in this Office.

Certified By:

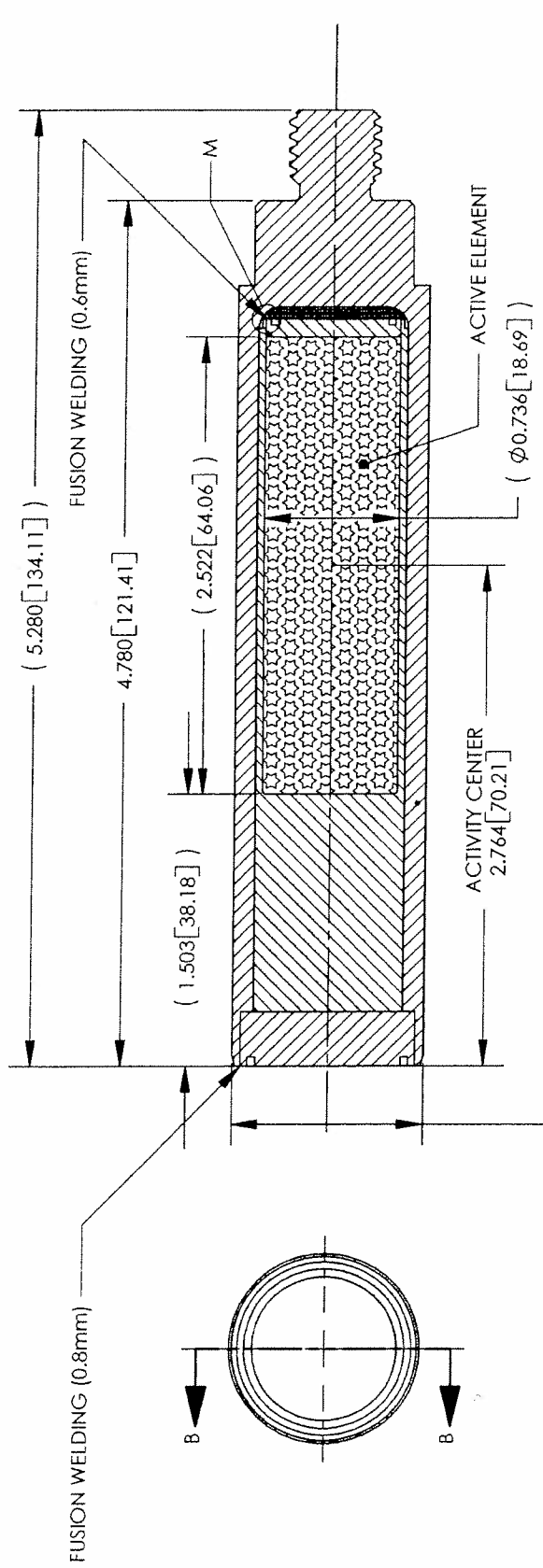


Nov 06 2014

(DATE)

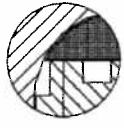
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Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety

Revision 1 - Issued to extend the expiration date.

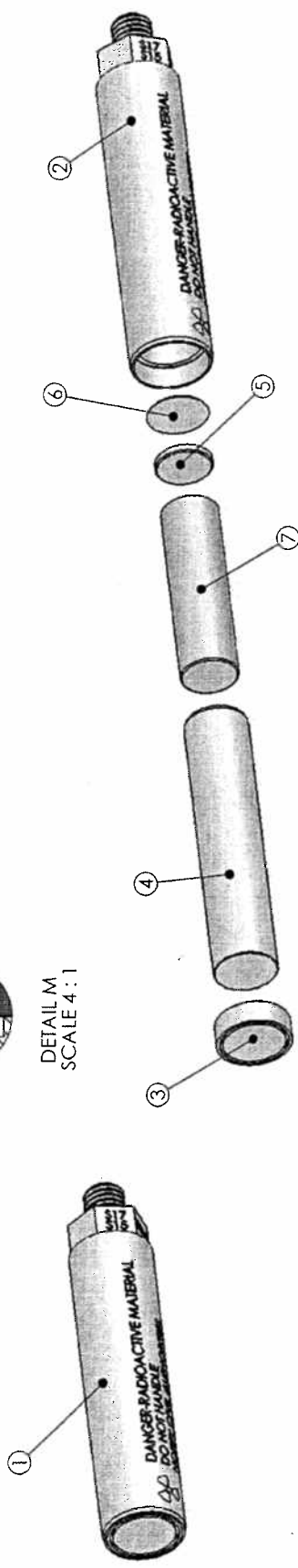


INTERNAL ACTIVE ELEMENT CAPSULE VOLUME
 17575.003 (CYLINDRICAL VOLUME) - 3.254 (END ROUND) = 17571.749 mm³

SECTION B-B
 SCALE 1:1:1



DETAIL M
 SCALE 4:1



2. PACKAGE AND IDENTIFY PART NUMBER THEREON
 1. ASSEMBLE PER ENGINEERING DRAWING
 NOTES: UNLESS OTHERWISE SPECIFIED

P/N A4163 DOUBLE ENCAPSULATED Am-Be SOURCE CAPSULE ASSEMBLY

Eckert & Ziegler Isotope Products VALENCIA, CALIFORNIA 91355 <small>THIS DRAWING IS THE PROPERTY OF ECKERT & ZIEGLER ISOTOPE PRODUCTS AND MAY NOT BE USED, REPRODUCED, PUBLISHED OR DISCLOSED TO OTHERS WITHOUT EXPRESS AUTHORIZATION BY ECKERT & ZIEGLER ISOTOPE PRODUCTS.</small>	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCH-SIZES. METRIC UNITS [mm] ARE IN MILLIMETERS.	TOLERANCES X.XXX ± .002 INCH X.XX ± .005 INCH X.X ± .03 INCH X. ± .1 INCH ALL DIMENSIONS ARE FINISHED DIMENSIONS	(UNLESS OTHERWISE SPECIFIED) ANGULAR TOLERANCE OF 0°±30' FRACTIONAL DIMENSIONS ± 1/32" REFERENCE DIMENSIONS () N/A SURFACE ROUGHNESS μ INCH MAX	THIRD ANGLE PROJECTION 	DRAWN KP	ME/CHECKER JH	ENGINEER KP	SCALE NONE	SIZE A	CAGE CODE 32993	DRAWING NO. 4163	REV B	SHEET 3 OF 9
	TITLE BP SERIES; Am-241/Be NEUTRON-SOURCE, BP4163		SERIES TITLE OIL WELL LOGGING (Am-Be GROUP)										



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CERTIFICATE NUMBER: USA/0775/S-96, Revision 1

ORIGINAL REGISTRANT(S):

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Regulatory Affairs Manager
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