



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

**IAEA CERTIFICATE OF COMPETENT AUTHORITY  
SPECIAL FORM RADIOACTIVE MATERIALS  
CERTIFICATE USA/0080/S-96, REVISION 6**

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 Agency<sup>1</sup> and the United States of America<sup>2</sup> for the transport of radioactive material.

1. Source Identification - Monsanto Research Corporation capsule identified by Monsanto Research Corporation Drawing No. SK195-2A0 (a prototype of Model No. 24132).
2. Source Description - The source described by this certificate is a TIG-welded, doubly encapsulation constructed of Type 304 stainless steel, and measures 3.175 cm (1.25 in.) in diameter by 10.80 cm (4.25 in.) in length. Construction shall be in accordance with attached Monsanto Research Corporation Drawing No. SK195-2A0.
3. Radioactive Contents - This neutron source consists of not more than 0.395 TBq (10.67 Ci) of Am-241 as americium oxide powder, mixed with lithium hydride powder.
4. Special Conditions -
  - a. This certificate does not apply to any source manufactured according to Monsanto Research Corporation Drawing No. SK195-2A0 after January 1, 2000.
  - b. This certificate remains valid only insofar as no object is ever inserted in the tap hole at the base of the capsule.
5. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations<sup>1</sup> 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.

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<sup>1</sup> "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.

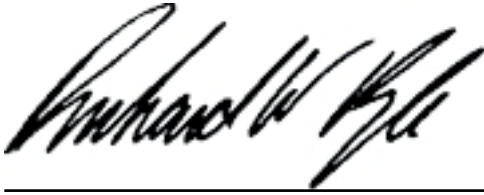
<sup>2</sup> Title 49, Code of Federal Regulations, Parts 100-199, United States of America.

**CERTIFICATE USA/0080/S-96, REVISION 6**

6. Expiration Date - This certificate expires on February 28, 2020.

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 January 29, 2015 petition by Department of Energy, Washington, DC, and in consideration of other information on file in this Office.

Certified By:



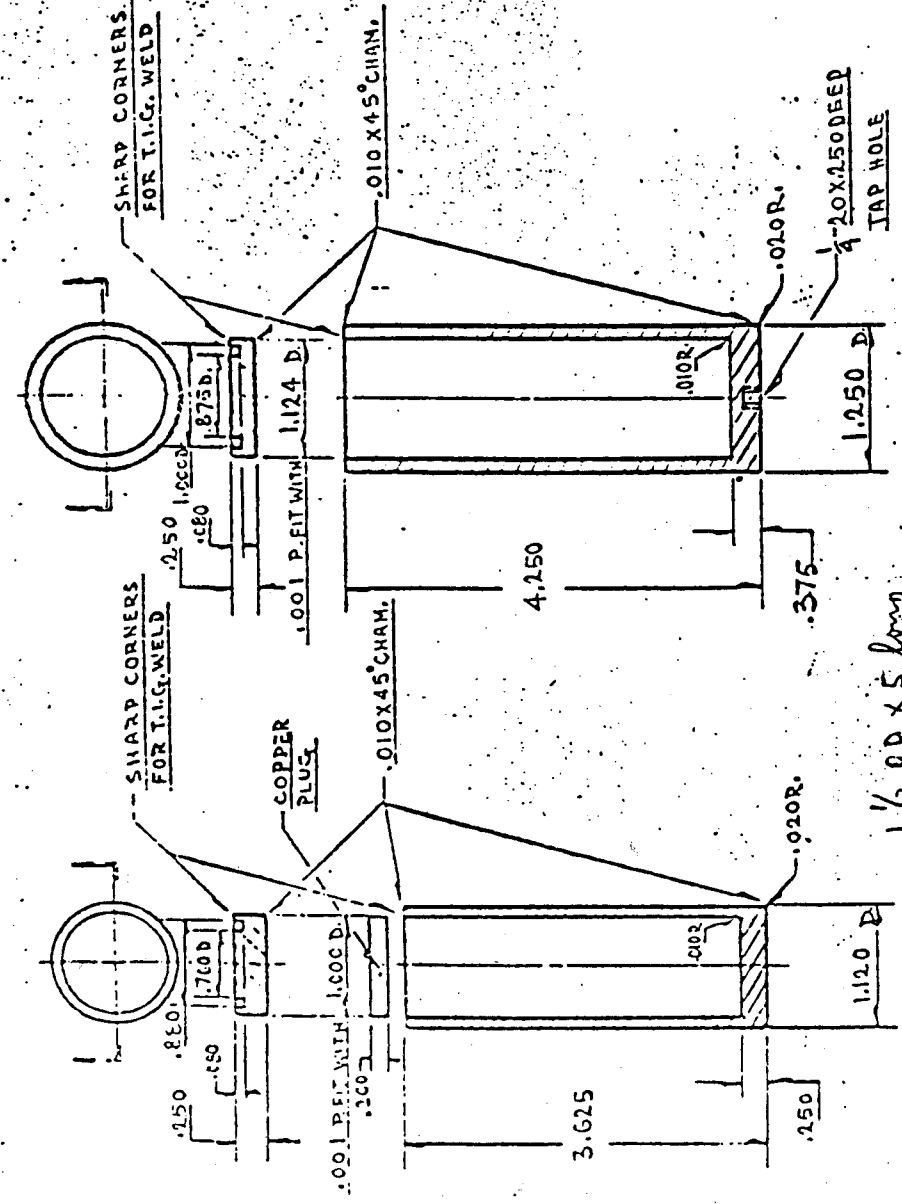
Dr. Magdy El-Sibaie  
Associate Administrator for Hazardous Materials Safety

**Feb 19 2015**

(DATE)

Revision 6 - Issued to extend the expiration date.

DWG



**NOTE:**

1. DIA. CLEARANCE BETWEEN INNER AND OUTER CONTAINER .004 MINIMUM .002 MINIMUM.
2. WELD PENETRATION .050 DESI R AND .040 MINIMUM.

**NOTICE**

This drawing is the property of Monsanto Research Corporation and must be returned, without reproduction or duplication, at any time upon request but in any event at completion of the work or job. While in the possession of the recipient, it must be properly safeguarded against revelation or disclosure to anyone except those employees who require it for the work or job. The recipient must keep it confidential, and require his (its) employees to keep confidential, the information contained hereon.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 DECIMALS FRACTIONS  
 .XX = ±.02 ± 64  
 .XXX = ±.005 ANGLES  
 .XXX BASIC 32 ± 30'  
 ALL SURFACES ✓  
 MATERIAL 304 S.S. & ANNEALED

APPD					
APPD					
APPD	<i>APPD</i>	8-14-72			
APPD	<i>APPD</i>	8-11-72			
CHECKED					
DRAWN	<i>U. R.</i>	8-11-72			
SIGNATURE		DATE			

**MONSANTO RESEARCH CORPORATION**  
 DAYTON LABORATORY  
 DAYTON, OHIO

**AW-Li NEUTRON SOURCE (SX10<sup>5</sup>)**

STANDARD DRAWING

DWG NO. **SK 195-2A0**

SCALE

DATE

COORDINATE NO.

SHEET **OF**



U.S. Department  
of Transportation

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

**Pipeline and  
Hazardous Materials  
Safety Administration**

**CERTIFICATE NUMBER:** USA/0080/S-96, Revision 6

**ORIGINAL REGISTRANT(S):**

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