



US Department  
of Transportation

Research and  
Special Programs  
Administration

400 Seventh Street, S.W.  
Washington, D.C. 20590

**IAEA CERTIFICATE OF COMPETENT AUTHORITY  
SPECIAL FORM RADIOACTIVE MATERIALS  
CERTIFICATE NUMBER USA/0237/S, REVISION 1**

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 materials.

1. Source Identification - Monsanto Research Corporation Model No. 24181.
2. Source Description - The source described by this certificate is a tungsten-inert-gas welded, double encapsulation with the inner capsule constructed of Type 304 stainless steel and the outer capsule constructed of Type 17-4PH steel. This source measures 27 mm (1.06") in diameter x 130 mm (5.12") long. Sources must conform to Monsanto Research Corporation drawing no. B24181-AA00 (attached).
3. Radioactive Contents - This neutron source consists of not more than 1.66 TBq (45 Ci) of Am-241 or Pu-238 as oxide powder mixed with either beryllium, lithium, boron, or fluorine powder.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 209 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 and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.
5. Expiration Date - This certificate expires April 1, 2001.

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<sup>1</sup> "Safety Series No. 6, Regulations for the Safe Transport of Radioactive Materials, 1985 Edition, as amended 1990", published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

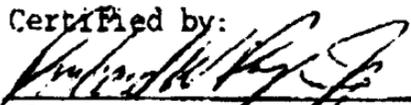
<sup>2</sup> Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.

(- 2 -)

**CERTIFICATE USA/0237/S, REVISION 1**

This certificate is issued in accordance with paragraph 703 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the petition and information dated October 20, 1995 submitted by Halliburton Energy Services, Houston, TX, and in consideration of other information on file in this Office.

Certified by:

  
\_\_\_\_\_  
Alan I. Roberts

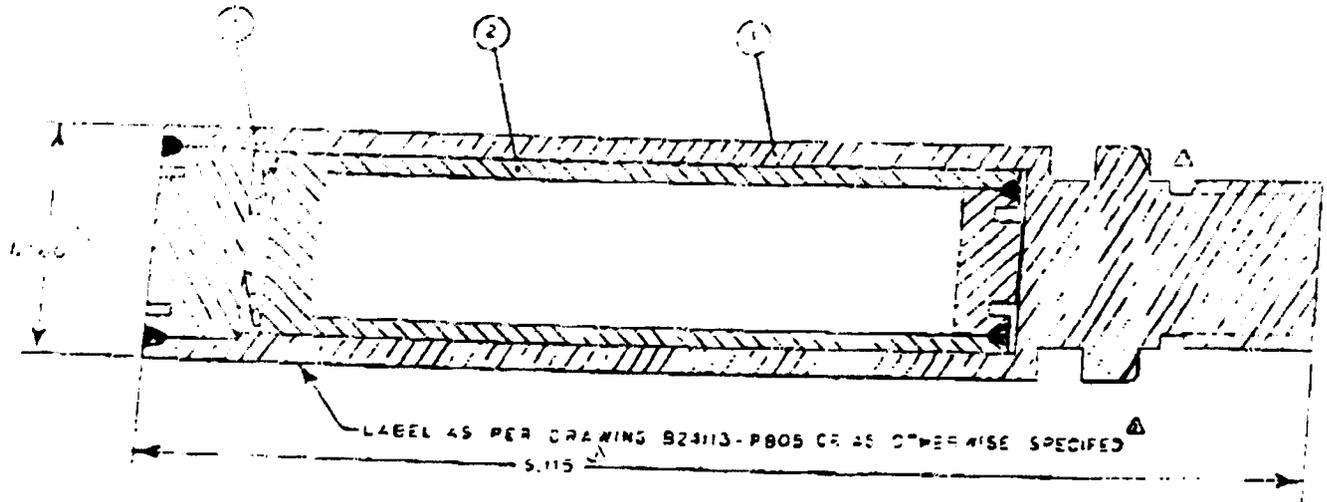
Associate Administrator for Hazardous Materials Safety

APR 15 1996

\_\_\_\_\_  
(DATE)

Revision 1 - Issued to incorporate the 1985 Edition of IAEA Safety Series No. 6, and to extend the expiration date.

CODE	SYM	DESCRIPTION
	Δ	ADDED FINISHES, DIMENSIONS
	Δ	CHANGED NOTES
	Δ	CHANGED NOTES, ADDED RUNOUT



REV	DESCRIPTION	DATE	BY	CHKD	APPD
1	ISSUE NC				
2	B24113-PB01				
3	B24113-PB02				
4	B24113-PB03				

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		APPD		DATE	
TOLERANCES:		DATE	BY	DATE	BY
DECIMALS	FRACTIONS	DATE	BY	DATE	BY
.XX = ± .02	ANGLES	DATE	BY	DATE	BY
.XXX = ± .005	30°	DATE	BY	DATE	BY
.XXX BASIC	✓	DATE	BY	DATE	BY
ALL SURFACES		DATE	BY	DATE	BY
MATERIAL		DATE	BY	DATE	BY
FINISH		DATE	BY	DATE	BY
		SIGNATURE	DATE	SCALE	WT CALC ACT

MORGANTO RESEARCH CORPORATION RAYTON LABORATORY RAYTON, OHIO		MODEL 241B1 SOURCE ASSEMBLY	DWG NO B24113-01
SCALE	WT CALC ACT	DATE	SHEET