



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

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

**IAEA CERTIFICATE OF COMPETENT AUTHORITY  
SPECIAL FORM RADIOACTIVE MATERIALS  
CERTIFICATE NUMBER USA/0128/S, REVISION 3**

This certifies that the sources described have 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 United States of America<sup>2</sup> for the transport of radioactive materials.

1. Source Identification - MRC Model No. 2493-G or OHMART Model No. B 18248-9/4.
2. Source Description - Cylindrical double encapsulations made of stainless steel and welded. Approximate outer dimensions are 16.1 mm (0.635 in.) in diameter and 203.2 mm (8.0 in.) to 279.4 mm (11.0 in.) in length. Construction shall be in accordance with attached MRC Drawing Nos. B2493-AA00 and B2491-AA00, or OHMART Corporation Drawing Nos. B-18138 and B-18248-A/C.
3. Radioactive Contents - No more than 444.0 GBq (12.0 Ci) of Plutonium-238 and/or Americium-241, and 222 GBq (6.0 Ci) of Cesium-137 or 370.0 GBq (10.0 Ci) of Cobalt-60. The Pu-238 and Am-241 are in the form of an oxide mixed with a beryllium or lithium powder, or hydrides or hydroxides of lithium. The Cs-137 is in the form of ceramic microspheres. The Co-60 is in metallic form.
4. 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 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. Special Conditions -
  - a. This certificate is only valid in the United States for disposal of sources, including transport of sources to locations pending disposal.
  - b. This certificate is only valid for surface transport (rail or highway), unless transported in an approved Type B package.
6. Expiration Date - This certificate expires on February 28, 2005.

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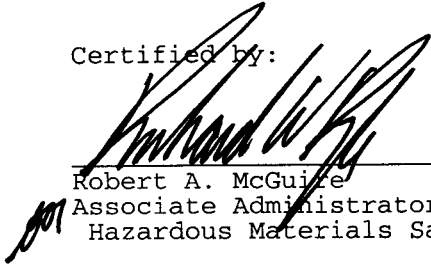
<sup>1</sup> "Regulations for the Safe Transport of Radioactive Materials, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

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

**CERTIFICATE USA/0128/S, REVISION 3**

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 petition and information dated March 17, 2004 submitted by Chase Environmental Group, Inc, Knoxville, TN, and in consideration of other information on file in this Office.

Certified by:



Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety

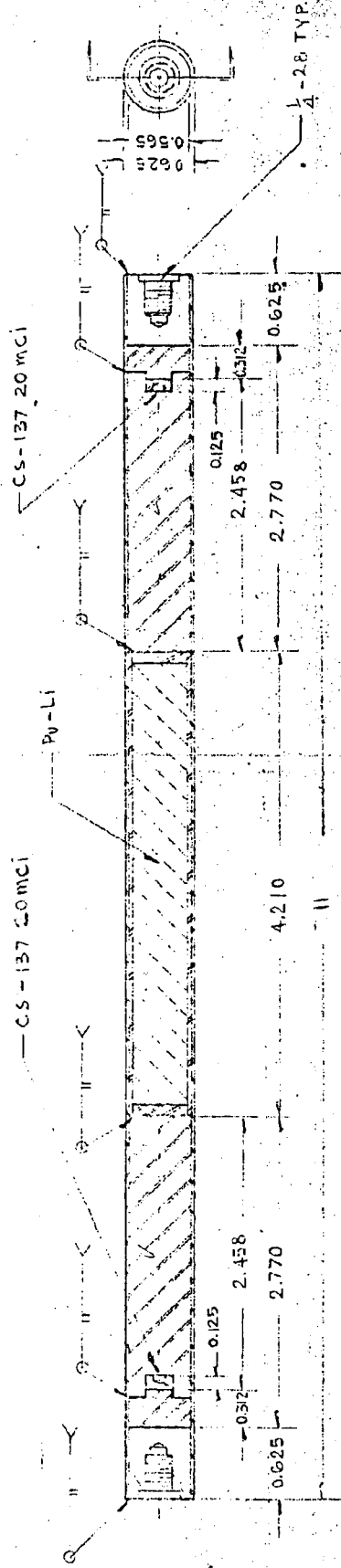
AUG 12 2004

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

Revision 5 - Issued to authorize disposal of sources.

ZONE	BYM	DESCRIPTION	DATE	APPROVAL

RE	OF	SHEET



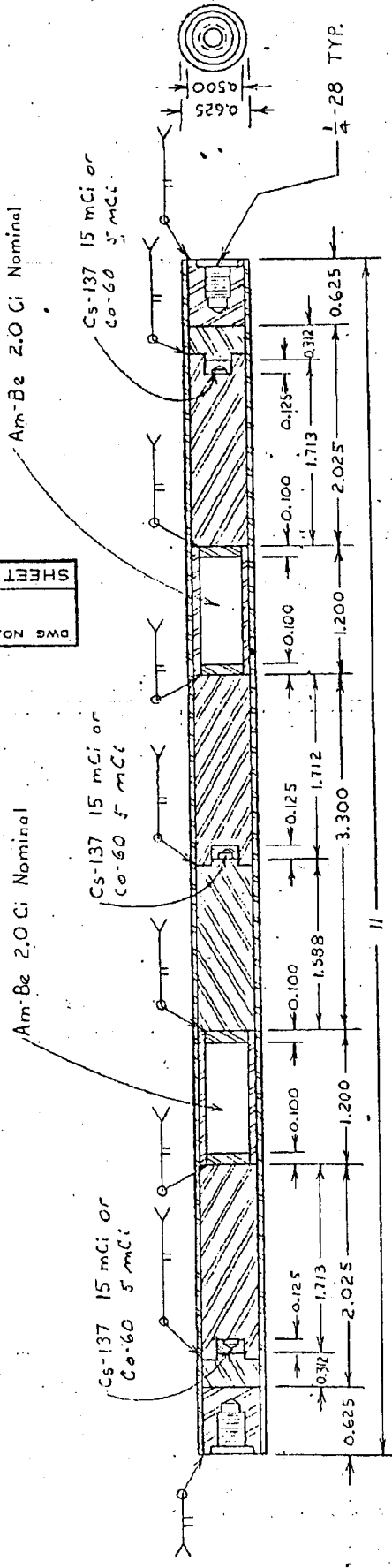
**NOTICE**

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 confidential, and require his (its) employees to keep confidential, the information contained hereon.

*Notice Removed  
8-19-94  
George Brown  
OH MAT Corporation*

- NOTES:**
1. ALL CLOSURES BY T.I.G. FUSION WELD. Pu-Li MATERIAL COMPACTED TO PREVENT SHIFTING DURING USE.
  2. LEAK TEST BY STANDARD PRESSURE - BUBBLE TEST AND 7-DAY SWIPE TEST OR HELIUM MASS SPECTROMETER LEAK TEST.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		TOLERANCES:		FRACTIONS	
DECIMALS	XX = ±	XXX = ± 0.005	XXXX BASIC	✓	ANGLES ± 30°
ALL SURFACES	MATERIAL 20A STAINLESS				
FINISH	SCALE: FULL WT				
APPD	APPD	APPD	APPD	CHECKED	DRAWN
				9-27	4-2771
MONSANTO RESEARCH CORPORATION DAYTON LABORATORY DAYTON, OHIO			SOURCE: ROD - Pu-Li/CS Ref: OH MAT PWDW 81244		
LABEL (ETCHED) MRC - P2811/CS-1			DWG. NO. B2425-AAA		
			REV		



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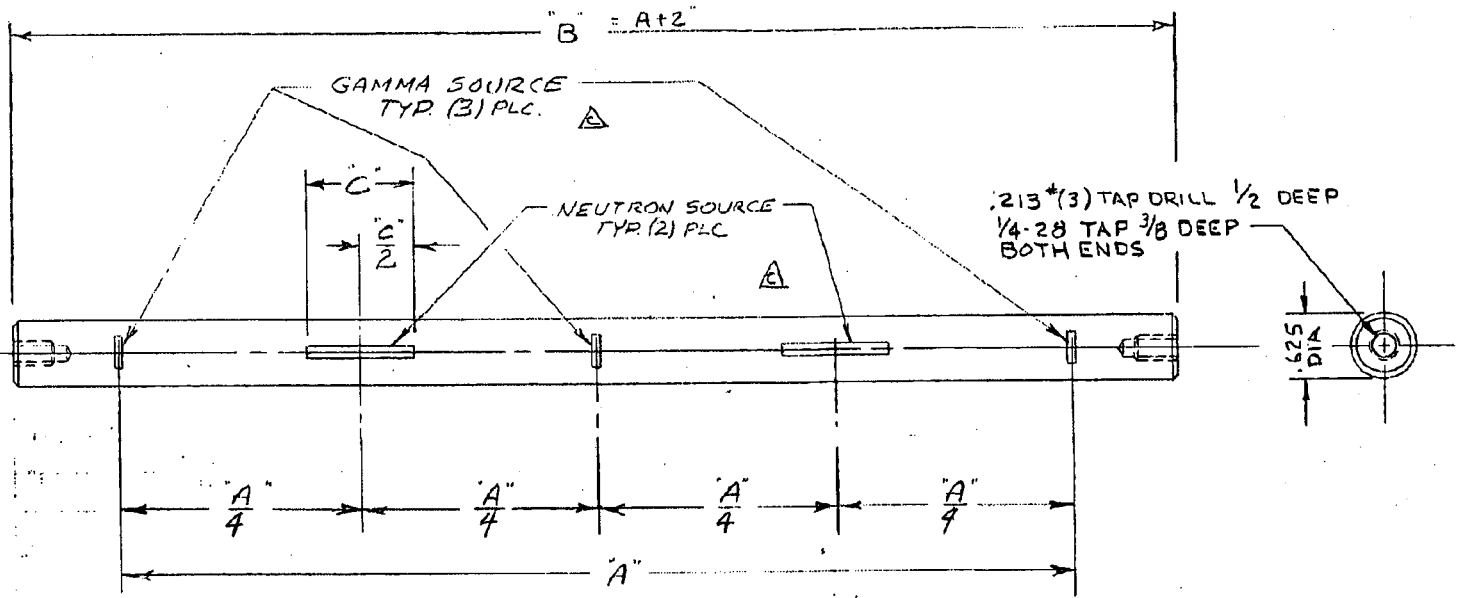
*Notice removed.  
8-19-94  
George Brown  
Chimney Super Station*

ADD Co 60 6-22-73 JGK

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES:		APPD		MONSANTO RESEARCH CORPORATION	DAYTON LABORATORY	DAYTON, OHIO
DECIMALS	.XX = ±	APPD				
FRACTIONS	.XXX = ±.005	APPD				
ANGLES	.XXXX BASIC	APPD				
ALL SURFACES	✓	CHECKED	1.11			
MATERIAL	304 STAINLESS STEEL	DRAWN	EJG			
FINISH						

- NOTES:
1. ALL CLOSURES BY T.I.G. FUSION WELD.
  2. Am-Be MATERIAL COMPACTED TO PREVENT SHIFTING DURING USE.
  3. LEAK TEST BY STANDARD PRESSURE-BUBBLE TEST AND 7-DAY SWIPE TEST OR HELIUM MASS SPECTROMETER LEAK TEST.

SOURCE: Rod - Am-Be/Cs-137 Co		MRC-AMBE/CS-137-Co-1	
MRC No. 701223B		REV	
DWG NO. B2491-AA00		CODE IDENT NO.	



DASH NO. A/C	DIM. A ACTIVE LENGTH	DIM. B	DIM. C	DETAIL DWG.
-9/1	9"	11"	1"	B-18489

MAT'L: STAINLESS STL.  
FINISH: NONE

*Notice Removed 8-18-94  
George B. Brown Ohmart Corp.*

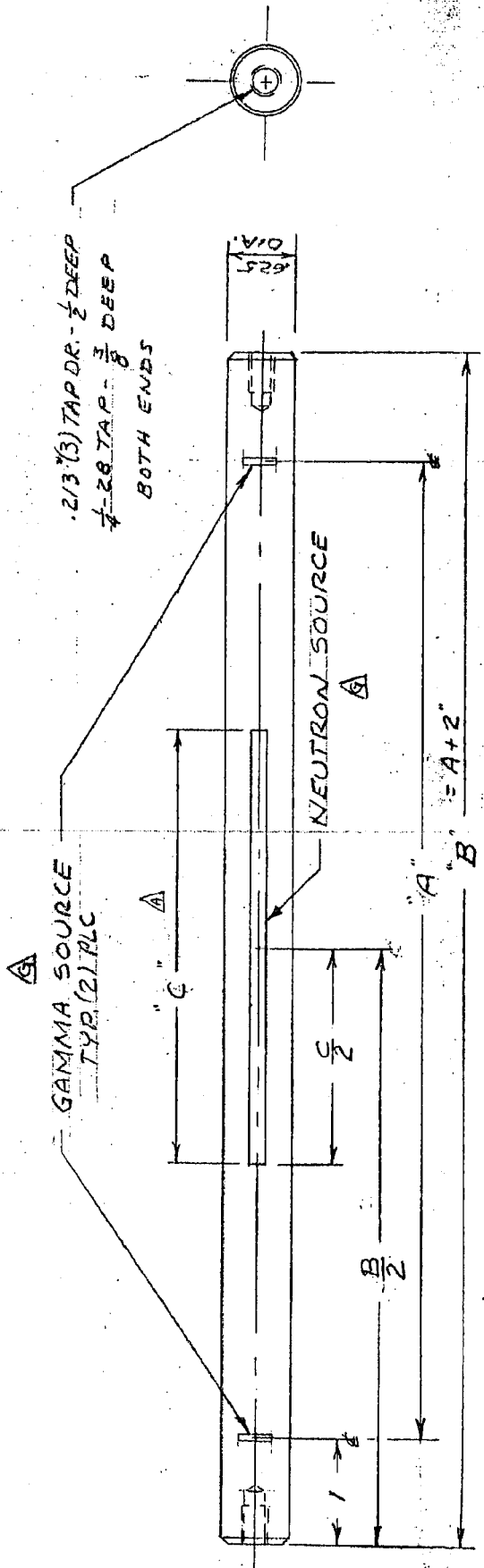
This drawing, together with all information and know-how disclosed thereon, is the property of The Ohmart Corporation, and no use, disclosure or reproduction of any part thereof may be made except by written authority of The Ohmart Corporation.

△	ADD ARROWS ON GAMMA & NEUTRON SOURCE CHARTS.	ULJ	7/13/6
△	ADD DETAIL DWG. B-18489	ULJ	7/9/6
△	ADD CHART REORGANIZE DIMENSIONS	ULJ	6/23/6

THE OHMART CORPORATION  
CINCINNATI OHIO

SOURCE ROD AmBe

MODEL	OHMART S.O. 5731
DRAWN BY P.M. Leach	CHECKED J.B.S.
CUSTOMER	
P.O. NO.	SCALE FULL
DATE 3-15-71	DWG. B 18138



ADD GAMMA SOURCE	ULS	7/26/61
NEUTRON SOURCE CHANGE	ULS	7/27/61
ADD AM B.C. CS 137 ALUMINUM SOURCE MATERIAL	ULS	7/27/61
ADD MANUFACTURER	ULS	7/27/61
CHANGE DASH NO. (94)	ULS	7/27/61
B/2 WAS 5 1/2"	ULS	7/27/61
ADD CHART	ULS	7/27/61
ACTIVE AREA WAS 2" NOW 4"	ULS	7/27/61
REVISION	DATE	

THE OHMART CORPORATION  
CINCINNATI OHIO

SOURCE ROD AmBe-609-137  
PUL-CE-5737

MODEL: OHMART S. O.  
DRAWN BY: AM  
CHECKED:  
CUSTOMER:  
P.O. NO.: SCALE: FULL  
DATE: 3-17-71  
DWG: B 18348-AR

DASH NO. A/C	"A"	"B"	"C"
* -6/3	6"	8"	3"
-7/4	7"	9"	4"
-9/4	9"	11"	4"

MONSANTO RESEARCH  
SERIES 2493

MATL.: STAINLESS STEEL ROD .625 OD.

FINISH: NONE

\* DETAIL DWG B-18248

Notice removed.  
8-19-94  
George Brown  
Ohmart Corporation

UNLESS OTHERWISE SPECIFIED:  
CAST OR WELD DIM ± .005  
MACHINED FRACTIONAL ± .002  
MACHINED DECIMAL ± .001  
BREAK ALL SHARP CORNERS  
MADE FROM B-