



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

**IAEA CERTIFICATE OF COMPETENT AUTHORITY  
SPECIAL FORM RADIOACTIVE MATERIALS  
CERTIFICATE NUMBER USA/0513/S, REVISION 1**

400 Seventh Street, S.W.  
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 materials.

1. Source Identification - AEA Technology QSA (Amersham) Model No. X.560.
2. Source Description - The source described by this certificate is a tungsten inert gas welded, single encapsulation constructed of Type 316 or 316L stainless steel with external dimensions of 6.6 mm (0.26 in) diameter and 10.4 mm (0.41 in) length. Typically the Model X.560 is a single encapsulation, but in some cases it may contain an inner encapsulation constructed of stainless steel, aluminum, or titanium. Construction must be in accordance with Sentinel (Amersham Corporation) Drawing No. R 87523 (attached).
3. Radioactive Contents - This source consists of not more than 20 TBq (540 Ci) of Ir-192 or Co-60 in the form of solid metal.
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 February 28, 2004.

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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.

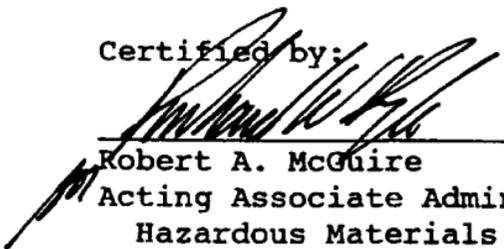
<sup>2</sup> Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.

( - 2 - )

**CERTIFICATE USA/0513/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 January 7, 2000 submitted by AEA Technology QSA Inc., Burlington, MA, and in consideration of other information on file in this Office.

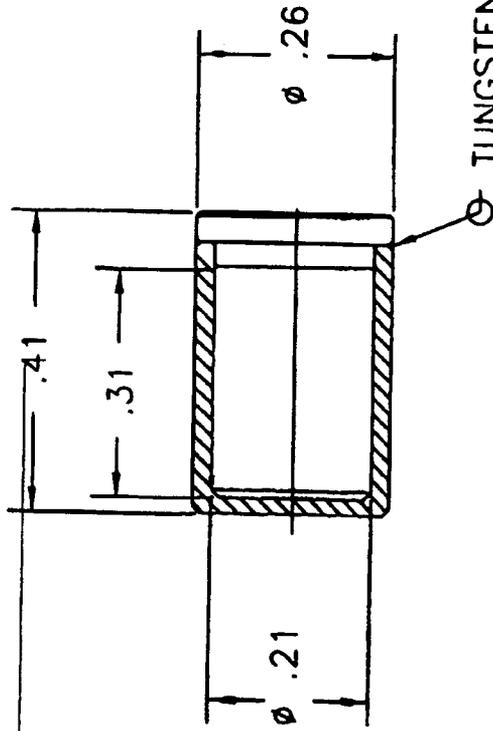
Certified by:

  
\_\_\_\_\_  
Robert A. McGuire  
Acting Associate Administrator for  
Hazardous Materials Safety

MAR 24 2000

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

Revision 1 - Issued to extend the expiration date.



TUNGSTEN INERT GAS WELDED

NOTES:

1. INTERNAL VOID TO BE 0.010 mL OR GREATER.
2. MATERIAL: 316L STAINLESS STEEL OR EQUIVALENT.
3. INNER CAVITY DIMENSIONS MAY VARY. METALLIC SPACERS, SPRINGS AND GUARDS WHICH SECURE AND/OR LOCATE THE RADIOACTIVE MATERIAL WITHIN THE CAPSULE MAY BE USED.
4. MINIMUM WALL THICKNESS TO BE 0.018.

UNLESS OTHERWISE SPECIFIED:  
ALL DIMENSIONS ARE INCHES, AND REFERENCE



DESCRIPTIVE  
DRAWING

UPDATE BORDER, DDCO#51	<i>S. Grenier</i>	2/18/95	B
INITIAL RELEASE	S.GRENIER/L.PODOLAK	21JUL95	A
DESCRIPTION	APPROVALS	DATE	LTR
REVISIONS			
TITLE		X560 CAPSULE ASSEMBLY	
SIZE	OWG. NO.	R87523	REV
A	SCALE:	NONE	B
		SHEET 1	OF 1