



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

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

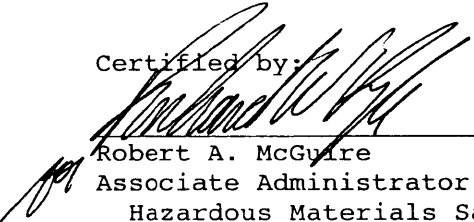
**IAEA CERTIFICATE OF COMPETENT AUTHORITY  
SPECIAL FORM RADIOACTIVE MATERIALS  
CERTIFICATE NUMBER USA/0116/S, REVISION 4**

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 - Halliburton Energy Services Model X-602-04-101 neutron source.
2. Source Description - Source is a tungsten-inert-gas welded double encapsulation constructed of Type 304 and 304L stainless steel, and measures approximately 25.4 mm (1.0") in diameter x 108 mm (4.25") long. Sources must conform to Halliburton drawing no. X-602-101 (attached).
3. Radioactive Contents - This neutron source consists of not more than 185 GBq (5.0 Ci) of Pu-238 or Am-241 as an oxide mixed with beryllium 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 November 30, 2005.

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 March 23, 2000 and August 15, 2000 submitted by Halliburton Energy Services, Inc., Houston, TX, and in consideration of other information on file in this Office.

Certified by:

  
Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety

**NOV 6 2000**

(DATE)

Revision 4 - issued to extend the expiration date.

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1 "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.

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

