



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/0463/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 Agency¹ and the United States of America² for the transport of radioactive materials.

1. Source Identification - J.L. Shepherd & Associates Model 7810-109-BP.
2. Source Description - The source described by this certificate is a fusion welded, double encapsulation constructed of Type 304 stainless steel with external dimensions of 9.5 mm (0.375") diameter x 161 mm (6.34") long. The inner encapsulation measures 7.9 mm (0.313") in diameter x 156 mm (6.134") long. The source must be constructed in accordance with J.L. Shepherd & Associates drawing no. A-0109-BP (attached).
3. Radioactive Contents - This source consists of not more than 12.4 TBq (335 Ci) of Co-60 in the form of nickel-plated 1 mm x 1 mm pellets. Maximum thermal output approximately 5 watts.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 209 of the IAEA regulations¹ 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 August 31, 2005.

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.

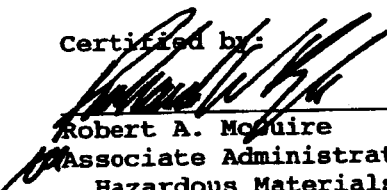
2 Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.

(- 2 -)

CERTIFICATE USA/0463/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 May 5, 2000 submitted by J.L. Shepherd & Associates, San Fernando, CA, and in consideration of other information on file in this Office.

Certified by:

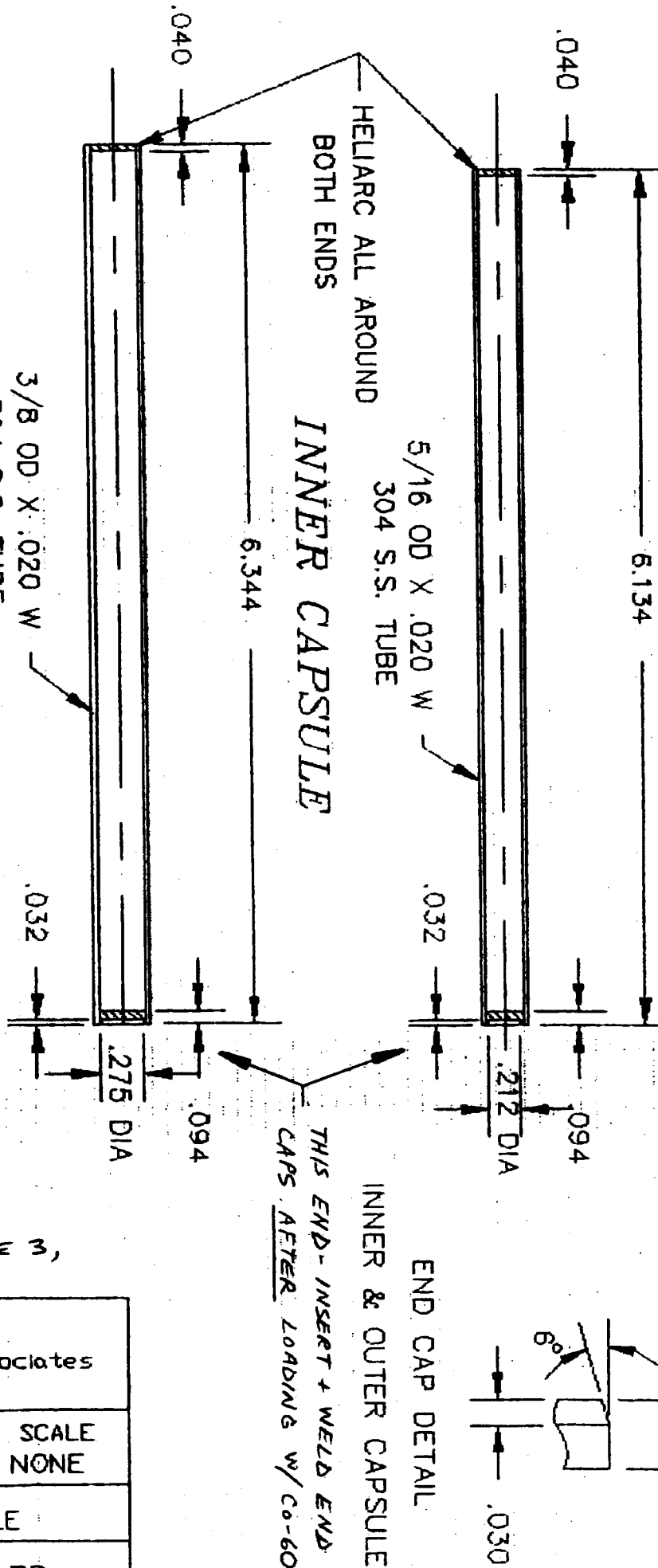


Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

AUG 30 2000

(DATE)

Revision 1 - Issued to extend the expiration date.



NOTES:

1. END CAPS - 304 SS
2. SOURCES CERTIFIED "SPECIAL FORM"
3. REGISTER TUBE ENDS .004" ON I.D. FOR END CAPS
(REGISTER DEPTH = LENGTH OF CAP)
4. BEFORE LOADING, 1 END OF EA TUBE
WELDED & HELIUM LEAK TESTED TO SENSITIVITY
OF 1×10^{-8} CC/MIN
5. REMOVEABLE CONTAMINATION (LEAK TEST)
AFTER LOADING $\leq 5 \times 10^{-3}$ MCI

REVISED 13 JAN 93 / TJS: CORRECT NOTE 3,
ADD NOTE ON UPPER END CAPS

J. L. SHEPHERD and Associates

AWN BY D. TRAN	DATE 10-21-92	APPROVED BY TJS	SCALE NONE
7810 SERIES Co-60 SOURCE CAPSULE			