



U.S. Department
of Transportation
**Pipeline and
Hazardous Materials
Safety Administration**

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE USA/0540/S-96, REVISION 3**

East Building, PHH-23
1200 New Jersey Avenue Southeast
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 Agency¹ and the United States of America² for the transport of radioactive material.

1. Source Identification - J.L. Shepherd Model No. 7810-9.
2. Source Description - Cylindrical double encapsulation made of Type 304 stainless steel and heliarc seal welded. Approximate exterior dimensions are 8.0 mm (0.315 in.) in diameter and 12.0 mm (0.472 in.) in length. Construction shall be in accordance with attached J.L. Shepherd Drawing No. A-0517-TC, dated December 10, 1997.
3. Radioactive Contents - No more than 19.0 GBq (500 mCi) of Cobalt-60 as a solid metal.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 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 in the United States exporting shipments under this certificate shall satisfy the applicable requirements of Subpart H of 10 CFR 71.
5. Expiration Date - This certificate expires on February 28, 2018.

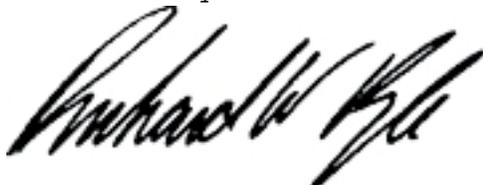
¹ "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency(IAEA), Vienna, Austria.

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

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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 November 07, 2012 petition by J.L. Shepherd & Associates, San Fernando, CA, and in consideration of other information on file in this Office.

Certified By:

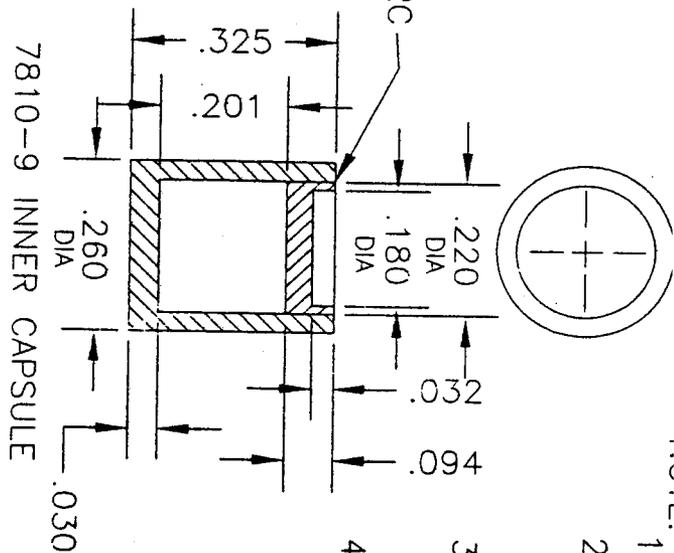
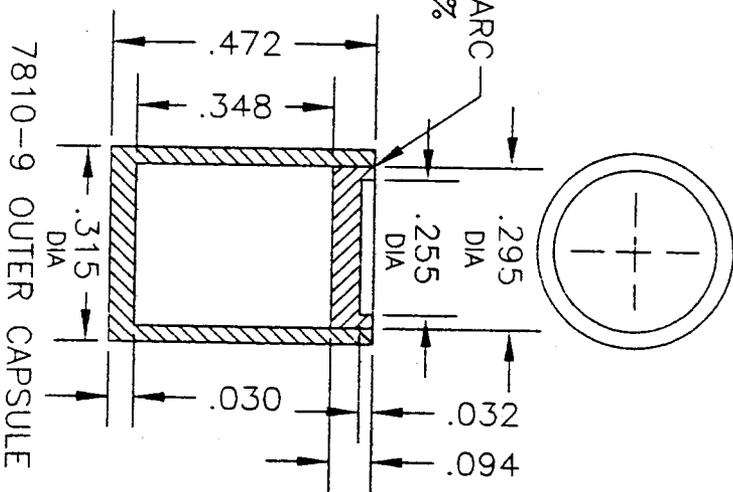
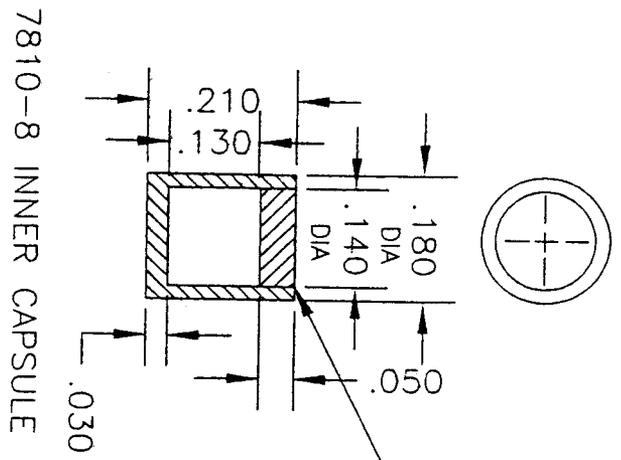
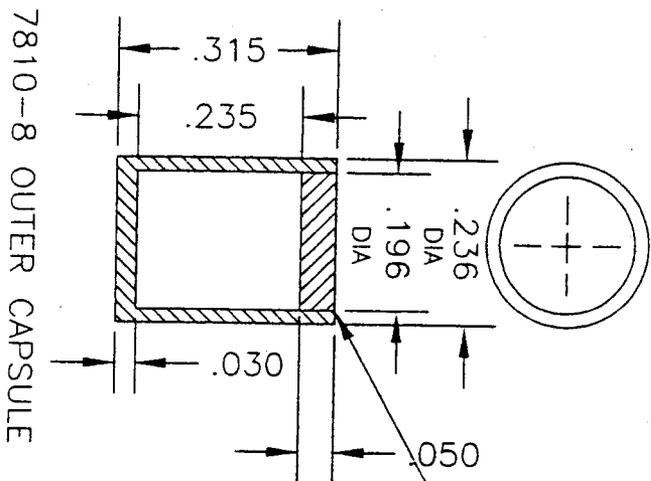


Feb 22 2013

(DATE)

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Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety

Revision 3 - Issued to extend the expiration date.



1. MATL = 304 STAINLESS STL.
2. END CAPS TO HAVE .006 REGISTER & .0005 INTERFERENCE FIT.
3. CAPSULES TO BE CERTIFIED "SPECIAL FORM".
4. REMOVEABLE CONTAMINATION $\leq 5 \times 10^{-5}$ M CI.

| | | | | | |
|--|-----------|--------------------------------------|-------|-----------|--------|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCE | | J. L. SHEPHERD <i>and Associates</i> | | | |
| DECIMALS | FRACTIONS | | | | |
| .X ± .030 | | | | | |
| .XX ± .010 | ± 1/16 | ± ∅ 30' | SIZE | MODEL | |
| .XXX ± .005 | | | A | | |
| DRAWN | DATE | SIZE | MODEL | DWG NO. | REV |
| D. TRAN | 10DEC97 | A | | A-0517-TC | |
| APPROVED | | SCALE | | SHEET | 1 OF 1 |
| | | NONE | | | |



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Hazardous Materials
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CERTIFICATE NUMBER: USA/0540/S-96, Revision 3

ORIGINAL REGISTRANT(S):

Ms. Mary Shepherd
Vice President
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USA