



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

COMPETENT AUTHORITY CERTIFICATION
FOR A NON-FISSILE OR FISSILE EXCEPTED
URANIUM HEXAFLUORIDE PACKAGE DESIGN
CERTIFICATE USA/0592/H(M)-96, REVISION 3

East Building, PHH-23
1200 New Jersey Ave.,
Washington, D.C. 20590

This certifies that the radioactive materials package design described below has been certified by the Competent Authority of the United States as meeting the regulatory requirements for a packaging for non-fissile or fissile excepted uranium hexafluoride as prescribed in the regulations of the International Atomic Energy Agency¹ and the United States of America².

1. Package Identification - Model 48X and 48Y cylinders.
2. Package Description - Cylinders must be designed, fabricated, inspected and marked in accordance with American National Standards Institute (ANSI) N14.1 standard in effect at the time of manufacture. Sample drawings of the cylinders are shown in Attachment 1.
3. Authorized Contents - The cylinders may contain solid (at 20°C), fissile excepted or non-fissile uranium hexafluoride up to 62% of their certified volumetric capacity or fissile excepted or non-fissile uranium hexafluoride residual (heels) quantities of not more than 22.7 Kg (50 lbs).
4. General Conditions -
 - a. Each user of this certificate must have in his possession a copy of this certificate and all documents necessary to properly prepare the package for transportation. The user shall prepare the package for shipment in accordance with the documentation and applicable regulations.
 - b. Each user of this certificate, other than the original petitioner, shall register his identity in writing to the Office of Hazardous Materials Safety, (PHH-20), Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, Washington D.C. 20590-0001.
 - c. This certificate does not relieve any consignor or carrier from compliance with any requirement of the Government of any country through or into which the package is to be transported.

¹ "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.


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

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- d. 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 and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.
 - e. Each user of this certificate must periodically inspect, test, mark, repair, and modify cylinders in accordance with the ANSI N14.1 standard in effect at the time of the action.
5. Special Transport Conditions -
- a. Cylinders must be handled and operated in accordance with the procedures and packaging criteria identified in United States Enrichment Corporation Report No. USEC-651 and the ANSI N14.1 standard in effect at the time of transport.
 - b. Cylinders containing greater than residual quantities of non-fissile or fissile excepted uranium hexafluoride must use the valve protector alternate described in ANSI N14.1-2012.
6. Marking and Labeling - The package shall bear the marking USA/0592/H(M)-96 in addition to other required markings and labeling.
7. Expiration Date - This certificate expires on May 31, 2021.

This certificate is issued in accordance with paragraph 805 of the IAEA Regulations and Section 173.420 of Title 49 of the Code of Federal Regulations, in response to the April 28, 2016 petition by Cameco Corporation of Port Hope, Ontario, Canada and in consideration of other information on file in this Office.

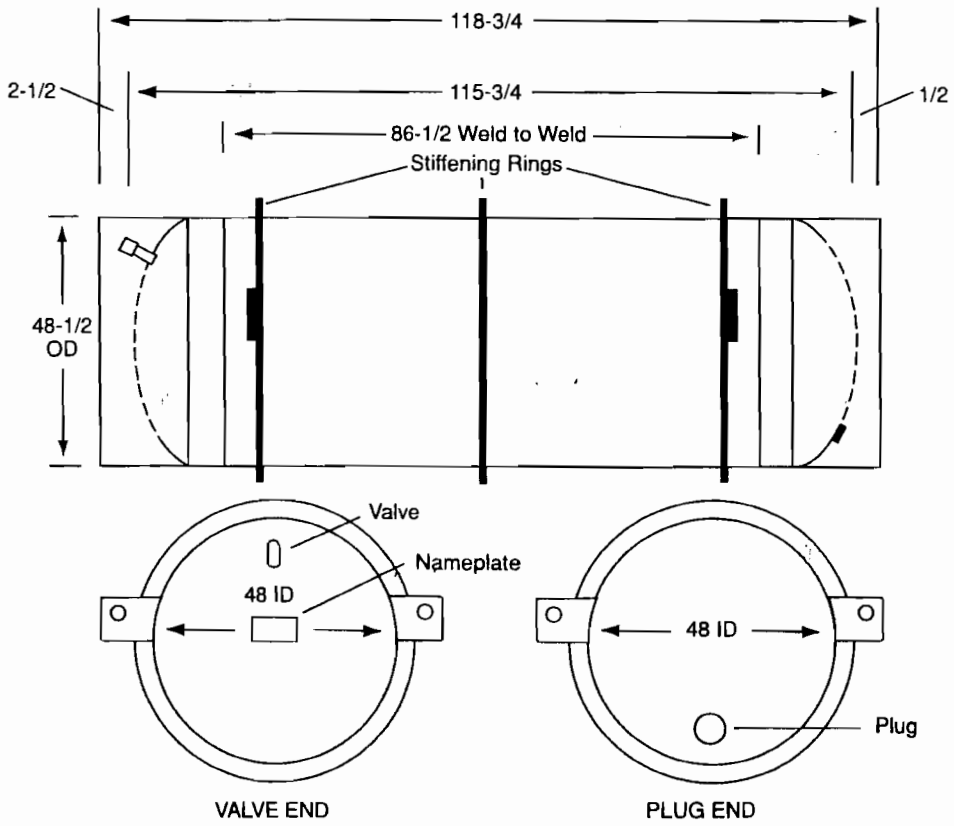
Certified by:


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

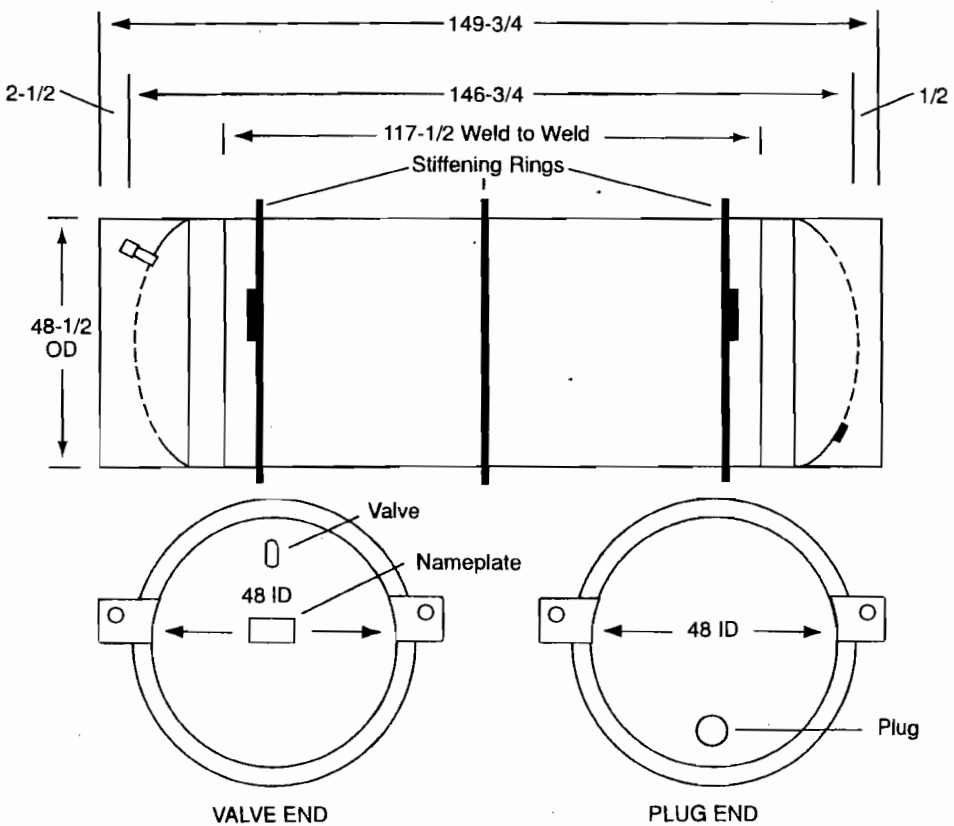
MAY 16 2016

(DATE)

Revision 3 - Issued to update condition 5.b and to extend the expiration date.



Schematic of Cylinder Model 48X



Schematic of Cylinder Model 48Y



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CERTIFICATE NUMBER: USA/0592/H(M)-96, Revision 3

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