



U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration

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

**COMPETENT AUTHORITY CERTIFICATION FOR A  
NON-FISSILE OR FISSILE EXCEPTED  
URANIUM HEXAFLUORIDE PACKAGE DESIGN  
CERTIFICATE USA/0575/H(U)-96, REVISION 5**

The Competent Authority of the United States certifies that the radioactive material package design described in this certificate satisfies the regulatory requirements for a Type H(U) package for non fissile or fissile excepted quantities of uranium hexafluoride as prescribed in the regulations of the International Atomic Energy Agency<sup>1</sup> and the United States of America<sup>2</sup> The package design is approved for use within the United States for import and export shipments made in accordance with applicable international and domestic transport regulations.

1. Package Identification - 2000 MED package.
2. Package Description - The 2000 MED package is constructed and assembled in accordance with the AREVA NC SA document, "2000 MED Package Safety Analysis Report Rev.1, May 2016". As shown in drawing no. 2000 MED SAR, Figure 1-1 (attached), the 2000 MED consists of two parts: an ANSI N14.1 certified 1S sampling cylinder which provides the containment boundary and an impact absorbing, thermal protecting overpack. The overpack portion of the package is constructed using a standard 10 gallon, open head, series 300 stainless steel drum whose lid is secured with a standard bolted clamping ring. The clamping ring and bolt may be stainless steel, or plated or painted carbon steel. The inner cavity and interior lid structure are constructed of a combination of stainless steel sheet and light duty pipe. The void space between the inner cavity and the drum is filled with a ceramic fiberboard which provides the required impact and thermal protection.

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<sup>1</sup> "Regulations for the Safe Transport of Radioactive Material, 2012 Edition, No. SSR-6" 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.

**CERTIFICATE USA/0575/H(U)-96, REVISION 5**

3. Authorized Contents - A 1S sampling cylinder that is designed, fabricated, inspected and marked in accordance with American National Standards Institute (ANSI) N14.1 standard in effect at the time of manufacture, containing up to 400 grams of uranium hexafluoride enriched to a maximum of five weight percent.

For shipments solely within the United States, contents must be non-fissile or meet one of the fissile material exceptions in the U.S. Code of Federal Regulations, Title 49 Section 173.453. For import, export or transit shipments involving the United States, contents must be non-fissile or meet one of the fissile material exceptions in paragraph 417 of the IAEA regulations<sup>1</sup>.

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 Engineering and Research, (PHH-23), 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.

d. Records of Management System activities required by Paragraph 306 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 in the United States exporting shipments under this certificate shall satisfy the applicable requirements of Subpart H of 10 CFR 71.

5. Special Conditions - The minimum wall thickness of the 1S cylinder is as specified in ANSI N14.1 in effect at time of manufacture or 0.100 inch, whichever is greater.

6. Marking and Labeling - The package shall bear the marking USA/0575/H(U)-96 in addition to other required markings and labeling.

**CERTIFICATE USA/0575/H(U)-96, REVISION 5**

7. Expiration Date - This certificate expires on April 30, 2026. Previous editions which have not reached their expiration date may continue to be used.

This certificate is issued in accordance with paragraph(s) 805 of the IAEA Regulations and Section 173.477 of Title 49 of the Code of Federal Regulations, in response to the February 1, 2021 petition by TN Americas LLC, Columbia, MD, and in consideration of other information on file in this Office.

Certified By:



April 14, 2021  
(DATE)

*WJS*  
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William Schoonover  
Associate Administrator for Hazardous  
Materials Safety

Revision 5 - Issued to extend the expiration date and to clarify requirements for contents to be considered fissile-excepted material.

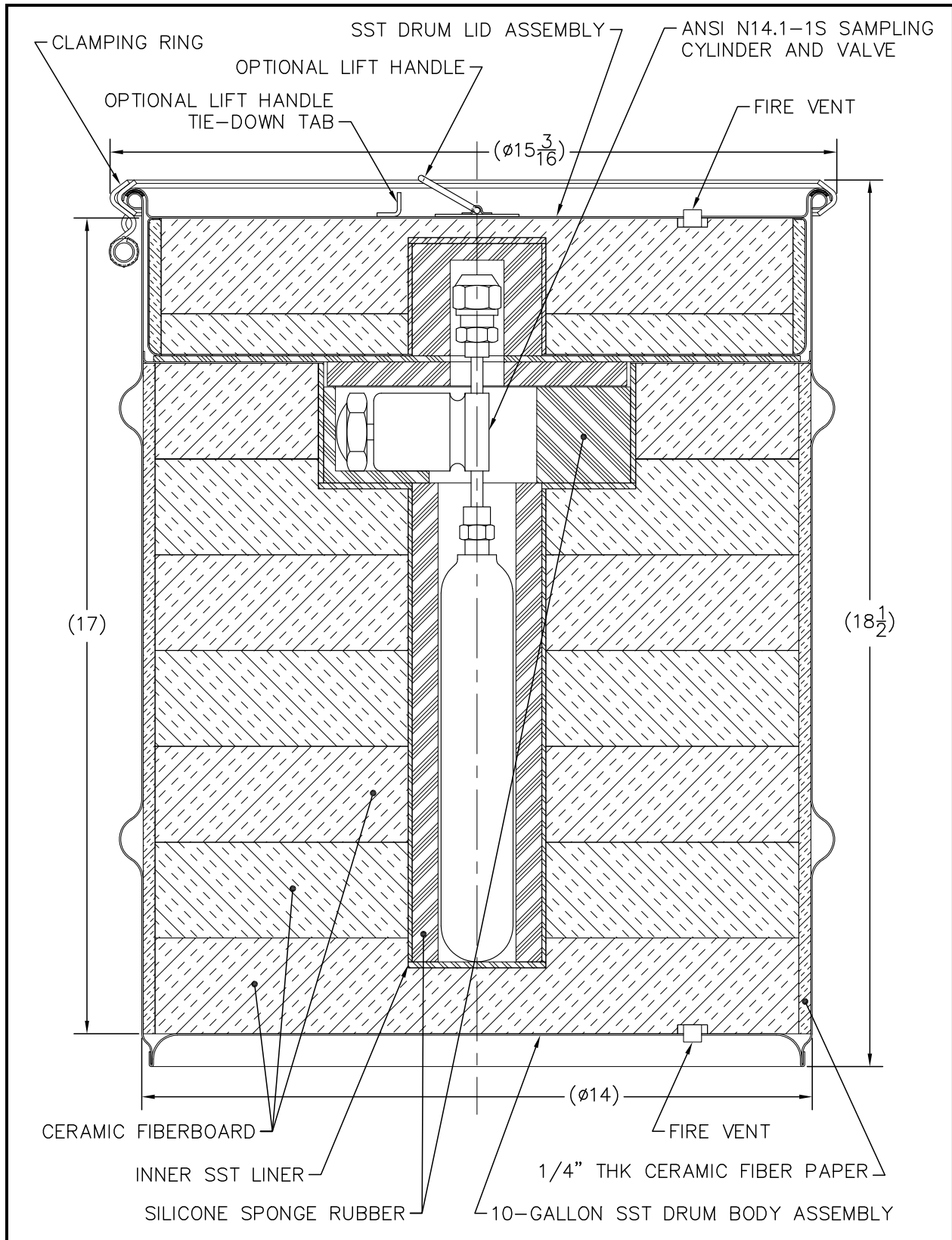


Figure 1-1 – 2000 MED Package Configuration



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**CERTIFICATE NUMBER:** USA/0575/H(U)-96

**ORIGINAL REGISTRANT(S) :**

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