

June 13, 2006



U.S. Department
of Transportation

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

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 14221

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: (See individual authorization letter)
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the one-time transportation in commerce of 48 inch cylinders containing either non-fissile uranium hexafluoride or heel quantities of fissile uranium hexafluoride from the East Tennessee Technology Park in Oak Ridge, TN to the United States Enrichment Corporation plant in Piketon, OH. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
 - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
 - c. Unless otherwise stated herein, this special permit consists of the special permit authorization letter issued to the grantee together with this document.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED:
 - a. 49 CFR § 173.417(a)(2) as it pertains to the maximum uranium-235 enrichment authorized to be transported within a 48 inch cylinder.
 - b. 49 CFR § 173.420(a)(2) as it pertains to the packagings being designed, fabricated, inspected and tested and marked in accordance with American National Standards Institute (ANSI) Standard N14.1 and Section VIII of the American Society of Mechanical Engineers (ASME) Code.

- c. 49 CFR § 173.420(a)(3) as it pertains to the cylinders ability to withstand the required pressure and drop tests.
- d. 49 CFR § 173.420(a)(5) as it pertains to fill limits for the cylinders.
- e. 49 CFR § 173.420(a)(6) as it pertains to the pressure within the package at 20° C (68° F) being less than 101.3 KPa (14.8 psig).
- f. 49 CFR § 173.420(b) as it pertains to each cylinder being periodically inspected, tested and marked and to otherwise conform to ANSI N14.1.
- g. 49 CFR § 173.420(c) as it pertains to repair of cylinders being performed in conformance with ANSI N14.1.
5. BASIS: This special permit is based on the applications of the Department of Energy dated June 7, 2005 and September 29, 2005 and additional technical information submitted by the Department of Energy on July 15, 2005. All documents were submitted in accordance with § 107.105 and the public proceeding thereon.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Radioactive material, uranium hexafluoride, fissile	7	UN 2977	N/A
Radioactive material, uranium hexafluoride non-fissile or fissile excepted	7	UN 2978	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING -

1. All cylinders transported under the terms of this special permit must be in compliance with the standards and conditions listed in DOE's June 7, and September 29, 2005 applications and additional test data. The

June 13, 2006

cylinders authorized for shipment by this permit must be model numbers 480; 480M; 480H; 80HI; 48G; 48T; 48A; or 48X.

2. All cylinders, except fissile "heel" cylinders which conform to the provisions of the 49 CFR except full ANSI or ASME markings, transported under this special permit must be overpacked within a Century Industries Model CI-48 overpack as described in DOE's special permit application.

3. Fissile shipments are limited to heel quantities of fissile uranium hexafluoride. For material with uranium 235 enrichments greater than 4.5 weight percent, the enrichment must not exceed 6.6 weight percent and the heel must not exceed 30 pounds. For material with uranium-235 enrichments of 4.5 weight percent or less, the maximum heel size is 225 pounds.

4. The criticality safety index for all fissile shipments must be 0.0.

5. The content of the cylinder may not exceed 70% of the total volume of the cylinder.

b. OPERATIONAL CONTROLS -

1. Cylinders transported under this special permit must be consigned as exclusive use shipments.

2. Prior to loading in the CI-48 overpack, each cylinder must be inspected by the shipper in accordance with the inspection plans referenced in the transport plan, BJC/OR-1431, Rev.1, dated May 2005, submitted as Attachment G of the original application.

c. MARKING - The package must be plainly and durably marked "DOT-SP 14221" in accordance with § 172.301(c).

8. SPECIAL PROVISIONS: A current copy of this special permit must be maintained at each facility where the package is offered for transportation.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each motor vehicle used to transport packages covered by this special permit.

June 13, 2006

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this exemption must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term 'exemption' to 'special permit' and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of

June 13, 2006

this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for Robert A. McGuire
Associate Administrator
for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.

Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at <http://hazmat.dot.gov/exemptions> Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: RB:dl