

April 26, 2006



U.S. Department  
of Transportation

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

**Pipeline and  
Hazardous Materials  
Safety Administration**

DOT-SP 9716  
(THIRTEENTH REVISION)

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: (See individual authorization letter)
2. PURPOSE AND LIMITATIONS:
  - a. This special permit authorizes the use of a FRP-1 type, non-DOT specification cylinder for the transportation in commerce of certain hazardous materials described in paragraph 6 subject to the limitations and special requirements specified herein. 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: 49 CFR § 173.302a(a)(1); §173.304a(a) and (d); § 175.3 in that a non-DOT specification cylinder is not authorized except as specified herein.
5. BASIS: This special permit is based on the application of the Department of Defense dated February 9, 2004, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Material Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Carbon Dioxide	2.2	UN1013	N/A
Compressed gas, oxidizing, n.o.s. (containing up to 39% by volume oxygen)	2.2	UN3156	N/A
Helium, compressed	2.2	UN1046	N/A
Hydrogen, compressed	2.1	UN1049	N/A
Methane, compressed or Natural gas, compressed ( <i>with high methane content</i> )	2.1	UN1971	N/A
Nitrogen, compressed	2.2	UN1066	N/A
Oxygen, compressed	2.2	UN1072	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packaging is a non-DOT specification fiber reinforced plastic (FRP) full wrapped (FC) composite cylinder made in accordance with Comdyne I, Inc.'s drawings 285-10000 dated August 15, 1986, 285-10010 dated June 6, 1986, 285 10000.AFA dated June 3, 1988, 285 10010.LFA dated June 6, 1988, 550 10000.AFA dated June 13, 1988, 550 10010.LF dated June 8, 1988, 45110000.AF dated May 20, 1992, and 45100001.LF dated April 27, 1992, on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA) and conforming with Basic Requirements for Fiber Reinforced Plastic Type 3FC Composite Cylinders (DOT FRP-1 Standard, (178.AA), Revision 2 dated February 15, 1987) except as follows:

§ 178.AA-5 Material.

(a) Aluminum liner must be 6061 and T6 temper. Cylinders constructed with aluminum liner 6351 before January 1, 1990, can remain in service if requalified in accordance with § 180.205.

\* \* \* \* \*

§ 178.AA-18 Design qualification tests.

(b) Applies, except that designs using 6061 with the same mechanical strength as 6351 liner previously qualified under this special permit may be qualified based on acceptable results of tests on the largest capacity (with the same diameter and service pressure rating) cylinder to represent tests for smaller sized cylinders (with the same diameter and service pressure rating). In this case, mechanical strength of 6061 alloy must be the same (within plus or minus 2-1/2 percent of mechanical properties of 6351 alloy used).

(c) Applies, except that designs using 6061 with the same mechanical strength as 6351 liner previously qualified under this special permit may be qualified based on acceptable results of tests on the largest capacity (with the same diameter and service pressure rating) cylinder to represent tests for smaller sized cylinders (with the same diameter and service pressure rating). In this case, mechanical strength of 6061 alloy must be the same (within plus or minus 2-1/2 percent of mechanical properties of 6351 alloy used).

(d) Not required for designs using 6061 T6 alloy with mechanical properties within plus or minus 2-1/2 of strength of 6351 alloy previously used.

b. Cylinders may not be used for underwater breathing purposes.

c. Cylinders used in oxygen service must conform with § 173.302a(a)(5)(i) through (a)(5)(iv).

d. Cylinders manufactured under this special permit are not authorized for use fifteen (15) years after the date of manufacture.

e. Each cylinder must be reinspected and hydrostatically retested every three years in accordance with § 180.205, as prescribed for DOT 3HT specification cylinders, except that the rejection elastic expansion does not apply and the permanent volumetric expansion may not exceed 5 percent of the total volumetric expansion at test pressure. Retest dates must be stamped on the exposed metallic surface of the cylinder neck or marked on a label securely affixed to the cylinder and overcoated with epoxy near the original test

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date. Reheat treatment or repair of rejected cylinders is not authorized. When a hydrostatic retest is repeated as provided for in § 180.205, only two such retests are permitted.

f. A cylinder that has been subjected to fire may not be returned to service.

g. Transportation of Division 2.1 (flammable gases) is not authorized aboard cargo vessel or aircraft unless specifically authorized in the Hazardous Materials Table (§ 172.101).

h. Transportation of oxygen is only authorized by aircraft when in accordance with § 172.102(c)(2) Special Provision A52 and § 175.85(h) and (i).

i. Cylinders must be packaged in accordance with the § 173.301(a)(9).

j. No person may perform inspection and testing of cylinders subject to this special permit unless that person (1) holds a current copy of this special permit at the location of such inspection and testing, and (2) complies with all the terms and conditions of this special permit. The marking of the retester's symbol on the cylinders certifies compliance with all of the terms and conditions of this special permit.

k. Filling requirements are subject to all terms contained in § 173.302a(a) for 3AL specification cylinders.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modification or change is made to the package or its contents and it is reoffered for transportation in conformance with this special permit and the HMR.

b. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

- c. The cylinders described in this special permit are authorized only for normal transportation as an article of commerce i.e., the movement of hazardous materials from cosignor to consignee.
- d. New construction of cylinders after June 30, 2000, is not authorized.
- e. Packagings permanently marked 'DOT-E 9716', prior to October 1, 2007, may continue to be used under this special permit for the remaining service life of the packaging or until the special permit is no longer valid. Packagings marked on or after October 1, 2007, must be marked 'SP 9716'.
- f. Shipping papers displaying 'DOT-E 9716' may continue to be used until October 1, 2007, provided the special permit remains valid.
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only, and passenger-carrying aircraft (See paragraph 7.g. and 7.h. for restrictions).
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel and aircraft used to transport packages covered by this special permit. The shipper must furnish a current copy of this special permit to the air carrier before or at the time the shipment is tendered.
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, Parts 171-180.
  - o Persons operating under the terms of this special permit 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.

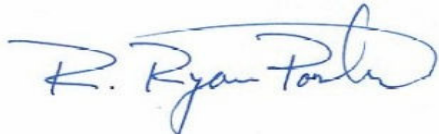
Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when the 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 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

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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 special permit may be obtained by accessing the Hazardous Materials Safety Homepage at [http://hazmat.dot.gov/sp\\_app/special\\_permits/spec\\_perm\\_index.htm](http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm) Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

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