

March 8, 2006



U.S. Department
of Transportation

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

**Pipeline and
Hazardous Materials
Safety Administration**

DOT-SP 9740
(FIFTH REVISION)

(FOR RENEWAL, SEE 49 § 107.109)

1. GRANTEE: (See individual authorization letter)
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of hydrostatically retested DOT (ICC) 3AA and 3AAX cylinders and certain non-DOT specification cylinders which are in partial conformance with DOT (ICC) 3AA and 3AAX specifications. 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 § 180.205, in that the prescribed cylinders may in lieu of five years alternatively be retested every ten years; § 173.302a(a) in that non-DOT specification cylinders are not authorized except as specified herein; and 173.302a(b), except as specified herein.
5. BASIS: This special permit is based on the application of NASA dated July 7, 2005, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

| Proper Shipping Name/ Hazardous Materials Description | Hazard Class/ Division | Identi- fication Number | Packing Group |
|--|------------------------------|-------------------------------|------------------|
| Air, compressed (Air must be manufactured by vaporization of 80:20 ratio liquid nitrogen to liquid oxygen) | 2.2 | UN1002 | N/A |
| Compressed gases, n.o.s. | 2.2 | UN1956 | N/A |
| Helium, compressed | 2.2 | UN1046 | 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 DOT (ICC) 3AA or 3AAX cylinder mounted on a tube trailer vehicle chassis or non-DOT specification cylinders that conform with DOT (ICC) 3AA or 3AAX specification except that the cylinders: are manufactured from AISI 4340 steel; exceed the maximum wall stress specified in § 178.37(f) while not exceeding 67 percent of the minimum tensile strength of the steel; and the threaded connections do not conform to the provisions specified in § 178.37(h) (3). Each cylinder must be retested and accepted in accordance with the test procedure specified in the application and as prescribed in this special permit, in place of that prescribed in § 180.205.

b. TESTING -

(1) Each cylinder must be hydrostatically tested and refurbished in accordance with Kennedy Space Center (KSC) Specification KSC-SO-S-9 entitled "Specification for the Remanufacture and Retesting of Compressed Gas Trailers" after 10 years or 400 cycles, whichever occurs first.

(2) The initial qualifying test and each subsequent retest must include the following steps as a minimum:

(i) Retest and refurbishment of compressed gas

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trailers in accordance with KSC
Specification KSC-SO-S-9;

- (ii) Leak test;
- (iii) Dew point certification of residual leak test gas (dew point must be -65°F or lower);
- (iv) Document test; and
- (v) Document chassis and trailer suitability.

(3) Cylinders that are used or that have been used for the transportation of hydrogen or hydrogen bearing gases are not authorized for the extended retest allowed under this special permit.

(4) Cylinders retested in accordance with paragraph 7 above may be charged to 110 percent of marked service pressure in accordance with § 173.302a(b).

c. OPERATIONAL CONTROLS -

(1) Preventative maintenance should be carried out on the trailer and cylinders in accordance with the "Compressed Gas Trailer and Movable Storage Unit Service Life Maintenance Plan (81K04817)" included in the petitioners application.

(2) The gas pressure in each cylinder must not drop below 200 psig at any time.

(3) At the time of each filling, the gas must be sampled to determine that the dew point of the gas is -65°F or lower.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this special permit, but 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 offered for transportation in conformance with this special permit and the HMR.

b. MARKING -

(1) The exterior of the trailer cabinet of the vehicle

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chassis to which the cylinders are affixed must be marked with letters at least 2 inches high on a contrasting background "DOT-SP 9740".

(2) An exterior tube on each side of a tube module must be marked with letters at least 2 inches high on a contrasting background "DOT-SP 9740".

(3) The current retest date must be marked on the rear bulkhead inside the trailer cabinet at approximately eye level above the withdrawal valve for tube trailers and on the bulkhead near the withdrawal valve for tube modules. In the event retest dates of cylinders differ in a trailer cluster, the retest date displayed will be that of the oldest retest date, meaning the date of the retest that must occur first.

c. Packages permanently marked 'DOT-E 9740', prior to October 1, 2007 may continue to be used under this special permit for the remaining service life the package or until the special permit is no longer valid. Packages marked after October 1, 2007 must be marked 'DOT-SP 9740'.

d. Shipping papers displaying 'DOT-E 9740' may continue to be used until October 1, 2007, provided the special permit remains valid.

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.
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 special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.

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- 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 B Immediate notice of certain hazardous materials incidents, and 171.16 B 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

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 Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: dl/kah