

April 23, 2014



U.S. Department
of Transportation

East Building, PHH-30
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 9985
(ELEVENTH REVISION)

EXPIRATION DATE: March 31, 2018

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Taylor-Wharton Gas Equipment
Theodore, Alabama
2. PURPOSE AND LIMITATIONS:
 - a. This special permit authorizes the manufacture, mark, sale and use of a DOT Specification 4L cylinder for the transportation in commerce of carbon dioxide, refrigerated liquid and provides for the filling and discharging of a DOT Specification 4L cylinder without removal from the vehicle. This special permit provides no relief from any Hazardous Materials Regulation (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
 - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 177.834(h) in that a DOT Specification 4L cylinder is unloaded while on a motor vehicle.
5. BASIS: This special permit is based on the application of Taylor-Wharton dated March 23, 2014, submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Carbon dioxide, refrigerated liquid	2.2	UN2187	n/a

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a vacuum insulated DOT Specification 4L (§ 178.57) welded cylinder having a service pressure of 292 psi securely attached in an upright position to a skid which is secured to a motor vehicle. The skid must be as described in Taylor-Wharton drawing numbers BC04-8C40, BC04-8C39, BC04-8C34, BC06-8C27, and B-BC06-9C00-A, on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA). The liquid cylinders are securely attached in an upright position to the skid by 5/16 diameter plated steel U bolts clamped to the cylinder halo right which is integrally welded to the cylinder. In addition:

1. Each cylinder must conform with Taylor-Wharton Gas Equipment drawings and related calculations for Models XL-45 HP and XL-50 HP submitted to and on file with OHMSPA.

2. Each cylinder must be protected with at least one safety relief valve and at least one frangible disc complying with §§ 173.301(f) and 173.304a(b)(2). The relieving capacity of the safety devices must be in accordance with CGA Pamphlet S-1.1 on a bare tank basis, or with the insulation space saturated with gaseous lading at atmospheric pressure.

b. OPERATIONAL CONTROLS -

1. The maximum allowable filling density must be as follows:

<u>Setting of Safety Relief Valve</u>	<u>Percent Filling Density</u>
350 psig	97.3

2. The temperature of the cargo at time of loading must not exceed 0EF. (291 psig) for carbon dioxide. Maximum travel time is not to exceed 120 hours.

3. Total delivery time during loading or unloading must not exceed one hour.

4. The skids must be secured to the motor vehicle in accordance with 49 CFR Parts 393.100 - 393.106.

5. The filling (or discharge) hose may be transported containing product subject to the following conditions:

(i) The hose is enclosed in a wire mesh housing that must provide protection to the hose in the event of collision or overturn of the vehicle. The housing must be locked during transportation.

(ii) The driver must have been instructed as to necessary safeguards and proper procedures for operating the system.

(iii) The hose is protected by a pressure relief valve set-to-discharge at 400 psig.

(iv) The burst pressure of the hose must be at least four times the service pressure.

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. 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 modifications or changes are made to the package and it is offered for transportation in conformance with this special permit and the HMR.

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- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Special Permits and Approvals for a specific manufacturing facility.
- e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.
- f. MARKING - Each cylinder must be plainly marked on both sides near the middle, in letters at least two inches high on a contrasting background "DOT-SP 9985".
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, 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.

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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 Dr. Magdy El-Sibaie
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.

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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