

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

Pipeline and Hazardous Materials Safety Administration

DOT-SP 12211 (EIGHTH REVISION)

(FOR RENEWAL, SEE 49 CFR 107.109)

- 1. GRANTEE: (See individual authorization letter)
- 2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of liquid nitrogen, cryogenic liquid, in non-DOT specification insulated portable tanks by cargo vessel for delivery to oil and gas production facilities within the jurisdiction of the United States of America. This special permit provides no relief from the Hazardous Materials Regulations (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.
 - 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 173.320(a) in that the packagings prescribed in this special permit are authorized for transportation by cargo vessel.
- 5. BASIS: This special permit is based on the Pipeline and Hazardous Materials Safety Administration's (PHMSA) editorial review under § 107.121 initiated on December 4, 2008.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Nitrogen, refrigerated liquid cryogenic liquid	2.2	UN1977	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING -

- (1) Packaging prescribed is a non-DOT specification insulated portable tank designed and constructed in accordance with the DOT specification MC-338 cargo tank motor vehicle, except as modified herein. The portable tank must meet all requirements of Section VIII Division 1 of the ASME Code. The portable tank must be enclosed in a frame capable of withstanding the combined forces expected to be encountered in transportation and handling caused by tank mountings, lifting attachments and tie downs. The maximum design pressure may not exceed 50 psig. The design temperature is -320° F. The maximum capacity may not exceed 2100 gallons.
- (2) The requirements of §§ 178.338-10, 178.338-13 and 178.338-18(b)(9) do not apply to tanks transported under this special permit.
- (3) Each tank must be protected by at least one pressure relief valve and at least one frangible disc arranged to discharge upward and unobstructed to the outside of the housing so as not to impinge against the tank itself, the cargo vessel or any other cargo. Alternatively, where the location of the discharge does not conform to the foregoing provision, suitable measures must be provided so that any release of lading from the road relief valve or any pressure relief device must be prevented from impinging on any part of the vessel.

b. <u>TESTING</u> - Each portable tank must be reinspected and retested once every five years in accordance with the procedure prescribed in § 180.605 for DOT Specification 51 portable tanks. Nitrogen may be used as a test medium in place of (air or hydrostatic) as required by § 180.605. The test pressure for the inner tank must be determined from the following formulas:

If there is no vacuum in the outer jacket during test: $P_T = 1.25 \times P_d$

If vacuum exists in the outer jacket during test:

 $P_T = [1.25 \times P_d] - 14.7$

Where:

 P_T = Test pressure, psiq

 P_d = Design pressure (the sum of the maximum allowable working pressure, Static head of liquid in inner tank, psi and 14.7 psi)

c. OPERATIONAL CONTROLS -

- (1) Each portable tank must be prepared and shipped as required in § 173.318, as applicable for the lading.
- (2) Shipments by cargo vessel must conform with § 176.76(g). The portable tank must not be overstowed with other containers or freight.
- (3) Any lading road relief valve set at a pressure lower than that prescribed for the (safety) pressure relief valve must be closed during transportation by cargo vessel.

8. SPECIAL PROVISIONS:

- a. Use of this special permit is limited to a portable tank, manufactured before February 1, 1999, used for transportation in support of oil and gas production facilities within the jurisdiction of the United States of America.
- b. Each tank need not be marked as required by § 178.338-18(a)(1) but instead be plainly and durably marked on both sides near the middle in letters and numbers at least two inches high on a contrasting background "DOT-SP 12211".

- c. A current copy of this special permit must be maintained at each facility where the package is loaded and offered for transportation.
- 9. MODES OF TRANSPORTATION AUTHORIZED: Cargo vessel (This special permit is not necessary for rail freight or motor vehicle transportation).
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel used to transport packages covered by this special permit.
- 11. <u>COMPLIANCE</u>: 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 <u>et</u> 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
 - 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 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.:

Diane Lavalle

for Theodore L. Willke 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: RT/am