

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

Pipeline and Hazardous Materials Safety Administration

# DOT-SP 8354 (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 certain Division 2.1 gases in non-DOT specification portable tanks. This special permit provides no relief from any Hazardous Materials Regulation (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 § 173.315, in that a non-DOT specification portable tank is not authorized, except as specified herein.
- 5. <u>BASIS</u>: This special permit is based on the application of Arbel-Fauvet-Rail dated February 16, 2004, 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
Butadienes, stabilized	2.1	UN1010	N/A
Butane <i>see also</i> Petroleum gases, liquefied	2.1	UN1011	N/A
Butylene <i>see also</i> Petroleum gases, liquefied	2.1	UN1012	N/A
Dimethylamines, anhydrous	2.1	UN1032	N/A
Ethyl Chloride	2.1	UN1037	N/A
Isobutane <i>see also</i> Petroleum gases, liquefied	2.1	UN1969	N/A
Isobutylene <i>see also</i> Petroleum gases, liquefied	2.1	UN1055	N/A
Methylamine, anhydrous	2.1	UN1061	N/A
Methyl Chloride <i>or</i> Refrigerant gas R 40	2.1	UN1063	N/A
Trimethylamine, Anhydrous	2.1	UN1083	N/A
Vinyl chloride, stabilized <i>or</i> Vinyl chloride, stabilized	2.1	UN1086	N/A

## 7. SAFETY CONTROL MEASURES:

- a. PACKAGING Packages prescribed are non-DOT specification portable tanks designed and constructed in accordance with Fauvet-Girel drawings Co-166177 and Co-166178, dated August 2, 1979, and general drawings Co-166168 and Co-166169 and calculations on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA), and in compliance with the following:
  - (1) Code Complies with ASME Section VIII Div. 1 but not certified, and IMCO Type V specification. Tank is enclosed in an ISO Type 1c frame.
  - (2) Insulation none.

- (3) Number of Compartments one.
- (4) Water Capacity (U.S. Gallons) 6,517
- (5) Material Carbon steel A52FP with 73,970 psi tensile strength and 22% elongation. Stress relieved after welding.

outside dia.) X (length) X (thickness)

- (6) Tank Size (inches) 94.5 235.625 0.402

  Head Thickness 0.449
- (7) Design Pressure (PSIG) 150.

  Note: Design pressure means "maximum allowable working pressure (MAWP)" as used in the ASME Code.
- (8) Test Pressure, Minimum (PSIG) 225.
- (9) Openings -- One 18 inch manhole, lower part of one head, 2 bottom discharge openings.
- (10) Tank surface area (square feet) 520.
- (11) Safety Relief Devices Each tank must be equipped with 2 spring loaded safety valves in series with and out board of one rupture disc all set to relieve at not less than design pressure and not more than 110 per cent of tank design pressure. Total venting capacity is 800,400 SCFH.
  - (i) Tanks constructed after December 31, 1980 must have all pressure relief devices sited on the top of the tank in a position as near the longitudinal and transverse center of the tank as possible. In no case must the device be sited more than 3.5 feet or 1/6 the tank length, whichever is less, from the transverse axis of the tank measured along the longitudinal axis and also within 12 degrees from the top of the tank. A drawing documenting this configuration must be on file with the OHMSPA prior to the first shipment.

- ii. Each safety relief device must be installed to have direct communication with the vapor space of the tank at the midlength of the top centerline.
- (12) G-Loadings: Vertical down 2; Vertical up 1; Longitudinal 2; and Transverse 1.
- (13) Maximum Gross Weight:
  - (i) 52,910 pounds for tank constructed to general dwg. 166168.
  - (ii) 55,000 pounds for tank constructed to general dwg. 166169.

#### b. TESTING -

- (1) Each tank must be (i) visually inspected prior to each trip to insure that it has not been damaged on the previous trip; (ii) visually inspected at least once every 2-1/2 years in accordance with the provisions of § 177.824(b); and (iii) pressure tested at least once every 5 years at one and one-half times the design pressure in accordance with the provisions of § 180.605 for DOT 51 specification portable tanks.
- (2) Hydrostatic test certificates for each tank must be maintained by the owner or manufacturer at its principal business office and be made available to any representatives of the DOT upon request.

#### c. OPERATIONAL CONTROLS -

- (1) Each portable tank must 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 8354".
- (2) The tank must be filled so as not to be liquid full at  $130^{\circ}F$ . In addition the filling density requirements of § 173.315 must be met.

## 8. <u>SPECIAL PROVISIONS</u>:

- 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 modifications or changes are made to the package 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. Transportation of Division 2.1 materials(flammable gases) are not authorized aboard cargo vessel unless specifically authorized on the Hazardous Materials Table (§ 172.101).
- d. Packagings permanently marked 'DOT-E 8354', 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 'DOT-SP 8354'.
- e. Shipping papers displaying 'DOT-E 8354' may continue to be used until October 1, 2007, provided the special permit remains valid.
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight and cargo vessel.

### 10. MODAL REQUIREMENTS:

- a. A current copy of this special permit must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this special permit.
- b. Portable tanks may not be transported in railer-on-flatcar (TOFC) service except under conditions approved by the Associate Administrator for Safety, Federal Railroad Administration (FRA). Portable tanks may be transported in container-on-flatcar (COFC) service only under the following conditions:

- (1) Portable tanks must be equipped to be securely attached to a railcar equipped with an ISO standard COFC basic pedestal system designed for container support and securement;
- (2) Each railcar used to transport portable tanks must be equipped with a cushioning system that meets the requirements of the Association of American Railroads Specification M-952-82; and
- (3) Shipments made under this special permit must be in accordance with § 174.84.
- 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.

January 18, 2006

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:

- a. The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this special permit.) In addition, the holder(s) of this special permit must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this special permit.
- b. The owner of the tanks covered by this special permit must provide to the OHMSPA a list of all shippers who have shipped under this special permit and a shipping experience report every six months from the effective date of this special permit. The shipping experience report must contain approximate number of shipments made during the previous six months and any difficulties encountered.
- c. The holder of this special permit, as identified in paragraph 1 above, must contact the OHMSPA immediately after any of the tanks covered by this special permit are sold to another party.

Issued in Washington, D.C.:

for Robert A. McGuire

R. Ryan Forla

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 <a href="http://hazmat.dot.gov/sp\_app/special\_permits/spec\_perm\_index.htm">http://hazmat.dot.gov/sp\_app/special\_permits/spec\_perm\_index.htm</a>
Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: sln