U.S. Department
of Transportation

**Pipeline and
Hazardous
Materials Safety
Administration**

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

SEP 30 2005

DOT-E 3216
(TWENTY-FIRST REVISION)

EXPIRATION DATE: June 30, 2007

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: E. I. DuPont de Nemours & Company, Inc.
Wilmington, Delaware

(See Appendix A to this document for a list of additional grantees)

2. PURPOSE AND LIMITATION:

a. This exemption authorizes the transportation in commerce of certain materials listed in paragraph 6 below, in non-DOT specification multi-unit tank car tanks, and provides no relief from any regulation other than as specifically stated herein.

b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.314 (c) and § 179.301 in that non-DOT specification multi-unit tank car tanks are not authorized except as specified herein.

5. BASIS: This exemption is based on E. I. DuPont de Nemours and Company, Inc.'s application dated August 31, 2005, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

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Hazardous Material Description			
Proper Shipping Name	**Hazard Class/ Division**	**Identi-fication Number**	**Packing Group**
1,1-Difluoroethylene *or* Refrigerant gas, R 1132a	2.1	UN1959	NA
Chlorotrifuloromethane and trifluoromethane azeotropic mixture *or* Refrigerant gas, R 503	2.2	UN2599	NA
Compressed gas, n.o.s. ("SUVA" 95 a mixture of two fluorinated hydrocarbons)	2.2	UN1956	NA
Compressed gas, n.o.s. (Mixture of 16% tetrafluoromethane and 84% trifluoromethane)	2.2	UN1956	NA
Compressed gas, flammable, n.o.s. (Mixture of 20% ethane and 80% bromotrifluoromethane)	2.1	UN1954	NA
Corrosive liquid, toxic, n.o.s. (Anhydrous hydrogen fluoride, Anhydrous hydrogen chloride)	8	UN2922	6.1
Hexafluoroethane compressed *or* Regrigerant gas, R 116	2.2	UN2193	NA
Liquefied gas, toxic, corrosive, n.o.s. (Sulfur hexafluoride, hydrogen fluoride)	2.3, 8	UN3308	Hazard Zone D
Tetrafluoromethane *or* Refrigerant gas, R 14	2.2	UN1982	NA
Trifluoromethane *or* Refrigerant gas, R 23	2.2	UN1984	NA
Vinyl fluoride, inhibited	2.1	UN1860	NA

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packagings prescribed are:

(1) DOT Specification 110A3000W multi-unit tank car tanks meeting the requirements described in AAR Docket Application 15286 dated November 8, 1961. Each tank must be fabricated from cross-rolled T-1 steel in compliance with details of Columbiana Boiler Company's drawings 71957-E on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA). New construction is not authorized. The gas pressure may not exceed 2,250 psia at 130°F.

(2) DOT Specification 110A2000W multi-unit tank car tanks conforming to Columbiana Boiler Company's drawing 102692 Revision 1 on file with OHMEA. Each tank must be fabricated from ASTM A 516 Grade 70 normalized steel. Each tank is equipped with six fusible plug/rupture disk safety relief devices conforming to either Superior Valve & Fitting Company's drawing 5396X3 or the Neriki Valve Company's drawing SP-11-001-1, both of which are on file with OHMEA. The gas pressure may not exceed 1,500 psia at 130°F.

b. TESTING - Each multi-unit tank car tank must be reinspected and retested as prescribed in § 180.509 for DOT Specification 110A1000W multi-unit tank car tanks, except test pressure is 3000 psig for the DOT 110A3000W tank and 2000 psig for the DOT 110A2000W tank.

c. OPERATIONAL CONTROLS

(1) Only trifluoromethane, hexafluoroethane, "SUVA" 95, chlorotrifluoromethane, chlorotrifluoromethane, trifluoromethane azeotropic mixture, and vinyl fluoride, inhibited are authorized in DOT 110A2000W multi-unit tank car tanks.

(2) Each multi-unit tank car tank must meet the outage requirements contained in § 173.24b(a)(1), except for 1,1-Difluoroethylene.

(3) The maximum filling density for each gas in DOT Specification 110A2000W and 110A3000W multi-unit tank car tanks is as follows:

HAZARDOUS MATERIAL	110A3000W TANKS	110A2000W TANKS
Chlorotrifluoromethane	100%	80%
Corrosive liquid, toxic, N.O.S. (Anhydrous hydrogen fluoride, Anhydrous hydrogen chloride)	117%	NA
Tetrafluoromethane	62%	NA
Trifluoromethane	87%	65%
Hexafluoroethane	128%	86.75%
Mixture of 16% tetrafluoromethane and 84% trifluoromethane	82%	NA
Chlorotrifluoromethane and trifluoromethane azeotropic mixture	96%	62%
"SUVA" 95	89%	67%
1,1-Difluoroethylene	73%	NA
Vinyl fluoride, inhibited	62%	51.5%
Liquefied gas, toxic, corrosive, n.o.s. (Sulfur hexafluoride, hydrogen fluoride)	NA	100%
Mixture of 20% ethane and 80% bromotrifluoromethane	88%	NA

(4) Used sulfur hexafluoride from electrical installation may only be transported in Specification 110A2000W multi-unit tank car tanks for reprocessing. Outage must be determined as specified in § 173.24b(a)(1).

8. SPECIAL PROVISIONS:

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

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

c. MARKING

(1) Each multi-unit tank car tank must be marked DOT-E 3216."

(2) Tanks specified herein marked "DOT SP 3216" prior to the issuance of this exemption may be transported under the terms of this exemption.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight and cargo vessel.

10. MODAL REQUIREMENTS:

a. A current copy of this exemption must be carried aboard each cargo vessel used to transport packages covered by this exemption.

b. For shipment by water, the multi-unit tank car tanks must be securely fastened in a freight container so as to prevent motion of the tanks in any direction.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- Persons operating under the terms of this exemption must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
- Registration required by § 107.601 et seq., when applicable.

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

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this exemption 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 exemption must notify the Associate Administrator for Hazardous Materials Safety -- OHMEA, in writing, of any incident involving a package, shipment or operation conducted under terms of this exemption.

Issued in Washington, D.C.

Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

SEP 3 0 2005
DATE

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 exemption may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/exemptions. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: AM

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The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with § 107.107 or § 107.109, as appropriate:

Company Name City/State	Application Date	Issue Date	Expiration Date
Linde Gas LLC Independence, OH	Jun 21, 2005	Jul 26, 2005	Jun 30, 2007
Solvay Fluorides, Inc. St. Louis, MO	Aug 30, 2005	SEP 3 0 2005	Jun 30, 2007

Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety