1. **GRANTEE:** (See individual authorization letter)

2. **PURPOSE AND LIMITATION:**

   a. This special permit authorizes the transportation in commerce of certain manifolded DOT specification cylinders containing Division 2.1 and 2.2 gases. 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 §§ 173.301(g), 173.302a(a)(1), 173.301a(a)(4) and 173.302(b) in that additional hazardous materials are not authorized in DOT specification cylinders, except as specified herein.

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.
### Hazardous Materials Description

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Hazard Class/Division</th>
<th>Identification Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argon, compressed</td>
<td>2.2</td>
<td>UN1006</td>
<td>N/A</td>
</tr>
<tr>
<td>Compressed gas, n.o.s. (contains chlorine)</td>
<td>2.2</td>
<td>UN1956</td>
<td>N/A</td>
</tr>
<tr>
<td>Deuterium, compressed</td>
<td>2.1</td>
<td>UN1957</td>
<td>N/A</td>
</tr>
<tr>
<td>Helium, compressed</td>
<td>2.2</td>
<td>UN1046</td>
<td>N/A</td>
</tr>
<tr>
<td>Hexafluoroethane or Refrigerant gas R116</td>
<td>2.2</td>
<td>UN2193</td>
<td>N/A</td>
</tr>
<tr>
<td>Krypton, compressed</td>
<td>2.2</td>
<td>UN1056</td>
<td>N/A</td>
</tr>
<tr>
<td>Mixtures of Argon, compressed; Krypton, compressed; Xenon; Helium, compressed; Nitrogen, compressed; Carbon dioxide; and Tetrafluoromethane; with not over 21 percent Oxygen/ Compressed or Liquefied gases, n.o.s.</td>
<td>2.2</td>
<td>UN1956</td>
<td>N/A</td>
</tr>
<tr>
<td>Mixtures of Silane; Argon, compressed; Xenon; Helium, compressed; Hydrogen, compressed; Nitrogen, compressed; Methane, compressed; Carbon dioxide; and Tetrafluoromethane/compressed or Liquefied gases, n.o.s. or Compressed or Liquefied gases, flammable, n.o.s., as applicable</td>
<td>2.1 or 2.2 as applicable</td>
<td>UN1956, UN1954, or UN3163</td>
<td>N/A</td>
</tr>
<tr>
<td>Nitrogen, compressed</td>
<td>2.2</td>
<td>UN1066</td>
<td>N/A</td>
</tr>
<tr>
<td>Nitrogen trifluoride</td>
<td>2.2</td>
<td>UN2451</td>
<td>N/A</td>
</tr>
<tr>
<td>Refrigerant gases, n.o.s. (contains R-22 and R-23 gas mixtures)</td>
<td>2.2</td>
<td>UN1078</td>
<td>N/A</td>
</tr>
</tbody>
</table>
7. SAFETY CONTROL MEASURES:

   a. PACKAGING - Packagings prescribed are DOT Specification 3A, 3AA, 3AX, 3AAX, 3T, or 3AL (§§ 178.36, 178.37, 178.45, 178.46) cylinders.

      (1) Manifolded DOT 3A, 3AA, 3AX, 3AAX, 3T, and 3AL specification cylinders must fully conform with § 173.301(g)(1)(i) when used to transport the Division 2.1 and Division 2.2 gases or gas mixtures described in paragraph 6.

      (2) Tetrafluoromethane and mixtures of tetrafluoromethane are not authorized in Specification DOT 3AL cylinders.

   b. TESTING - Cylinders must be retested and reinspected in accordance with the applicable requirements of § 180.205.

   c. MARKING - Each storage gas module with DOT 3AX, 3AAX or 3T cylinders must be marked "DOT-SP 8915" on both sides near the middle in letters and numerals at least 2 inches high on a contrasting background.

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Hazardous Materials Description

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Hazard Class/Division</th>
<th>Identification Number</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Silane</td>
<td>2.1</td>
<td>UN2203</td>
<td>N/A</td>
</tr>
<tr>
<td>Tetrafluoromethane or Refrigerant gas R14</td>
<td>2.2</td>
<td>UN1982</td>
<td>N/A</td>
</tr>
<tr>
<td>Trifluoromethane or Refrigerant gas R23</td>
<td>2.2</td>
<td>UN1984</td>
<td>N/A</td>
</tr>
<tr>
<td>Vinyl fluoride, stabilized</td>
<td>2.2</td>
<td>UN1860</td>
<td>N/A</td>
</tr>
<tr>
<td>Xenon</td>
<td>2.2</td>
<td>UN2036</td>
<td>N/A</td>
</tr>
</tbody>
</table>
8. **SPECIAL PROVISIONS:**

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.

9. **MODES OF TRANSPORTATION AUTHORIZED:** Motor vehicle, rail freight and cargo vessel (see restrictions in paragraphs 10.b. and 10.c.).

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. Division 2.1 gases shipped in DOT Specification 3AL cylinders are not authorized for transportation by vessel.

c. Transportation of Division 2.1 (flammable gases) in DOT Specification cylinders other than 3AL cylinders are not authorized aboard cargo vessels unless specifically authorized in the Hazardous Materials Table (§ 172.101).

d. Double stacking of these packagings is prohibited when transported via rail in container on flat car service.

e. Railcars containing these packagings must not be placed next to:

   (1) an occupied locomotive or caboose

   (2) an open top rail car when any of the lading in the open top car protrudes beyond the car end, or if the lading shifted would protrude beyond the car ends.

   (3) any transport vehicle or freight container having an operating internal combustion engine or an open flame device in operation.
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:

- All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.

- 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.

- Registration required by 107.601 et seq., when applicable.

Each AHazmat 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 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 explosion, fire or loss of a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

[Signature]

for Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety


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: MMT/dl