EXPIRATION DATE: August 31, 2006

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. **GRANTEE:** Air Products and Chemicals, Inc.
   Allentown, PA

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

2. **PURPOSE AND LIMITATIONS:**

   a. This exemption authorizes the use of a non-DOT specification full opening head, steel salvage cylinder as an overpack for the transportation in commerce of damaged or leaking cylinders containing gases and mixtures of gases of Division 2.1 with the exception of acetylene, dissolved, 2.2, and 2.3 hazard zones A, B, C, and D; Division 6.1; Class 8 and Class 3 materials authorized in DOT Specification cylinders, except DOT 8 and 8AL. This exemption provides no relief from the Hazardous Materials Regulations (HMR) 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 § 173.201, § 173.202, § 173.203, 173.301(f); § 173.302a(a)(1), § 173.304a(a)(2); § 180.209.

5. **BASIS:** This exemption is based on the application of Air Products and Chemicals, Inc. dated September 1, 2004, submitted in accordance with § 107.109.
6. **HAZARDOUS MATERIALS (49 CFR § 172.101):**

<table>
<thead>
<tr>
<th>Proper Shipping Name/ Hazardous Materials Description</th>
<th>Hazard Class/ Division</th>
<th>Identification Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Those flammable gases (except acetylene), nonflammable gases, toxic materials and flammable and corrosive liquids authorized in DOT Specification cylinders*</td>
<td>2.1, 2.2, 2.3, 3, 6.1, 8</td>
<td>as appropriate</td>
<td>as appropriate</td>
</tr>
</tbody>
</table>

* The specific chemical name or generic commodity description as appropriate.

7. **SAFETY CONTROL MEASURES:**

   a. **PACKAGING** - Prescribed packaging is a non-DOT specification full opening head, steel salvage cylinder of welded construction, with provisions for securely positioning the damaged cylinder contained within. The salvage cylinder must conform with the Chlorine Institute Inc. drawing number 188 dated 3-9-87 on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA); the cylinder must be designed, constructed and stamped in accordance with Section VIII of the ASME Code for a working pressure of 250 psig at 300°F and as follows:

   Design Service pressure (MAWP)... 250 psig at 70°F
   Test pressure.......................... 375 psig.
   Volume................................. 31 gallon water capacity (nominal).
   Material............................... ASTM A 283, A 53 Gr. B, or equivalent carbon steel.
   Outside diameter...................... 12 inches, nominal.
   Length................................. 64 inches, nominal.
   Sidewall thickness.................... 0.250 inch, nominal (.230 inch, min.)
   Openings - Sidewall.................. 3/4 inch threaded outlet inside a valve protective cap.
   Openings - head...................... Full opening head, hinged to cylinder sidewall.
   Pressure relief devices............. None.
   Welded attachments.................. 2-lifting rails, 2-supports.
b. TESTING - At least once every 2 years, each cylinder must be visually reinspected (internally and externally) and hydrostatically retested at 375 psig. The visual inspections must be performed in accordance with the Compressed Gas Association's pamphlet C-6.

c. MARKING -

(1) Each salvage cylinder must be plainly marked on the cylinder sidewall, 180 degrees apart, in letters at least 2 inches high on a contrasting background, "DOT-E 10987" and "SALVAGE CYLINDER".

(2) Each salvage cylinder must be labeled as prescribed in § 172.101 column (6) for the hazardous material shipped.

8. SPECIAL PROVISIONS:

a. Damaged cylinders containing liquefied gases with a vapor pressure exceeding 250 psig at 70°F are not authorized.

b. The non-liquefied gases in damaged cylinders to be transported must be limited in pressure and volume so that if totally discharged into the salvage cylinder the pressure at 70°F will not exceed 250 psig.

c. Shippers using the packaging covered by this exemption must comply with all provisions of this exemption, and all other applicable requirements contained in 49 CFR Parts 171-180.

d. Each salvage cylinder must be cleaned and purged after each use.

e. Salvage cylinders are authorized for overpacking leaking DOT Specification cylinders with the exception that no DOT Specification 8 and 8AL cylinders are authorized in the salvage cylinder.

f. Drivers and persons who load, unload or transport these salvage cylinders must have been trained in handling, loading and unloading the cylinder. The loaded salvage cylinder must be delivered to the consignor or consignee as soon as practicable.
9. **MODES OF TRANSPORTATION AUTHORIZED:** Motor vehicle.

10. **MODAL REQUIREMENTS:**

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

    b. Each salvage cylinder must be secured to the motor vehicle by a securement system that conforms with the requirements contained in § 393.100 through § 393.106.

    c. Transportation is limited to motor vehicles owned or leased by the holder of this exemption or owned or leased by contract carriers employed by the holder of this exemption.

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:

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

    o 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.

    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 exemption must receive training on the requirements and conditions of this exemption in addition to the training required by § 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:** 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 exemption.) In addition, the holder(s) of this exemption must also inform the AAHMS, in writing, as soon as practicable of any incidents involving the package and shipments made under this exemption.

Issued in Washington, D.C.:

Robert A. McGuire
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-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: 11n
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:

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Application Date</th>
<th>Issue Date</th>
<th>Expiration Date</th>
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</thead>
<tbody>
<tr>
<td>American Chemical &amp; Environmental, Inc.</td>
<td>Apr 23, 2004</td>
<td>May 14, 2004</td>
<td>Dec 31, 2004</td>
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<td>(dba AmeriChem)</td>
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<td>Chula Vista, CA</td>
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<tr>
<td>Linde Gas LLC</td>
<td>Apr 10, 2003</td>
<td>Apr 6, 2004</td>
<td>Dec 31, 2004</td>
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<td>Independence, OH</td>
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<td>(Former Grantee: AGA Gas, Inc./Linde Gas)</td>
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<td>Cheyenne, WY</td>
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<td>Malvern, PA</td>
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<td>Charlotte, NC</td>
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<td>Plumsteadville, PA</td>
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<tr>
<td>SET Environmental, Inc.</td>
<td>Feb 19, 2003</td>
<td>Feb 27, 2003</td>
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<td>Wheeling, IL</td>
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<td>Alexandria, VA</td>
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Robert A. McGuire  
Associate Administrator for Hazardous Materials Safety