DOT-E 7769
(SEVENTH REVISION)

EXPIRATION DATE: March 31, 2004

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. **GRANTEE**: Lincoln Composites
   (Former Grantee: Brunswick Corporation)
   Lincoln, NE

2. **PURPOSE AND LIMITATIONS**:  
   a. This exemption authorizes the manufacture, mark, sale
      and use of non-DOT specification fiber reinforced
      plastic (FRP) full composite cylinders. 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.


4. **REGULATIONS FROM WHICH EXEMPTED**: 49 CFR § 173.302(a)(1) and
   § 175.3 in that non-DOT specification cylinders are not
   authorized, except as specified herein.

5. **BASIS**: This exemption is based on the application of
   Lincoln Composites dated April 9, 2002, submitted in
   accordance with § 107.109.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<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>Air, compressed</td>
<td>2.2</td>
<td>UN1002</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>Nitrogen, compressed</td>
<td>2.2</td>
<td>UN1066</td>
<td>N/A</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>2.2</td>
<td>UN1013</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7. SAFETY CONTROL MEASURES:

Packaging prescribed is a non-DOT specification fiber reinforced plastic (FRP) full composite (FC) cylinder, in full compliance with Brunswick Corporation's specification contained in enclosures I thru VIII of the application on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA), and with DOT FRP-1 Standard (Revision 2) dated February 15, 1987 "Basic Requirements For Fiber Reinforced Plastic (FRP) Type 3FC Composite Cylinders" attached in Appendix A except as follows:

§ 178.AA-2 Type, size and service pressure. Type 3FC cylinder consisting of resin impregnated continuous filament windings in both longitudinal and circumferential directions over a seamless aluminum liner; not over 1200 cubic inches water capacity; and service pressure at least 900 PSI but not greater than 4,500 PSI.

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (h) of § 173.22a, persons may use the packaging authorized by this exemption for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this exemption.

b. A person who is not a holder of this exemption, but receives a package covered by this exemption, may reoffer it for transportation provided no modifications or changes are made to the package and it is offered for transportation in conformance with this exemption and the HMR.
c. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

d. Use of cylinders manufactured under this exemption is not authorized to exceed 15 years from the date of manufacture.

e. Use of these cylinders for underwater breathing is not authorized.

f. Cylinder must be packaged in accordance with § 173.301(k).

g. Each packaging manufactured under the authority of this exemption must be marked with a registration symbol designated by the Office of Hazardous Materials Exemptions and Approvals for a specific manufacturing facility in accordance with § 178.AA-15.

h. A current copy of this exemption must be maintained at each facility where the package is manufactured under this exemption. It must be made available to a DOT representative upon request.

i. Each cylinder must be reinspected and hydrostatically retested every three years in accordance with § 173.34(e) as prescribed for DOT 3MT cylinders, except that permanent volumetric expansion must not exceed 5 percent of total volumetric expansion at test pressure. Retest dates must be imbedded in the epoxy coating in a permanent manner other than stamping. Retest dates may be steel stamped on the outer exposed metallic surface of the cylinder neck as an alternate method. Reheat treatment or repair of rejected cylinders is not authorized.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only, and passenger-carrying aircraft.

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel and aircraft used to transport packages covered by this exemption. The shipper must furnish a copy of this exemption to the air carrier before or at the time the shipment is tendered.

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, Parts 171-180.

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

Each "Hazmat employee", as defined in § 171.6, 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 T. 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: AM