1. GRANTEE: Certified Cylinder, Crossville, Tennessee.

2. PURPOSE AND LIMITATIONS: This exemption authorizes the rebuilding and selling of DOT specification DOT 4B, 4BA, 4BW, and 4E cylinders in accordance with the procedures prescribed in this exemption for the transportation in commerce of hazardous materials authorized in paragraph 6. This exemption provides no relief from any regulation other than as specifically stated herein.


4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR Sections 172.203(a), 172.301(c), 173.34(l) subparagraphs 1, 2, and 3.

5. BASIS: This exemption is based on Certified Cylinder's application dated December 3, 1996 submitted in accordance with 49 CFR 107.109.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

<table>
<thead>
<tr>
<th>Hazardous materials description/proper shipping name</th>
<th>Hazard Class/Division</th>
<th>Identification Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous materials authorized to be shipped in DOT 4B, 4BA, 4BW, and 4E cylinders.</td>
<td>As appropriate</td>
<td>As appropriate</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7. PACKAGING(S) and SAFETY CONTROL MEASURES: This exemption authorizes the rebuilding and selling of DOT Specification 4B, 4BA, 4BW steel, and 4E aluminum cylinders in accordance with the following:

EXPIRED - NOT ACTIVE
a. Only cylinders originally manufactured to the above DOT specifications may be rebuilt and represented as DOT cylinders. Changes from one DOT specification to another are prohibited.

b. Rebuilding work must be performed in accordance with the Certified Cylinder, Inc. Quality Assurance Manual on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA), and in accordance with section 173.34(i).

c. Certified Cylinder, Inc. shall be considered a manufacturer subject to the requirements of Subpart C of Part 178.

d. After removal of a non-pressure component and before replacement of any non-pressure component, the cylinder must be visually inspected in accordance with CGA Pamphlet C-6. Rejected cylinders must be repaired as prescribed in 49 CFR 173.34(i) or (j), or be condemned.

e. Rebuilding of any cylinder involving a joint subject to internal pressure may only be performed by fusion welding. The rebuilder may rebuild a DOT cylinder having a water capacity of 20 pounds or greater by replacing a head of the cylinder using a circumferential joint. When this weld joint is located at other than an original welded joint a notation of this modification must be shown on the Manufacturer's Report of Rebuilding (See Appendix A). Weld joint must be on the cylindrical section of the cylinder.

f. Welding must be:

i. In accordance with the procedures and qualification requirements of CGA Pamphlet C-3.

ii. Performed using welding rod compatible with the material of the cylinder including any non-pressure component.

iii. Performed on an area free of any contaminant.

g. Any rebuilt cylinder must be:

i. Heat treated as required in the applicable cylinder specification in Part 178.

ii. Subjected to a full hydrostatic volumetric expansion test on each cylinder as specified in the applicable cylinder specification. The results of the test must conform with the applicable cylinder specification.
iii. Inspected and have test data reviewed to determine conformance with the applicable cylinder specification.

iv. Made of material in conformance with the applicable cylinder specification. Determination of conformance shall include chemical analysis, verification, inspection and tensile testing of the replaced part. Tensile tests must be performed by lots defined in the applicable specification.

8. SPECIAL PROVISIONS:

a. Offerors for transportation of the hazardous materials specified in this exemption may use the packaging described in this exemption for the transportation of such hazardous materials so long as no modifications or changes are made to the packages, and all terms of this exemption are complied with.

b. Each packaging rebuilt under the authority of this exemption must be either (1) marked with the name of the rebuilders and location (city and state) of the facility at which it is rebuilt or (2) marked with a registration symbol designated by the Office of Hazardous Materials Exemptions and Approvals for a specific rebuilding facility.

c. A copy of this exemption, in its current status, must be maintained at each rebuilding facility at which this packaging is rebuilt and must be made available to a DOT representative upon request.

d. 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.

e. A record of rebuilding must be completed for each cylinder rebuilt in the format presented in Appendix A.

f. A copy of the reports of rebuilding must be maintained by the rebuilding facility for 15 years.

g. The marking requirements of 49 CFR Sections 172.203(a) and 172.301(c) are waived.

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

10. MODAL REQUIREMENTS:

Modal-specific requirements are not required by 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 Federal hazardous materials transportation law 49 U.S.C. Section 5101 et seq:

   - All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, Parts 171-180.
   - Registration required by 49 CFR 107.601 et seq., when applicable.

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. (49 CFR 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 at Washington, D.C.

[Signature]
Alan J. Roberts
Associate Administrator
for Hazardous Materials Safety

JAN 14 1997
(DATE)

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.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

Dist: USCG, FHWA, FAA, FRA
APPENDIX A
Manufacturer's Report of Rebuilding

Cylinder Identification
Manufacturer ________________________________

Cylinder Specification Number and Service Pressure ________

Cylinder Serial Number ________________________________

Date of Original Manufacturer ___________________________

Other Identification Marks ______________________________

Rebuild Information

Chemical Analysis of Replacement Parts

Parts Being Replaced ________________________________

Heat Identification ________________________________

Steel Manufactured by ________________________________

Analysis Performed by ________________________________

C P S Si Mn Ni Cr Mo Cu Al Zr

Record of Physical Test of Replacement Parts

Yield Tensile Elongation in Reduction of Weld Weld
PSI PSI inches Area % Tensile bend

Record of Hydrostatic Test

Calculated Volumetric Capacity of Cylinder Being Rebuilt

Actual Test Total Permanent % of Total Volumetric
Pressure Expansion Expansion to Permanent Capacity

(Volumetric capacity of rebuilt cylinder must be + or - 3% of the calculated capacity).

I Certify that this rebuilt cylinder is accurately represented by the data above and that all provisions of DOT-E 9793 and other applicable regulations have been complied with.

Repair Technician __________________________ Date __________

Company Representative __________________________ Date __________