



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

SEP 28 2004

DOT-E 11592
(FOURTH REVISION)

EXPIRATION DATE: August 31, 2006

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Amtrol, Inc.
West Warwick, R.I.
2. PURPOSE AND LIMITATIONS:
 - a. This exemption authorizes the manufacture, marking, sale and use of a non-DOT specification steel water pump system tank that exceeds the prescribed maximum outside diameter and wall stress used for the transportation in commerce of compressed air or nitrogen. 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 § 173.306(g) in that the water pump system may not be charged to greater than 40 psig, except as specified herein; § 173.306(g)(1) in that the outside diameter of each water pump system may not exceed 24 inches, except as specified herein; and § 173.306(g)(3) in that the maximum wall stress at the prescribed pressure may not exceed 20,000 psi, except as specified herein.

5. BASIS: This exemption is based on the application of Amtrol Inc. dated April 14, 2004, submitted in accordance with § 107.105 and the public proceeding thereon and the application dated August 24, 2004, submitted in accordance with § 107.109.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Air, compressed	2.2	UN1002	N/A
Compressed gas, n.o.s. (air with up to 15% helium)	2.2	UN1956	N/A
Nitrogen, compressed	2.2	UN1066	N/A

7. SAFETY CONTROL MEASURES: PACKAGING - Packaging prescribed is a water pump system tank constructed of ASTM A620 low carbon, killed, deep-drawn steel as shown on AMTROL Inc. drawing nos. 147-144 Rev. B and 150-39 Rev. B; and § 173.306(g) except as follows:

(a) § 173.306(g)(1) - Applies except that the outside diameter may not exceed 26 inches.

(b) § 173.306(g)(3) - The stress at pressure must not exceed 25,000 psi using the formula:

$$S = Pd/2t$$

Where:

S = wall stress in pounds per square inch;
 P = prescribed pressure for the tank of at least 3 times charged pressure at 70°F or 100 psig, whichever is greater;
 d = inside diameter in inches;
 t = minimum wall thickness, in inches.

(c) § 173.306(g)(4) - The burst pressure must be at least 8 times the charge pressure at 70°F.

(d) § 173.306(g) - Applies except the compressed air may contain up to 15% compressed helium and the tank must not be charged to over 50 psig.

8. SPECIAL PROVISIONS:

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

e. 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.

f. MARKING - Packages are exempt from marking and labeling requirements except that the name of contents must be marked on the outside packaging. In addition, each packaging manufactured under the authority of this exemption must be plainly and durably marked "DOT-E 11592".

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9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, and cargo vessel.
10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel used to transport packages covered 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 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.

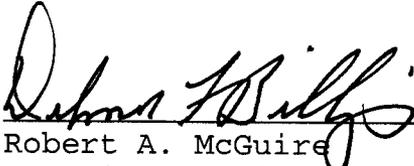
Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when this 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.

but


Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

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(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.

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: DBurger:DL