



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

APR 29 2004

DOT-E 12899
(SECOND REVISION)

EXPIRATION DATE: December 31, 2005

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Pencor Reservoir Fluid Specialists
Broussard, LA
2. PURPOSE AND LIMITATIONS:
 - a. This exemption authorizes the manufacture, mark, sale and use of a non-DOT specification cylinder conforming with all regulations applicable to a DOT Specification 3A cylinder, except as specified herein, for the transportation in commerce of the materials authorized by this exemption. 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. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not 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(c), 173.202(c), 173.203(c), 173.302a(a), 173.304a(a) and (d), and 175.3 in that a non-DOT specification cylinder is not authorized except as specified herein; and § 173.301(f) in that the cylinder is not equipped with a pressure relief device.

5. BASIS: This exemption is based on the application of Pencor Reservoir Fluid Specialists dated February 16, 2004, submitted in accordance with § 107.105 and the public proceeding thereon.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Compressed gas, flammable, n.o.s.	2.1	UN1954	N/A
Hydrocarbon gas mixture, compressed, n.o.s.	2.1	UN1964	N/A
Hydrocarbon gas mixture, liquefied, n.o.s.	2.1	UN1965	N/A
Liquefied gas, flammable, n.o.s.	2.1	UN3161	N/A
Natural gas, compressed	2.1	UN1971	N/A
Nitrogen compressed	2.2	UN1066	N/A
Petroleum crude oil	3	UN1267	I, II, or III
Petroleum gases, liquefied	2.1	UN1075	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packaging is a non-DOT specification oil well sampling cylinder, threaded at one end with a matching threaded end cap closure. The opposite end closure is machined as part of the cylinder body. Each cylinder must comply with the design calculations and with Pencor drawings 500P-03-01-01, 500P-03-04-01, and 550P-03-04-01-CC on file with the Office of Hazardous Materials Exemptions and Approvals. In addition, each cylinder must conform to the DOT 3A specification (§§ 178.35 and 178.36) except as follows:

§ 178.35(e) *Safety devices.*

No pressure relief device is required on the completed cylinder. The cylinder must be equipped with elastomeric seals that relieve pressure when subjected to a pool fire.

§ 178.35(f) *Marking.*

(1) * * *

(i) Each cylinder must be marked "DOT-E 12899" in lieu of "DOT-3A" followed by the service pressure.

* * *

§ 178.36(a) *Type, Size, and Service pressure.*

The cylinder body and components are machined from solid bar stock. The maximum volume may not exceed 1250 cc's. The maximum service pressure may not exceed 25,000 psig.

§ 178.36(b) *Steel.*

Material for the cylinder body and end cap must be AISI 630 17-4PH stainless steel double heat treated at 1150°F. The material must meet the specification of AMS 5643P. Material must meet the requirements of the National Association of Corrosion Engineers (NACE) Specification MR-01-75 for suitability in hydrogen sulfide (H₂S) service.

§ 178.36(f) *Wall thickness.*

The minimum wall thickness must be 0.975 inch. * *

§ 178.36(g) *Heat treatment.*

No heat treatment is required for the completed cylinder.

§ 178.36(j) *Flattening test.*

No flattening test is required.

§ 178.36(1) *Acceptable results for physical tests.*

Minimum Tensile strength:	135,000 psi
Minimum Yield strength:	105,000 psi
Elongation:	18% on a 4D 2 inch gage length specimen

b. TESTING - Each cylinder must be reinspected and hydrostatically retested in accordance with § 180.205 as prescribed for DOT 3A Specification cylinders. Reheat treatment or repair of rejected cylinders is not permitted.

c. OPERATIONAL CONTROLS -

(1) Each cylinder must be packed for shipment in accordance with 49 CFR 173.301(a)(9).

(2) Emergency response information provided with the shipment, and available via an emergency response telephone number, must indicate that the cylinders are not fitted with pressure relief devices and provide appropriate guidance in case the cylinders are exposed to fire.

8. SPECIAL PROVISIONS:

a. The cylinders are authorized for oil well sampling service only.

b. 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.

c. 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 modification or change is made to the package or its contents and it is offered for transportation in conformance with this exemption and the HMR.

d. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

e. 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.

f. 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.

g. Transportation of Division 2.1 materials (flammable gases) are not authorized aboard cargo vessel or aircraft unless specifically authorized in the Hazardous materials Table (§ 172.101).

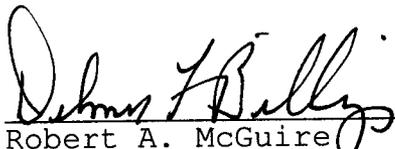
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, and cargo aircraft only.
10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel or aircraft used to transport packages covered by this exemption. The shipper must furnish a copy 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.:
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 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.

for 
Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

APR 29 2004

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: CWFreeman/alb