

East Building, PHH-30 1200 New Jersey Avenue S.E. Washington, D.C. 20590

### Pipeline and Hazardous Materials Safety Administration

DOT-SP 9295 (NINTH REVISION)

EXPIRATION DATE: January 31, 2019

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. <u>GRANTEE</u>: Applied Pressure Vessels, Inc. Santa Clarita, CA

#### 2. PURPOSE AND LIMITATIONS:

- a. This special permit authorizes the manufacture, mark, sale and use of a non-DOT specification toroidal pressure vessel conforming with all regulations applicable to a DOT 39 cylinder, except as specified herein, for the transportation in commerce of the materials authorized by this special permit. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
- b. The safety analyses performed in development of this special permit 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 § 173.302a(a)in that non-DOT specification cylinders are not authorized, except as specified herein.
- 5. <u>BASIS</u>: This special permit is based on the application of Applied Companies dated February 17, 2015, submitted in accordance with § 107.109.

# 6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Air, compressed	2.2	UN1002	N/A
Argon, compressed	2.2	UN1006	N/A
Helium, compressed	2.2	UN1046	N/A
Nitrogen, compressed	2.2	UN1066	N/A

## 7. SAFETY CONTROL MEASURES:

PACKAGING - Prescribed packaging is a non-DOT specification, non-reusable (non-refillable), welded pressure vessel made in accordance with Applied Environment Corporation's drawing 289-4 on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA) and DOT 39 Specification (§§ 178.35 and 178.65) except as follows:

§ 178.35(c) Duties of inspector.

(3) \* \* \*

(iii) Inspector must verify heat treatment prior to test.

§ 178.65(a) Type, size, service pressure and test pressure.

Toroidal in shape with a maximum cross-section outside diameter of 2 inches. Maximum volume must not exceed 35 cubic inches with a service pressure not to exceed 7900 psi and a maximum test pressure of 14,900 psig.

§ 178.65(b) *Material*.

Authorized material must be AISI 4130 steel conforming to the analysis shown in § 178.44(b).

§ 178.65(c) Manufacture.

- (1) \* \* \*
- (2) \* \* \*
  - (i) thru (v) Not applicable.
  - (vi) and (vii) \* \* \*

(viii) Each cylinder must be subjected to magnetic particle inspection and all welded joints subject to pressure must be subjected to 100% radiographic inspection.

- (3) \* \* \*
- § 178.65(d) Wall thickness.

The minimum wall thickness must be such that the wall stress at test pressure shall not exceed 110,000 psi nor the yield strength of the material of the finished cylinder wall.

- (1) \* \* \*
- (2) Does not apply.
- § 178.65(e) Openings and attachments.
  - (1) Openings must be located on the mean diameter of the torus and perpendicular to the cross section. Unless the torus has adequate thickness, the opening must be reinforced by a securely attached fitting, boss, pad or other suitable means.
  - (2) and (3). Not applicable.
  - (4) \* \* \*
- § 178.65(f) Pressure tests.
  - (1) \* \* \*
  - (2) \* \* \*
    - (i) Failure occurs at less than 19,900 psig.

(ii) thru (iv) \* \* \*

(c) \* \* \*

§ 178.65(g) Flattening test.

\* \* \*

- (1) thru (3) \* \* \*
- (4) Cylinder or test rings must not crack when flattened so that their outer surfaces are not more than 10 times the wall thickness apart.
- (5) \* \* \*
- § 178.65(i) Markings.

Applies except "DOT-SP 9295" must replace "DOT-39".

### 8. SPECIAL PROVISIONS:

- a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.
- b. A person who is not a holder of this special permit, but receives a package covered by this special permit, 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 special permit and the HMR.
- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- d. Each packaging manufactured under the authority of this special permit must be marked with a  $\frac{\text{registration symbol}}{\text{designated}}$  designated by the Office of Hazardous Materials Special Permits and Approvals  $\frac{\text{for a specific manufacturing facility}}{\text{constant of the manufacturing facility}}$ .

- e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo aircraft only.
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each aircraft used to transport packages covered by this special permit. The shipper shall furnish a current copy of this special permit to the air carrier before or at the time the shipment is tendered.
- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et seq</u>:
  - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
  - o Registration required by § 107.601  $\underline{\text{et seq.}}$ , when applicable.

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

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) - 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous

materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

Dune By

for Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at <a href="http://hazmat.dot.gov/sp\_app/special\_permits/spec\_perm\_index.htm">http://hazmat.dot.gov/sp\_app/special\_permits/spec\_perm\_index.htm</a>
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PO: BM/SG