September 23, 2020

U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety Administration**

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

DOT-SP 20831
(FIRST REVISION)

EXPIRATION DATE: 2024-08-31

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Cylinder Sales and Testing, LLC
Baltimore, MD

2. PURPOSE AND LIMITATION:

a. This special permit authorizes the transportation in commerce of certain hazardous materials in DOT Specification 3AL cylinders manufactured from aluminum alloy 6061-T6 that are requalified every ten years rather than every five years using 100% ultrasonic examination. This special permit provides no relief from the Hazardous Materials Regulation (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.

b. The safety analyses performed in the development of this special permit only considered the hazards and risks associated with the transportation in commerce.

c. No party status will be granted to this special permit.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 180.209(a) and part of § 180.209(b), in that DOT 3AL cylinders may be requalified every ten years and are not required to be hammer tested prior to each refill, and § 180.209(b)(1)(iv) in that ultrasonic examination is authorized in lieu of hydrostatic testing and visual inspection.

5. BASIS: This special permit is based on the application of Cylinder Sales and Testing, LLC dated September 17, 2020 submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	**Hazard Class/ Division**	**Identi-fication Number**	**Packing Group**
Non-corrosive liquefied or non-liquefied compressed gases, or mixtures of such compressed gases, classed as Division 2.1 (flammable gas) and Division 2.2, (non-flammable gas), which are authorized in the HMR for transportation in DOT 3AL cylinders	2.1 & 2.2	Various	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING: Packaging prescribed is a DOT specification 3AL cylinder made of aluminum alloy 6061-T6 that is subjected to the periodic retesting, re-inspection and marking prescribed in §§ 180.205, 180.209, and 180.213, except that:

(1) The requalification periodicity may increase from 5 to 10 years after each cylinder is requalified by 100% ultrasonic examination (UE) of the sidewall by an approved facility holding a valid UE special permit. The UE for 10-year requalification must use a referenced standard (calibration) that includes a flat bottom hole (FBH) with a diameter less than or equal to 1/8” and a depth less than or equal to 0.025”, respectively.

(2) After successful completion of requalification as described paragraph 7.a.(1) above, the cylinder must be marked in accordance with the applicable UE special permit, indicating UE as the method of requalification.

(i) To indicate the 10-year periodicity, each cylinder must be plainly marked "DOT-SP 20831" followed by "★" as specified in § 180.209(b)(1)(vi) indicating 10-year requalification period.

(ii) Cylinders with diameters less the 5.0" may be marked using a 1/8" high character or alternatively, a label bearing "DOT-SP 20831" followed by "★" may be affixed to the cylinder's sidewall near the shoulder region. Marking and/or labeling must be permanent and durable through each requalification period.

(3) The cylinder is not required to be hammer tested prior to each refill.

b. OPERATIONAL CONTROLS:

(1) Cylinders under this special permit must remain in dedicated service.

(2) Prior to each filling, the company filling the cylinder must ensure:

(i) Gas mixtures are chemically compatible with the cylinder material (aluminum alloy) and do not have an adverse effect on the cylinder's strength.

(ii) The quality of the gas and gas mixture meet all requirements of 180.209(b)(ii) and have a dew point below minus 52 °F at 1 atmosphere;

(3) Prior to each fill, the cylinder under this special permit must be externally inspected in accordance with CGA pamphlet C-6.1;

(4) Any cylinder exhibiting evidence of fire or excessive heat damage may not be retested under the terms of the special permit.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this special permit who receives a packaging covered by this special permit may reoffer it for transportation provided no modification or change is made to the packaging and it is reoffered for transportation in conformance with this special permit and the HMR.

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

c. The ultrasonic examination (UE) data, results, and additional technical information deemed pertinent in successful application of the UE must be recorded and kept at each facility for a minimum of 5 years after completion of UE. For any rejected cylinder, the defect causing the rejection must be fully characterized and profiled. That is, the specific type of defect should be identified (i.e. isolated pits, line corrosion or SBT crack) and the specific size of the defect should be determined (i.e. length, depth, width, diameter, area, etc.). The record includes cylinder type, size, minimum design wall thickness, age, etc. of the rejected cylinder.

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

e. Transportation of oxygen is only authorized by aircraft when in accordance with § 175.501.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo-only aircraft and passenger-carrying aircraft as currently authorized by the HMR for the hazardous materials being transported.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel, aircraft, and motor vehicle used to transport packages covered by this special permit. The shipper must furnish a copy of this special permit 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 special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

    - All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.

    - 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.

    - Registration required by § 107.601 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.:

for William Schoonover
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: BMoore/NICKS