

August 1, 2014



U.S. Department
of Transportation

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

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 15660
(FIRST REVISION)

EXPIRATION DATE: June 30, 2018

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Air Products and Chemicals, Inc.
Tamaqua, PA
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 using 100% ultrasonic examination every ten years rather than every five years. 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 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 § 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 Air Products and Chemicals, Inc. dated June 26, 2014, 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
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	As appropriate	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a DOT Specification 3AL cylinder that is subjected to periodic retesting, reinspection and marking, as prescribed in §§ 180.205, 180.209 and 180.213 except that:

- (1) The cylinder is not required to be hammer tested;
- (2) Each cylinder must be retested at least once every 10 years by utilizing the 100% ultrasonic examination (UE) of the sidewall as described in DOT-SP 15258 (Air Products and Chemicals) except that for all cylinders the flat bottom hole (FBH) used as referenced standard (calibration) must have a diameter and depth less than or equal to 1/8" and 0.025" respectively;
- (3) Each cylinder passing retests under the provisions of this special permit must be marked in accordance with DOT-SP 15258. Additionally, each cylinder must be plainly marked "DOT-SP 15660" followed by "*" as specified in § 180.209(b)(1)(vi). Cylinders whose outside diameter is less than 5.0" may be marked using a 1/8" high character or alternatively, a label bearing "DOT-SP 15660" followed by "*" may be

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affixed to the cylinder's side wall near the shoulder region. Marking and/or labeling must be permanent and durable through each requalification period.

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 cylinder material (aluminum alloy) and do not have an adverse effect on the cylinder's strength.
 - ii. Quality of the gas and gas mixture meet all requirements of § 180.209(b)(ii) and have 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 C6.1.
- (4) Any cylinder exhibiting evidence of fire or excessive heat damage may not be retested under the terms of this special permit.

8. SPECIAL PROVISIONS:

- a. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modification or change is made to the package 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

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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. Shippers (offerors) may use the cylinders specified and tested in accordance with the provisions of this special permit for the transportation in commerce of those hazardous materials specified herein, provided no modifications or changes are made to the cylinders. All terms of this special permit and other applicable requirements contained in 49 CFR Parts 100-185 must be met.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor Vehicle, Cargo aircraft, Cargo Vessel, Passenger-carrying aircraft, Rail Freight.
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel, aircraft, or 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:
 - 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 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 Dr. Magdy El-Sibaie
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.

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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