

Pipeline and Hazardous Materials Safety Administration 1200 New Jersey Avenue, SE Washington, DC 20590

DOT-SP 21764

# EXPIRATION DATE: 2027-03-31

## (FOR RENEWAL, SEE 49 CFR 107.109)

1. <u>GRANTEE</u>: NPROXX B.V. Heerlen, Netherlands

> US AGENT: Cummins, Inc. Columbus, IN

## 2. <u>PURPOSE AND LIMITATIONS</u>:

a. This special permit authorizes the manufacture, mark, sale, and use of a non-DOT specification fully wrapped fiber reinforced composite gas cylinder with a non-load sharing plastic liner. Except as specified, the cylinder is designed in accordance with the ISO 11515:2022 Standard for the transportation in commerce of the hazardous materials authorized herein. 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. 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.

c. In accordance with 49 CFR 107.107(a), party status may not be granted to a manufacturing special permit. These packagings may be used in accordance with 49 CFR 173.22a.

- 3. <u>REGULATORY SYSTEM AFFECTED</u>: 49 CFR Parts 106, 107 and 171-180.
- 4. <u>REGULATIONS FROM WHICH EXEMPTED</u>: 49 CFR § 173.302(a)(1) in that a non-DOT specification is authorized, as specified herein.

5. <u>BASIS</u>: This special permit is based on the application of NPROXX B.V. dated May 02, 2024, 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	Identi- fication Number	Packing Group
Argon, compressed	2.2	UN1006	N/A
Helium, compressed	2.2	UN1046	N/A
Hydrogen, compressed	2.1	UN1049	N/A
Methane, compressed <i>or</i> Natural gas, compressed ( <i>with high methane content</i> )	2.1	UN1971	N/A
Neon, compressed	2.2	UN1065	N/A
Nitrogen, compressed	2.2	UN1066	N/A

## 7. <u>SAFETY CONTROL MEASURES</u>:

a. <u>PACKAGING</u>: Packaging prescribed is a non-DOT specification fully wrapped carbon fiber reinforced composite cylinder (tube) with a non-load sharing plastic liner as described in NPROXX B.V. application on file with the Office of Hazardous Materials Safety (OHMS). The cylinder is designed and tested in accordance with ISO 11515: 2022 (Gas Cylinders – Refillable composite reinforced tubes of water capacity between 450 L and 3,000 L – Design, construction and testing) for type IV composite cylinder, except as follows:

(1) § 1 Scope: Cylinders manufactured under this special permit are limited to a maximum water capacity of 1,510 Liters and a maximum working pressure of 637 bar (9,239 psi).

(2) § 8.1 Type approval procedure, General requirements:

(i) A DOT Independent Inspection Agency (IIA), approved in writing by the Associate Administrator for Hazardous Materials Safety (AAHMS), must, in accordance with 49 CFR Part 107, Subpart I, review the results of the design qualification testing that was submitted in the application for special permit. The IIA must either verify that the cylinder design meets the requirements of the special permit based on the test results and other documentation submitted in the application for special permit, or the IIA may require additional testing and/or information from the manufacturer to verify the cylinder design meets all requirements of the special permit. Prior to cylinder production, the IIA's verification of the cylinder design must be submitted to and acknowledged in writing by the OHMS.

(ii) Prior to marking any cylinder under this special permit, an IIA, approved in writing by the AAHMS, must provide inspections and verifications of all batch testing and all new design qualification testing in accordance with the requirements of this special permit.

(3) § 8.5 Type approval test procedures and criteria:

(i) § 8.5.2.1 Hydraulic proof pressure test, Procedure: The test pressure shall be held for at least 30 seconds at a minimum pressure of 810 bar with the tube isolated from the pressure source, during which time there shall be no decrease in the recorded pressure or evidence of any leakage.

(ii) § 8.5.4 Liner burst test is not required for Type 4 cylinders.

(iii) § 8.5. 5.2.2 Tube burst test, Criteria: The burst pressure,  $p_b$ , or pressure at failure shall not be less than 1.6 times the test pressure,  $p_h$ , of the composite cylinder.

(iv) § 8.5.6 Ambient cycle test: The cylinders must be cycled from a maximum of 30 bar to the maximum developed pressure at 65 °C,  $p_{max}$ . Cylinders shall undergo a minimum of 10,000 pressure cycles, N<sub>d</sub>, without failure by burst or leakage. The test must continue to 20,000 pressure cycles 2N<sub>d</sub>, or until the tube fails by leakage, whichever is sooner, without failure by burst.

(v) § 8.5.7 Environment cycle test: The cylinder must be tested as specified in the Standard.

(vi) § 8.5.8 Flaw test: The cylinder must be tested as specified in the Standard.

(vii) § 8.5.9 Blunt impact test: The cylinder shall be subjected to two impacts. The first impact shall be delivered to the cylinder sidewall, midway between the ends, with a minimum energy of 1,200 Joules; the second at an angle of  $45^{\circ}$  in order to strike the shoulder of the cylinder (mid-arc length at the dome) with a minimum energy of 1,200 Joules. The cylinder shall then be subjected to the Ambient cycle test (§ 8.5.6) for 3,000 cycles at the maximum developed pressure,  $p_{max}$ , without failure by burst or leakage. The test must then continue to 18,000 cycles, or until the tube fails by leakage, whichever is sooner. In either case, the tube shall be deemed to have passed the test. However, if failure during this second part of the test is by burst, then the tube shall have failed the test. If the tube does not pass the test, a second cylinder shall be tested at an energy level of 488 Joules as specified in the Standard.

(viii) § 8.5.10 Fire Resistance Test: One cylinder shall be charged with air, nitrogen, or hydrogen to the working pressure. The cylinder must be tested as specified in the procedure in §8.5.10.2.2 of the Standard. The cylinder shall not rupture for a minimum of 5 minutes from the start of the fire.

(ix) § 8.5.11 Neck Strength Test: The cylinder must be tested as specified in the Standard.

(x) § 8.5.12.3 Leak test, Criteria: The cylinder must be tested as specified in the Standard except that Hydrogen leakages greater than 5 x  $10^{-5}$  mbar·l/s (95% N<sub>2</sub>, 5% H<sub>2</sub>) shall constitute a failure of the test.

(xi) § 8.5.13 Accelerated stress rupture test: The accelerated stress rupture test is not required.

(xii) § 8.5.14.2 Permeability Test, Procedure: The test shall be performed with hydrogen, or, alternatively, with helium or helium mixtures in inert gases. One finished cylinder shall be filled with the test gas to the working pressure,  $p_w$ . The valve and junctions of the thermoplastic liner or composite with the metallic bosses or rings shall then be visually checked for leaks (e.g., with soapy water) and any leaks shall be eliminated. The cylinder shall then be subjected to 1,000 hydraulic pressure cycles from a lower cyclic pressure of less than 10% of the working pressure to an upper cyclic pressure of 2/3 of maximum developed pressure at 65°C  $p_{max}$ . After cycling, 0the cylinder shall be filled with the test gas to the working pressure,  $p_w$ , at 15°C and placed in an enclosed, sealed chamber until a steady-state permeation value is reached over a minimum test duration of 50 hours. The permeation flow rate shall be monitored with an appropriate method like gas sensor or mass spectrometry. The calibration method shall be described in the test report. The test is not required to exceed 500 hours.

(xiii) § 8.5.14.3 Permeability Test, Criteria: The steady state permeation rate must be less than 6.0 normal milliliters of hydrogen per hour per Liter (mL/hr/L).

(xiv) § 8.5.15.2 Gas Cycle Test, Procedure: The cylinder shall be filled with the test gas to the working pressure in steps of 100 bar (10MPa). At each pressure step the container shall be checked for leaks using a portable hydrogen meter and leak detection solution. Following the leak check the cylinder shall be defueled in preparation for gas cycling. The cylinder shall then be subjected to 30 ambient temperature gas cycles from a lower cyclic pressure of 12 bar (1.2MPa) to an upper cyclic pressure of 540 bar (54MPa). Each cycle consists of a 20-hour hold time at 540 bar after which the cylinder is depressurized to 12 bar and the cylinder is allowed to stabilize at room temperature for a period of 4 hours.

(xv) § 8.5.16 Coatings Test: Not required.

(xvi) § 8.5.17 Salt Spray Test: Not required.

(xvii) § 8.5.18 Acid Environment Test: Not required.

(xviii) § 8.5.19 Vacuum Test: When this test is not carried out, a warning shall be permanently marked on the cylinder label to indicate that use under a vacuum is not permitted.

(xix) § 8.5.20 High Velocity Impact Test: The cylinder must be tested as specified in the Standard.

(xx) § 8.5.21 Glass Transition Temperature Test: The cylinder must be tested as specified in the Standard.

(xxi) § 8.5.22 Resin Shear Strength Test: The cylinder must be tested as specified in the Standard.

(4) § 9 Inspection and testing at time of manufacture

(i) 9.3.2 Liners for Type 4 tubes, Boss: The supplier's certification of the metal boss properties may serve as verification of compliance with the design specifications.

(ii) § 9.3.3 Liners for Type 4 tubes, Liner: The supplier's certification

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of the liner properties may serve as verification of compliance with the design specifications.

(iii) 9.5.1 Overwrap materials: The supplier's certification of the fiber and resin matrix properties may serve as verification of compliance with the ISO 11515 Standard.

(iv) § 9.6.6 Batch cycle testing, Procedure: One full scale cylinder for every five batches shall be subject to the ambient cycle test (§8.5.6). The pressure in the cylinder shall be cycled, from not more than 10% of the working pressure,  $p_w$ , to no less than 125% of the working pressure,  $p_w$ , at a rate not to exceed 6 cycles/min. The cylinder shall withstand 750 cycles times the specified service life (in years) without leakage or rupture.

(v) § 9.6.7 Batch burst testing, Criteria: One cylinder per batch shall be subject to a burst test in accordance with §8.5.5. The burst test may be conducted on the first unit of the batch. After reaching the minimum required burst pressure, and holding for 5 seconds, the cylinder shall have passed the test.

(5) § 10 Tube marking: marking must contain the following:

(i) The DOT special permit number followed by working pressure expressed in bar (psig). The marking may be on a label permanently attached to the outside of the cylinder.

(ii) A serial number and the manufacturer's identification number or a symbol as obtained from the AAHMS, located just below or immediately following the DOT marking. The serial number and the manufacturer's identification number may be placed on the boss provided the markings are accessible for inspection.

(iii) The DOT IIA official mark must be placed near the serial number. The marking must contain date the (month and year) of the initial hydraulic proof pressure test for that cylinder.

(iv) The size of the letters and numbers used must be at least 0.64 cm (1/4 inch) high if space permits.

(v) The following are examples of an authorized format for marking:

DOT-SP AAAAA-YYYY, (Where AAAAA is the special permit number and YYYY is the working pressure)

CCCC MMI, (Where CCCC is the serial number and MMI is the manufacturer's mark or symbol)

DDD - MM/YY, (Where DDD is the inspector's mark and MM/YY is the month and year of the hydraulic proof pressure test).

(vi) Additional marking, are permitted, provided the additional markings do not obscure the required markings and are not detrimental to the integrity of the cylinder. Provisions for marking of the required requalification dates and RIN information must be made near the cylinder markings.

#### b. ADDITIONAL REQUIREMENTS FOR EACH NEW DESIGN:

(1) Fire Protection System: The cylinder/tube assembly must be equipped with a Fire Protection System (FPS) that meets the following criteria:

(i) <u>NPROXX B.V.</u> must submit the FPS design to OHMS and receive acknowledgement in writing prior to first use.

(ii) The FPS, which includes sensors, Pressure Relief Device (PRD) and pneumatic piping along the length of each tube, shall respond to a local or engulfed fire by releasing the internal pressure of each tube prior to the rupture of any tube in the assembly. The FPS vent lines shall direct the released gas upwards and outside of the frame system.

(iii) If the packaging is not equipped with an FPS, then one of the tubes must be subjected to the Fire resistance test in accordance with the ISO 11515:2022 Standard and withstand an engulfed fire for a minimum duration of 20 minutes without rupturing as described in NPROXX B.V.'s Fire resistance test report on file with OHMS. The test results must be submitted and acknowledged in writing by OHMS prior to first use.

(iv) NPROXX B.V. must provide a detailed manual for the usage, inspection, and maintenance of components of the cylinder/tube assembly. The manual must include a Standard Operating Procedure (SOP) for each component of the assembly such as valves, fittings, Pressure Relief Devices (PRD) or Fire Protection System (FPS), piping, venting devices and other equipment used during charging and discharging of gases. All changes to the SOP must be clearly identified and recorded. The revised SOP, including the record of specific changes, must be submitted to OHMS before deployment of the first production unit.

c. <u>REQUALIFICATION</u>: Each cylinder must be requalified once every 5 years by using one of the two methods described in this special permit. The Facility that performs requalification of these composite cylinders (tubes) must be a RIN holder for requalification of this type of composite cylinder (tubes) as described in § 180.205(b) or

have this type of composite cylinders/tubes using Modal Acoustic Emission (MAE) testing.

(1) **Method 1: Hydraulic Proof Pressure Testing and Visual Inspections.** The requalification facility seeking RIN for Hydraulic Proof Pressure Testing and Visual Inspections must meet and prove the following requirements:

(i) Knowledge, documentation, equipment, and instrumentation for performing the external and internal visual inspection of cylinders manufactured in accordance with the provisions of DOT-SP 21764;

(ii) Knowledge, documentation, and equipment for performing the proof-pressure testing of cylinders manufactured in accordance with the provisions of DOT-SP 21764;

(iii) Adequate facilities, handling equipment, and skills to ensure cylinders manufactured in accordance with the provisions of DOT-SP 21764 will not be subject to impact or other damage during disassembling and reassembling;

(iv) Acknowledgment that the requalifier understands the specific operational controls of paragraph 7.d.(4) of DOT-SP 21935 that states the cylinder must be rejected if it drops from a height greater than 2 feet during the manufacturing and/or prior to being mounted into the framing;

(v) Availability to document that during the requalification process, the structural integrity of frame design is not compromised and remains the equal to or greater than the requirements specified in paragraph 7.d.(3) of DOT-SP 21764;

(vi) Visual Inspections: The external and internal visual inspection must be in accordance with CGA pamphlet C-6.2; and

(vii) Hydraulic proof pressure test as described in CGA Pamphlet C.1 which the test pressure is equal to 1.5 times the marked working pressure and hold the pressure for a minimum of 3 minutes without a loss of pressure. The testing facility for proof pressure test must be equipped with protection system (e.g., water jacket well or concrete barrier) to avoid injury during requalification process.

(2) Method 2: Modal Acoustic Emission (MAE) Testing and External Visual Inspection. Each organization seeking a RIN for requalification for performing MAE and external Visual Inspection must meet and prove the following requirements:

(i) Holder of a special permit in performing MAE testing on composite cylinders (tubes).

(ii) MAE testing must be in accordance with the **Modal Acoustic Emission (MAE) Examination Procedure for Requalification of Composite Overwrapped Pressure Vessels (Cylinders and tubes) posted on PHMSA website**, <u>https://www.phmsa.dot.gov/technical-resources/hazmat-technical-resources/technical-reports.</u>

(iii) External visual inspection must be in accordance with CGA pamphlet C-6.2.

(iv) **Tubes with severe impact damage from rollover accident:** For tubes that were subjected to severe impact damage from an event such as tube trailer collision or rollover accident, the pressurization of the MAE testing must be by hydraulic medium (e.g., water) rather than gaseous medium.

(3) Requalification Marking: Date (month/year) must be permanently marked on the cylinder as specified in paragraph § 180.213. The marking of the RIN symbol on the cylinder certifies compliance with all the terms and conditions of this special permit.

## d. <u>OPERATIONAL CONTROLS</u>:

(1) Cylinders manufactured under this special permit are not authorized for use 15 years from the date of manufacture, except as specified under paragraph 8.a. of this special permit.

(2) A cylinder that has been subjected to fire may not be returned to service.

(3) Manifolding of cylinders must be in accordance with the requirements of § 173.301(g).

(4) Cylinder (tube) handling: The cylinder/tube must be rejected if it drops from a height greater than 2 feet during manufacturing and/or prior to being mounted into the framing.

(5) Transportation of Division 2.1 (flammable gas) materials is not authorized aboard cargo vessel and aircraft unless specifically authorized in the Hazardous Materials Table (§ 172.101).

(6) Cylinders manufactured under this special permit must be permanently mounted within a structural frame (e.g., tube trailer, MEGC or ISO Frame) that meets the following requirements:

(i) The frame is designed, marked (approval plate) and approved in accordance with the International Convention for Safe Containers (CSC) (49 CFR Part 451).

(ii) The frame is designed and analyzed using appropriate calculation methods such as Finite Element Analysis (FEA). The analysis method must demonstrate the frame's ability to protect the cylinders (tubes) from damage due to front, rear, and side impact, and from rollover. The analysis report must be submitted to OHMS.

(iii) The frame must meet all requirements of § 173.301(i).

(iv) The frame must meet all requirements of CGA C-29 and 178.74.

(7) Cabinet Flammability Limit: The Lower Flammability Limit (LEL) of each gas or gas mixtures must be calculated for the highest pressure and temperature to ensure the cabinet of the cylinder assembly is equipped with proper ventilation to avoid a fire or explosion during transportation or normal usage.

(8) Low pressure/temperature prior to filling: If the pressure in the cylinder (tube) drops below 100 psig (7 bar) while the ambient temperature is below -12 °C, then, prior to filling, either the tube must be held at or above 16 °C for 8 hours, or the tube must be filled to 435 psig (30 +/- 3 bar) from a compressor and held for one hour before returning to normal fill procedures.

(9) Any changes or modification to the Fire Protection System (FPS) must be recorded; including the SOPs that governs the inspection of the FPS, gauges, fittings, valves, and vent. The document must be submitted to the OHMS before the deployment of the production unit.

(10) The special permit holder must provide a detailed manual for the usage, inspection, and maintenance of components of the cylinder/tube assembly. The manual includes a Standard Operating Procedure (SOP) for each component of the assembly such as valves, fittings, Pressure Relieve Devices (PRD) or Fire Protection System (FPS), piping, venting devices, and other equipment used during charging and discharging of gases. All changes to the SOP must be clearly identified and recorded. The revised SOP, as well as the record of specific changes, must be submitted to OHMS and made available to each of the end

users. Filling and discharge operations must be carried out in accordance with the SOP.

(11) Cylinder (tube) exhibiting liner bulging: Liner bulge must be fixed as following:

(i) Pressurize the tube to 10% of its marked working (service) pressure and hold for a minimum of 4 hours. Then depressurize the tube, perform an internal visual inspection and ensure no liner bulge is exhibited.

(ii) If a liner bulge is still present after the first pressurization described above, take the following actions:

(A) Pressurize the tube to its marked working (service) pressure and hold for a minimum of 1 hour. Then depressurize the tube, perform an internal visual inspection and ensure no bulge is exhibited in the liner.

(B) If a liner bulge is still present after the second pressurization as described above, the tube must be rejected.

(C) For the rejected tube, contact the tube manufacturer for obtaining additional guidance in fixing the liner bulge prior to completing the requalification process and placing the requalification marking such as re-test date and RIN.

(12) Any semi-tractor used for the transport of tube trailer modules transporting the gases authorized under the terms of this special permit must be equipped with electronic roll stability control (RSC). The RSC powered switch must be on and activated during transportation.

(13) All new trailer modules, (COPV frame assembly and chassis) transporting the gases authorized under the terms of this special permit must have a minimum rigid body Static Rollover Threshold (SRT) of 0.375. The SRT calculation must be submitted to the OHMS. The SRT calculation must account for susceptibility to rollover accident and the vehicle dynamics during transportation.

(14) The design and fabrication of external piping and valves connecting the cylinders must be such that damage to a valve or to the piping does not result in discharge of the contents through piping, tubing, valve, or other components. Failure of one or more of these components, must result in no excess flow from the cylinder.

## 8. <u>SPECIAL PROVISIONS</u>:

## a. <u>Service Life Extension Program:</u>

(1) Cylinders manufactured under this special permit are authorized for a maximum service life of 15 years from the date of manufacture unless a service life extension program is approved by OHMS. NPROXX B.V. must submit a request for service life extension within 12 months of the date on which the special permit is granted. If cylinders are authorized for extended service life, the maximum service life of each cylinder under this special permit is limited to 30 years from the date of manufacture.

Under the service life extension program, the grantee must randomly (2)recall a minimum of thirty (30) cylinders of each design type that have been in service for 10 and 13 years. Cylinders recalled after 10 years shall be designated "Group A" and cylinders recalled after 13 years shall be designated "Group B". All recalled cylinders must be subjected to design requalification as specified in Sections 8.5.5 (Tube burst test), 8.5.6 (Ambient cycle test), and 8.5.8 (Flaw test) of ISO 11515:2022. Out of the 30 cylinders, 15 will be used for burst test, 10 will be used for cycle test, and 5 will be used for flaw tolerance test. Acceptance criteria shall be as defined in ISO 11515:2022, except  $P_b = 1.6P_h$ , and the design life (y) must be greater than or equal to 20 years. All cylinders that fail to meet the requalification requirements must be condemned, removed from service and rendered incapable of retaining pressure. In the case that some units from the initial minimum lot size are condemned, an additional 30 cylinders must be selected and subjected to the same design regualification as specified above (Sections 8.5.5, 8.5.6, and 8.5.8 of ISO 11515:2022). An Independent Inspection Agency must witness all testing.

(3) A complete test report, which includes MAE and physical testing data (i.e. burst, ambient cycling, flaw tolerance), as described in paragraph 8.a.(2), must be submitted to the AAHMS for assessment within 30 days of completion of the cylinder requalification and physical testing. Failure to meet the acceptance criteria specified in this section shall result in the design being restricted to a maximum service life of 15 years with no additional life extension.

b. 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.

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

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

e. Each packaging manufactured under the authority of this special permit must be either (1) marked with the <u>name of the manufacturer and location (city and state) of the facility at which it is manufactured</u> or (2) marked with a <u>registration symbol</u> designated by the Office of Hazardous Materials Safety <u>for a specific manufacturing facility</u>.

f. A current copy of this special permit must be maintained at each facility where the packaging is manufactured under this special permit. It must be made available to a DOT representative upon request.

- 9. <u>MODES OF TRANSPORTATION AUTHORIZED</u>: Motor vehicle.
- 10. <u>MODAL REQUIREMENTS</u>: A current copy of this special permit must be carried aboard each motor vehicle used to transport packages covered by this special permit.
- 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 <u>et seq</u>., 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),

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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. <u>REPORTING REQUIREMENTS</u>: 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 AAHMS, 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 Materials Safety Administration, U.S. Department of Transportation, East Building PHH-13, 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 <u>https://www.phmsa.dot.gov/approvals-and-permits/hazmat/special-permits-search</u>. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: ae