1. **GRANTEE:** Airgas USA, LLC
   Tulsa, OK

2. **PURPOSE AND LIMITATIONS:**
   a. This special permit authorizes the transportation in commerce of ethylene in DOT 3T 2400 tubes that are not visually inspected before filling. 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. 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 § 173.301(a)(2) in that before each filling of a cylinder, the person filling the cylinder must visually inspect the outside of the cylinder, except as specified herein.
5. **BASIS:** This special permit is based on the application of Airgas USA, LLC dated October 7, 2020 and submitted in accordance with § 107.109.

6. **HAZARDOUS MATERIALS** (49 CFR 172.101):

<table>
<thead>
<tr>
<th>Hazardous Material Description</th>
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<tr>
<td>Proper Shipping Name</td>
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<td>Ethylene</td>
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7. **SAFETY CONTROL MEASURES:**

a. **PACKAGING:** Prescribed packaging consists of three tube trailer modules leased from FIBA, Inc. by NASA Glenn Research Center (GRC), Cleveland, Ohio. Each module is made up of nine (9) DOT 3T 2400 tubes that have been modified by installing heater elements on them and covered by a special water resistant blanket material.

b. **OPERATIONAL CONTROLS:**

(1) Each tube module may only be filled a maximum of 4 times.

(2) The tubes covered by thermal blanket material are exempted from external visual inspection before each filling as required in § 173.301(a)(2), provided they have been initially qualified and inspected prior to the installation of the heaters and thermal blanket. However, prior to each filling, the covering blanket must be visually inspected for any signs of mechanical damage to the thermal blanket that could extend to the underlying tubes and render them unsafe.

(3) During discharge of ethylene from the tubes, the temperature and pressure in the tubes may not exceed 120 °F and 2,000 psig.
(4) After the completion of the project (4 filling cycles), the heating elements and blanket material must be removed and the tubes visually inspected for any mechanical or heat damage per CGA Pamphlet C-6. Afterward, the tube trailers must be sent to the grantee to be purged with nitrogen to remove any residual ethylene before the tube trailers are returned to FIBA, Inc.

(5) The outside of each trailer must be marked “DOT-SP 21003”.

8. SPECIAL PROVISIONS:

a. 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.

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

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each or motor vehicle used to transport packages covered by this special permit.

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: Shipment 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

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at https://www.phmsa.dot.gov/approvals-and-permits/hazmat/special-permits-search. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: ae