1. **GRANTEE:** Worthington Cryogenics LLC
   Theodore, AL

2. **PURPOSE AND LIMITATIONS:**
   a. This special permit authorizes the manufacture, mark, sale and use of non-DOT specification cylinders conforming with DOT 4L specification except that the cylinder is made of Type 316L stainless steel for transportation of Class 2.2 gases. 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.
   
   c. In accordance with 49 CFR 107.107(a) party status may not be granted to a manufacturing permit. These packagings may be used in accordance with 49 CFR 173.22a.

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

4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR § 173.316(c) in that a non-DOT specification cylinder is not authorized, except as prescribed herein.

5. **BASIS:** This special permit is based on the application of Worthington Cryogenics, LLC, dated November 6, 2017, submitted in accordance with § 107.109.
6. **HAZARDOUS MATERIALS (49 CFR § 172.101):**

<table>
<thead>
<tr>
<th>Hazardous Materials Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proper Shipping Name</strong></td>
</tr>
<tr>
<td>Nitrogen, refrigerated liquid</td>
</tr>
</tbody>
</table>

7. **SAFETY CONTROL MEASURES:**

a. **PACKAGING** - Packaging prescribed is a non-DOT specification welded cylinder conforming with the Taylor Wharton drawings D-L240-3C01 dated 10/28/86, D2200-3C00 Rev. C dated 4/27/84, or C 2200-1C10 Rev. D dated 3/20/84 on file with the Office of Hazardous Materials Safety Approvals and Permits Division (OHMSAPD) and DOT 4L (49 CFR 178.57) except as follows:

§ 178.57(o) **Authorized material of construction.**

(1) Electric furnace steel of uniform quality must be used. Chemical analysis must conform to ASTM A-240, type 316L Stainless steel. The following chemical analyses and physical properties are authorized.

<table>
<thead>
<tr>
<th>Designation</th>
<th>Chemical analysis, limits in percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>0.08 max.</td>
</tr>
<tr>
<td>Manganese</td>
<td>2.00 max.</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>0.045 max.</td>
</tr>
<tr>
<td>Sulphur</td>
<td>0.030 max.</td>
</tr>
<tr>
<td>Silicon</td>
<td>1.00 max.</td>
</tr>
<tr>
<td>Nickel</td>
<td>10.0/14.0</td>
</tr>
<tr>
<td>Chromium</td>
<td>16.0/18.0</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>2.0/3.0</td>
</tr>
<tr>
<td>Titanium</td>
<td>None</td>
</tr>
<tr>
<td>Columbium</td>
<td>None</td>
</tr>
</tbody>
</table>

* * * * *
§ 178.57(o) Markings

Applies except that the cylinder must be marked “DOT-SP 9790” instead of the specification “DOT 4L”.

b. OPERATIONAL CONTROLS - Qualification, maintenance and use of the cylinder must conform with that required for a DOT 4L cylinder.

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 registration symbol designated by the Office of Hazardous Materials Safety Approvals and Permits Division for a specific 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.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each 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:

- All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 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 the 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


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: dl/TD