May 30, 2023

U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration

DOT-SP 20502
(SECOND REVISION)

EXPIRATION DATE: 2027-04-30

(FOR RENEWAL, SEE 49 CFR 107.109)

1. **GRANTEE:** Spencer Composites Corporation
   Sacramento, CA

2. **PURPOSE AND LIMITATIONS:**
   a. This special permit authorizes the manufacture, mark, sale, and use of non-DOT specification subsea sampling cylinders (similar to oil well sampling cylinders) without pressure relief device(s). 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 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 § 173.301(f) in that a cylinder filled with a gas and offered for transportation must be equipped with one or more pressure relief devices and §§ 173.201(c), 173.302(a)(1), and 173.304(a) in that non-DOT specification cylinders are not authorized, except as specified herein.

Tracking Number: 2023054536
5. **BASIS:** This special permit is based on the application of Spencer Composites Corporation dated May 4, 2023, submitted in accordance with § 107.109.

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

<table>
<thead>
<tr>
<th>Hazardous Material Description</th>
<th>Hazard Class/Division</th>
<th>Identification Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbon gas mixture, compressed, n.o.s.</td>
<td>2.1</td>
<td>UN1964</td>
<td>N/A</td>
</tr>
<tr>
<td>Compressed gas, flammable, n.o.s.</td>
<td>2.1</td>
<td>UN1954</td>
<td>N/A</td>
</tr>
<tr>
<td>Nitrogen, compressed</td>
<td>2.2</td>
<td>UN1066</td>
<td>N/a</td>
</tr>
<tr>
<td>Hydrocarbon gas mixture, liquefied, n.o.s.</td>
<td>2.1</td>
<td>UN1965</td>
<td>N/A</td>
</tr>
<tr>
<td>Petroleum crude oil</td>
<td>3</td>
<td>UN1267</td>
<td>I</td>
</tr>
</tbody>
</table>

7. **SAFETY CONTROL MEASURES:**

   a. **PACKAGING:** Prescribed packaging is a non-DOT specification subsea sampling cylinder (similar to an oil well sampling cylinder) that is threaded on both ends. Each cylinder must comply with the design calculations, drawings, material specifications, and engineering specifications submitted with Spencer Composites Corporation application for special permit on file with the Office of Hazardous Materials Safety. In addition, each cylinder must conform with DOT Specification 3A (§§ 178.35 and 178.36), except as follows:

   § 178.35(e) Safety devices.

   No pressure relief device is required on the completed cylinder. Cylinder must be equipped with elastomeric seals that relieve pressure when subjected to a pool fire. The start to discharge pressure must not exceed the hydrostatic test pressure.

   § 178.35(f) Markings.

   Applies except that cylinders must be marked “DOT-SP 20502” in lieu of the DOT Specification marking.
§ 178.36(a) Type size and pressure.

The cylinders are constructed of stainless steel seamless tube. The maximum volume is 4,200 cc. The maximum service pressure is 6,000 psig.

§ 178.36(e) Welding or brazing.

Welding of the flange and plug to the ends of the cylinder section is authorized by an ASME qualified welder in accordance with the design specifications in the application for special permit.

§ 178.36(f) Wall thickness.

The wall stress at the minimum specified test pressure may not exceed 67 percent of the minimum tensile strength as determined from the physical tests required in § 178.36(k) and (l).

§ 178.36(g) Heat treatment.

No heat treatment required for the completed cylinder.

§ 178.36(j) Flattening test.

Not required.

§ 178.36(l) Acceptable results for physical tests.

SA-312 Stainless Steel:

- Minimum Tensile strength: 75,000 psi
- Minimum Yield strength: 30,000 psi

SA-182 Stainless Steel:

- Minimum Tensile strength: 75,000 psi
- Minimum Yield strength: 30,000 psi

b. TESTING: Each cylinder must be reinspected and hydrostatically retested in accordance with 49 CFR §§ 180.205 and 180.209 as prescribed for DOT 3A specification cylinders. Reheat treatment or repair of rejected cylinders is not permitted.
c.  **OPERATIONAL CONTROLS:**

(1) Emergency response information provided with the shipment and available via an emergency response telephone number must indicate that the receptacles are not fitted with pressure relief devices and provide appropriate guidance in case receptacles are exposed to fire.

(2) The cylinders are only authorized for the transportation of hydrocarbon samples.

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 modification or change is 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 either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Safety for a specific manufacturing facility.

e. 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.  **MODES OF TRANSPORTATION AUTHORIZED:** Motor vehicle, rail freight, cargo vessel, and cargo-only aircraft.

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:

- 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.:

[Signature]

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: Jephthah Nti