November 13, 2023

DOT-SP 21589

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: (See individual authorization letter)

2. PURPOSE AND LIMITATION:
   a. This special permit authorizes the transportation in commerce of compressed helium in a non-DOT specification pressure vessel. 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. Unless otherwise stated herein, this special permit consists of the special permit authorization letter issued to the grantee together with this document.


4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.301(h) in that the cylinder valve protection requirements need not be met; § 173.302(a) in that a non-DOT specification cylinder is authorized; and Part 180 in that requalification is not required.

5. BASIS: This special permit is based on the application of Department of Energy dated June 12, 2023, submitted in accordance with § 107.105 and the public proceeding thereon.

Tracking Number: 2023064660
6. **HAZARDOUS MATERIALS (49 CFR 172.101):**

<table>
<thead>
<tr>
<th>Proper Shipping Name</th>
<th>Hazard Class/Division</th>
<th>Identification Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helium, compressed</td>
<td>2.2</td>
<td>UN1046</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7. **SAFETY CONTROL MEASURES:**

a. **PACKAGING:**

   (1) Prescribed packaging is an article containing a non-DOT specification pressure vessel, which contains compressed helium. The non-refillable pressure vessel is constructed of 304L stainless steel and has a maximum volume of 2L. The pressure vessel has a maximum operating pressure of 3,000 psia and a factor of safety (ultimate pressure/maximum operating pressure) of 3.6.

   (2) The article containing the hazardous material must be transported in a UN4B aluminum box.

   (3) The system (the article containing the pressure vessel, the pressure vessel, the hazardous material, and the UN4B aluminum box) must conform to what is described in the June 12, 2023, application on file with the Office of Hazardous Materials Safety.

b. **TESTING:** The pressure vessel is exempted from the requalification requirements of Part 180.

c. **OPERATIONAL CONTROLS:**

   (1) The shipper must make the notifications and provide loading and unloading instructions in accordance with § 173.22.

   (2) Operations under this special permit are limited to the Department of Energy and contractors operating on behalf of the Department of Energy. The Department of Energy and each contractor must have party status to 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.

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:

   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.:

[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: SMITH