EXPIRATION DATE: 2024-06-30

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. **GRANTEE:** Solvay Fluorides, Llc.
   Houston, TX

2. **PURPOSE AND LIMITATION:**
   a. This special permit authorizes the transportation in commerce of iodine pentafluoride in a non-DOT specification welded steel non-bulk packaging designed and constructed in accordance with Section VIII Division 1 of the ASME Code. 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.
   d. 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 § 173.205 in that non-DOT specification packaging is not authorized, except as provided herein.
5. **BASIS:** This special permit is based on the application of Solvay Fluorides, Llc. dated July 17, 2020, submitted in accordance with § 107.109.

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

<table>
<thead>
<tr>
<th>Hazardous Materials Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Proper Shipping Name</strong></td>
</tr>
<tr>
<td>Iodine pentafluoride</td>
</tr>
</tbody>
</table>

7. **SAFETY CONTROL MEASURES:**

   a. **PACKAGING:** Packaging prescribed is a non-DOT specification welded steel non-bulk pressure vessel, designed, constructed, certified and “U” stamped in accordance with the ASME Section VIII, Division-1 Pressure Vessel Code, and conforming to Chemet S.A. Drawing OF-UN2495/420L dated 04.2015 on file with the Approvals and Permits Division. Each pressure vessel is permanently mounted on a steel pallet with forklift pockets and has the following design characteristics:

<table>
<thead>
<tr>
<th>Design Code</th>
<th>ASME Section VIII, Division-1 (&quot;U&quot; Stamp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material of construction</td>
<td>SA-516 GR 70 Steel</td>
</tr>
<tr>
<td>Water capacity</td>
<td>420 liters (111 gallons)</td>
</tr>
<tr>
<td>Outside diameter</td>
<td>762 mm (30 inch)</td>
</tr>
<tr>
<td>Minimum wall thickness</td>
<td>10 mm (0.394 inch)</td>
</tr>
<tr>
<td>Working pressure</td>
<td>1.65 MPa (239.3 psig)</td>
</tr>
<tr>
<td>Test pressure</td>
<td>3.3 MPa (478.6 psig)</td>
</tr>
<tr>
<td>Bottom openings</td>
<td>Prohibited</td>
</tr>
</tbody>
</table>
b. OPERATIONAL CONTROLS:

(i) Each valve discharge outlet must be sealed by a leak-proof threaded cap or a threaded plug.

(ii) Each valve assembly must be equipped with a securely attached metal cap to protect valves from damage during transportation.

(iii) Emergency response information provided with the shipment and available via an emergency response telephone number must indicate that the packaging is not fitted with pressure relief devices and provide appropriate guidance in case of exposure to fire.

(iv) MARKING: Each packaging shipped under the terms of this special permit must be plainly and durably marked “DOT-SP 16191”.

c. REQUALIFICATION: At least once every 5 years each packaging must be inspected and tested as follows:

(i) Visually inspected externally and internally for evidence of pitting, corrosion, abrasion, dents, distortions, defects in welds and any other condition indicating a reduction in structural integrity that might render the packaging unsafe for transportation; and

(ii) hydrostatically tested at a test pressure of not less than 3.3 MPa (478.6 psig) for a period of not less than 5 minutes without leakage, permanent distortion, or other condition that might render the packaging unsafe for transportation.

Following successful completion of the above inspection and testing, the inspector must prepare a written record of testing, and durably mark the packaging with the month and year of the test and inspection.

8. SPECIAL PROVISIONS:

a. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
b. Any person who receives a package covered by the special permit would be authorized to reoffer it for transportation when containing only a residue of the approved material provided no modification or change is made to the packaging and it is offered for transportation to the special permit holder in conformance with the special permit. Securing a closure on the packaging prior to offering the package for transportation under this provision would not constitute a modification or change to the packaging.

c. This special permit in no way affects the need to obtain any required authorizations from other agencies of the United States Government or from the competent authorities of countries of origin, transit, and destination.

9. **MODES OF TRANSPORTATION AUTHORIZED**: Motor vehicle, cargo vessel and rail freight.

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

   - 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 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: Teresa D'Onfro/kah