1. **GRANTEE:** (See individual authorization letter)

2. **PURPOSE AND LIMITATION:**
   a. This special permit authorizes the transportation in commerce of certain hazardous materials in non-DOT specification stainless steel cylinders conforming, in part, with the specifications for a DOT 4BW cylinder. 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. Unless otherwise stated herein, this special permit consists of the special permit authorization letter issued to the grantee together with this document.

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

4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR §§ 172.101, Column (9B), 173.201, 173.226, 173.227, 178.35(f)(1)(i), 178.61(b), 178.61(d)(2) and 178.61(g) in that alternative packaging is authorized and quantity limitations for cargo aircraft are waived, except as provided herein.

5. **BASIS:** This special permit is based on the Pipeline and Hazardous Materials Safety Administration’s (PHMSA) editorial review under § 107.121 initiated on December 4, 2008 and additional information received by Arch Chemicals on October 16, 2012.
### Hazardous Materials Description

<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>Dimethylhydrazine, unsymmetrical</td>
<td>6.1</td>
<td>UN1163</td>
<td>I, Hazard Zone B</td>
</tr>
<tr>
<td>Hydrazine, anhydrous or Hydrazine aqueous solution with more than 64 percent hydrazine, by mass</td>
<td>8</td>
<td>UN2029</td>
<td>I</td>
</tr>
<tr>
<td>Methylhydrazine</td>
<td>6.1</td>
<td>UN1244</td>
<td>I, Hazard Zone A</td>
</tr>
<tr>
<td>Toxic by inhalation liquid, flammable, n.o.s. with an inhalation toxicity lower than or equal to 1000 ml/m3 and saturated vapor concentration greater than or equal to 10 LC 50 (50% Anhydrous hydrazine and 50% unsymmetrical dimethylhydrazine)</td>
<td>6.1</td>
<td>UN3384</td>
<td>I, Hazard Zone B</td>
</tr>
<tr>
<td>Toxic liquids, flammable, organic, n.o.s. (Corrosive) (50% Anhydrous hydrazine and 50% unsymmetrical dimethylhydrazine)</td>
<td>6.1</td>
<td>UN2929</td>
<td>I, Hazard Zone B</td>
</tr>
</tbody>
</table>

Cylinders which contain a low-pressure helium charge and hydrazine, classed and described as "Compressed gas, toxic, flammable, n.o.s. (hydrazine and helium), inhalation Hazard Zone C, Class 2.3, UN1953" and marked and labeled as such may be shipped under this special permit under the same terms and conditions that otherwise apply when the cylinders contain only anhydrous hydrazine.
7. SAFETY CONTROL MEASURES:

   a. PACKAGING - Packaging prescribed is a non-DOT specification steel cylinder conforming with DOT Specification 4BW (§§ 178.35 and 178.61), except as follows:

      § 178.61(b) Authorized steel. The material of construction must be ASTM A240 Type 304L or Type 316L stainless steel.

      § 178.61(d)(2) Circumferential seams. Joint must allow a 100% penetration butt weld with or without metal back-up, with full radiographic examination.

      § 178.61(g) Heat Treatment. The cylinders need not be heat treated.

      § 178.35(f) Markings.

      Applies except each cylinder must be marked “DOT-SP 11173” in lieu of “DOT 4BW”.

   b. TESTING - Cylinders must be retested in accordance with the requirements of § 180.209 applicable to the DOT 4BW cylinder.

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, rail freight, cargo vessel and cargo aircraft only.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel or aircraft used to transport packages covered by this special permit. The shipper must furnish a current 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 Dr. Magdy El-Sibaie
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: KFW/TG