June 28, 2007

1. GRANTEE: Pilkington North America, Inc.
   Northwood, OH

2. PURPOSE AND LIMITATIONS:
   a. This special permit authorizes the transportation in
      commerce of a flammable solids, organic, n.o.s. (ferrocene)
      in a non-DOT packaging (pressure vessel). This special
      permit provides no relief from the Hazardous Materials
      Regulations (HMR) other than as specifically stated herein.
   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. No party status will be granted to this special permit.


4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.212
   and 173.240 in that a non-DOT specification packaging
   (pressure vessel) is not authorized for transportation
   except as specified herein.

5. BASIS: This special permit is based on the application of
   Pilkington North America, Inc. dated April 5, 2007,
   submitted in accordance with § 107.109 and the public
   proceeding thereon.
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>Flammable solids, organic, n.o.s. (ferrocene)</td>
<td>4.1</td>
<td>UN1325</td>
<td>II</td>
</tr>
</tbody>
</table>

7. **SAFETY CONTROL MEASURES:**

a. **PACKAGING** - Packaging prescribed is a non-DOT specification double-walled pressure vessel as shown on Pilkington North America, Inc. DRWG. NO. 910-LOE-M-0191 dated 10/20/06 on file with the Office of Hazardous Materials Special Permits and Approvals. The non-DOT specification pressure vessel has a water capacity of approximately 92.5 gallons and is designed, manufactured and "U" stamped in accordance with Section VIII, Div. 1 of the ASME Code. Additionally, the pressure vessel has the following design attributes:

   (1) A design margin of 3.5:1;

   (2) Material of construction (SA312 Gr 316L or SA240 Gr 316L stainless steel);

   (3) A maximum allowable working pressure of 350 psig for the outer jacket and 100 psig for the inner vessel shell;

   (4) The pressure vessel is mounted on a skid for lift truck handling with approximate dimensions of 40” square and 72” in height; and

   (5) The pressure vessel is fitted with spring loaded pressure relief device.

b. **TESTING** - 

   (1) At the time of manufacture, the pressure vessel must be tested as required by the ASME Code.
(2) Continued qualification and maintenance of the pressure vessel shall as a minimum be as required in 49 CFR Subpart G, for DOT Specification 51 tanks. Note that any welding on the pressure vessel must be done in accordance with the latest edition/addenda of the National Board Inspection Code by an entity with a current Certificate of Authorization for "R" stamp repair.

c. OPERATIONAL CONTROLS –

(1) Each pressure vessel must be secured to the motor vehicle in accordance with the requirements of §§ 393.100 through 393.106.

(2) The pressure in the vessel during transportation must not exceed 5 psig. A nitrogen or inert gas pad may be applied during transportation.

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 Special Permits and Approvals 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.

f. Each pressure vessel must be plainly and durably marked "DOT-SP 14478" as specified in §§ 172.302(b) and (c).


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, 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.

“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 -- OHMSPA, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

Diane LaValle
for Bob Richard
Deputy 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: STANISZEWSKI/kah