December 9, 2009

Pipeline and Hazardous Materials Safety Administration

DOT-SP 8748
(ELEVENTH REVISION)

(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 boron trifluoride, Division 2.3, in a non-DOT specification metal pressure envelope contained in a radiation detection system. 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.


4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 172.101, Column (9A) and (9B); §§ 173.302a, 175.3 in that non-DOT specification packagings are not authorized, except as specified herein.

5. BASIS: This special permit is based on the application of Department of Defense, dated October 8, 2009, submitted in accordance with § 107.105.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

<table>
<thead>
<tr>
<th>Hazardous Materials Description</th>
<th>Hazard Class/Division</th>
<th>Identification Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boron trifluoride, compressed</td>
<td>2.3</td>
<td>UN1008</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packaging is a radiation detection system having a non-DOT specification metal pressure envelope with welded or soldered joints, and brazed ceramic to metal insulator feed-through assemblies as described in Reuter - Stokes, Inc.'s application of November 5, 1981 and supplemental information of February 5, 1982, on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA).

(1) Each envelope must be made with a burst pressure of at least 6 times the filling pressure. The maximum filling pressure may not exceed 25 psig.

(2) The volume of each envelope is limited by the equation:

\[ V = \frac{1050}{P} \]

Where \( V \) = Volume in cubic inches
\( P \) = Filling pressure in psig

b. OPERATIONAL CONTROLS - The detectors must be packaged in a strong outside packaging that is properly marked and labeled. The completed package must be able to withstand a six foot drop onto an unyielding surface without leakage of contents.

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 or its contents and it is reoffered for transportation in conformance with this special permit and the HMR.
b. Shippers using the packaging covered by this special permit must comply with all provisions of this special permit, and all other applicable requirements contained in 49 CFR Parts 171-180.

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:

   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 -- OHMSPA, 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
Acting 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](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/dl/sln