January 27, 2011

U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

DOT-SP 12506
(THIRD REVISION)

EXPIRATION DATE: October 31, 2014

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: United Space Alliance
   Cape Canaveral, FL

2. PURPOSE AND LIMITATIONS:
   a. This special permit authorizes the transportation in commerce of fifteen (15) non-DOT specification cylinders conforming with all regulations applicable to a DOT Specification 4DS cylinder, except as specified herein, for the transportation in commerce of bromotrifluoromethane under the terms and conditions specified herein. 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 use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.

   c. Party status will not be granted to this special permit.


4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.301(f) in that pressure relief devices are not required; and § 173.304 that non-DOT specification cylinders are not authorized, except as specified herein.
5. **BASIS:** This special permit is based on the application of United Space Alliance dated July 12, 2010 submitted in accordance with § 107.109.

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>Bromotrifluoromethane or Refrigerant gas, R 13B1</td>
<td>2.2</td>
<td>UN1009</td>
<td>NA</td>
</tr>
</tbody>
</table>

7. **SAFETY CONTROL MEASURES:**

   a. **PACKAGING** - Packaging prescribed is a non-DOT specification cylinder used exclusively as part of the NASA Space Shuttle fire extinguisher system. The cylinders are constructed in accordance with Brunswick Corporation Defense Division Specification ST-20425 and Hydraulic Research APCO/Filter Division Drawings 819200, 819201, and 819215 on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA). The cylinders must be in conformance with DOT Specification 4DS cylinders (§§ 178.35 and 178.47) except as follows:

   (1) § 178.35(e) *Safety devices.* Cylinders are not fitted with pressure relief devices.

   (2) § 178.47(a) *Type, Size and Service Pressure.* Circumferentially welded shells, drawn from 321 stainless steel plate, with a water capacity of not over 3.39 pounds (94 cubic inches) and maximum service pressure of 210 pounds per square inch gauge at 70°F are authorized.

   (3) § 178.47(f) *Wall Thickness.* The minimum wall thickness must be 0.032 inch.

   (4) § 178.47(n) *Acceptable results for flattening and burst tests.*

   (1) ***
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(2) The minimum burst pressure must be 840 psig, 4.0 times the service pressure of the cylinder.

b. TESTING - Each cylinder must be retested and reinspected at least once every five years in accordance with the requirements prescribed for DOT-4DS cylinders in §180.205(c). Evidence of leakage or bulging through the circumferential weld seam shall be reason for cylinder rejection.

c. OPERATIONAL CONTROLS -

   (1) Individual charged cylinders must be shipped in strong outside packaging in accordance with the requirements contained in §173.301(a)(9), and as described in the application on file with OHMSPA.

   (2) Emergency response information provided with the shipment and available via an emergency response telephone number must indicate that the cylinders are not fitted with pressure relief devices and provide appropriate guidance for exposure to fire.

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 modifications or changes are 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. Marking -

   (1) Each cylinder must be plainly and durably marked "DOT-SP 12506/210" where 210 represents the service pressure.
(2) As specified in § 172.301(c), each outside packaging must be marked "DOT-SP 12506".

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 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: SEG