December 29, 2006

U.S. Department
of Transportation

Pipeline and Hazardous
Materials Safety Administration

DOT-SP 13896
(SECOND REVISION)

EXPIRATION DATE: December 31, 2010

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: FIBA Technologies, Inc., (FIBA)
   Westboro, MA

2. PURPOSE AND LIMITATION:

   a. This special permit authorizes the transportation in
      commerce of certain DOT 3 series specification cylinders,
      which have been re-threaded during requalification, for the
      compressed gases described in paragraph 6 below. 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 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 § 180.205(d) in
   that a DOT 3 series specification cylinder may not be
   re-threaded except as specified herein.

   NOTE: This does not relieve the holder of this special
   permit from securing and maintaining a valid approval for
   the repair of cylinders from the Associate Administrator for
   Hazardous Materials Safety.
5. **BASIS:** This special permit is based on the application of FIBA dated November 28, 2006 submitted in accordance with § 107.109.

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

<table>
<thead>
<tr>
<th>Proper Shipping Name/ Hazardous Materials Description</th>
<th>Hazard Class/ Division</th>
<th>Identification Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>The appropriate proper shipping name listed in § 172.101/ Liquefied or nonliquefied compressed gases, or mixtures of such compressed gases which are authorized in the Hazardous Materials Regulations for transportation in DOT 3A, 3AA, 3AX, 3AAX and 3T cylinders.</td>
<td>2.1, 2.2 or 2.3 as applicable</td>
<td>As Appropriate</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7. **SAFETY CONTROL MEASURES:**

   a. **PACKAGING** -

      (1) Packagings prescribed are seamless DOT-3 series specification cylinders having straight threads. Each cylinder must be successfully retested, reinspected, and marked by FIBA as required in § 180.205 following any repair. The re-threading must be performed in accordance with the procedure described in FIBA application, dated September 2004, on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA) and the following:

         (i) External re-threading of long cylinders (tubes) - The external neck threads must be examined to determine if adequate material is present before machining is initiated. The tube necks thickness must be measured using a scissors gauge accurate to +/- 0.002". The critical location is in the neck-to-dome transition radius area.

             (A) At least four thickness measurements spaced 90 degrees apart must be taken at the critical location (neck-to-dome transition radius area).

             (B) The neck thickness measurements must be taken and reported before and after re-threading.
(C) Upon completion of the re-threading operation, the threads shall be gauged in accordance with Federal Standard, NSB H-28.

(ii) Internal re-threading of cylinder – the internal neck threads must be examined to determine if adequate shearing strength is present before machining is initiated. The cylinder internal neck threads must be measured using a caliper gauge accurate to +/-0.002”.

(A) At least four measurements spaced 90 degrees apart must be taken approximately middle of the threaded neck to determine the internal diameter of the cylinder neck at the critical location (root of each thread).

(B) The measurements must be taken and reported before and after re-threading.

(C) Upon completion of the re-threading operation, the threads shall be gauged in accordance with Federal Standard, NSB H-28.

b. OPERATIONAL CONTROLS –

(1) Upon completion of a cylinder neck re-thread, the threaded neck must be inspected by an approved Independent Inspection Agency (IIA) who must verify the threads are in conformance with the thread gauge Federal Standard, NBS H-28.

(2) For external neck re-threading, the minimum wall thickness must be calculated for total weight of the tube and to ensure the present of an adequate strength until the next requalification period. The minimum wall thickness calculation must include corrosion allowance and normal vibration that applies during transportation.

(3) For internal neck re-threading, the shear strength must be calculated to ensure a value equal or greater than 10 times the test pressure of the cylinder.

(4) No cylinder may be re-threaded more than one time.

(5) No person may re-thread a cylinder subject to this special permit unless:
(i) that person is an employee of FIBA and has a current copy of this special permit at the location of re-threading operation, and

(ii) complies with all the terms and conditions of this special permit.

c. Marking – Only cylinders that have been successfully retested and re-threaded by FIBA, including successful verification by an approved IIA, may be used under this special permit. Cylinders passing the prescribed tests and procedures under this special permit must be marked, in addition to the requirements of § 180.213, "RETHREAD" along with the approved Independent Inspector’s mark by stamping into the shoulder near the FIBA retest marks.

d. Recordkeeping –

(1) In addition to the recordkeeping requirements of § 180.215 for retesting cylinders, FIBA must maintain records for each re-threaded cylinder under this special permit. The cylinder retest records, for each day of re-threading, must bear a certification from the approved IIA for the cylinders that have successfully passed the prescribed inspection and verification requirements of paragraph 7 this special permit.

(2) The total number of cylinders re-threaded under this special permit must be reported to OHMSPA by cylinder specification and age. These results must be summarized and reported on an annual basis. If the cylinders are requalified by AE/UE or 100% UE under the terms of a separate special permit granted to FIBA, the re-threaded cylinders may be included in the same report provided they are clearly identified and grouped as having been re-threaded.

8. SPECIAL PROVISIONS:

a. Offerors may use the cylinders specified and tested in accordance with the provisions of this special permit for the transportation in commerce of those hazardous materials specified herein, provided no modifications or changes are made to the cylinders, and all terms of this special permit are complied with.

b. Shippers using the cylinders covered by this special permit must comply with the provisions of this special permit, and
all other applicable requirements contained in 49 CFR Parts 100-185.

c. Packages permanently marked 'DOT-E 13896', prior to October 1, 2007 may continue to be used under this special permit for the remaining service life of the packaging or until the special permit is no longer valid. Packages marked on or after October 1, 2007 must be marked 'DOT-SP 13896'.

d. Shipping papers displaying 'DOT-E 13896' may continue to be used until October 1, 2007, provided the special permit remains valid.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only and passenger-carrying aircraft, as currently authorized by the regulations for the hazardous materials being transported.

10. MODAL REQUIREMENTS: None, other than as required by the HMR.

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 Robert A. McGuire
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: Toughiry/kah