

August 12, 2016



U.S. Department
of Transportation

East Building, PHH-30
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 16559

EXPIRATION DATE: July 31, 2018

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: HTEC Hydrogen Technology & Energy Corporation
North Vancouver, BC, Canada

US AGENT: Registered Agent Solutions, Inc.
Sacramento, CA

2. PURPOSE AND LIMITATION:

a. This special permit authorizes the transportation in commerce of certain non-DOT specification fully wrapped carbon-fiber reinforced aluminum lined cylinders containing compressed hydrogen. 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 the development of this special permit only considered the hazards and risks associated with the transportation in commerce.

c. No party status will be granted to this special permit.

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

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.302(a) in that non-DOT specification cylinders are not authorized, except as specified herein.

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5. BASIS: This special permit is based on the application of HTEC Hydrogen Technology & Energy Corporation dated August 18, 2015 submitted in accordance with § 107.105 and the public proceeding thereon.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Hydrogen, compressed	2.1	UN1049	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packagings are aluminum lined, fully wrapped carbon-fiber reinforced cylinders manufactured in accordance with Luxfer Canada (formerly Dynetek Industries Ltd.) drawings on file with the Office of Hazardous Materials Safety Approvals Permits & Division and with Transport Canada Permit Number SU6039. The cylinders have a maximum water capacity of 303 Liters and a service pressure of 6527 psig. Only cylinders listed in the Appendix of this special permit are authorized.

b. OPERATIONAL CONTROLS -

(1) Cylinders manufactured under this special permit are not authorized for use fifteen (15) years after the date of manufacture.

(2) A cylinder that has been subjected to fire may not be returned to service.

(3) Cylinders must be manifolded in accordance with the requirements of § 173.301(g).

(4) Cylinders must be transported while enclosed in aluminum frames that are designed and manufactured in accordance with § 173.301(i). The frame must be designed to withstand a static force of eight times the weight of the entire skid structure, including trailer, in the three principal axes, applied individually. In addition, the frame must be designed to withstand a static force of seven times longitudinally, three times

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laterally, and three times vertically, the weight of the structure, applied simultaneously.

c. MARKING - Each cylinder must be plainly and durably marked "DOT-SP 16559". In addition, each frame must be marked "DOT-SP 16559".

8. SPECIAL PROVISIONS:

a. Under the terms of this special permit, the grantee may only offer hazardous materials (i.e., the grantee is not authorized as a carrier).

b. 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.

c. 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.

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

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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.:



for William Schoonover
Acting Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

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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: BMoore

Appendix - Serial Numbers of Authorized Cylinders:

N2329	N2327
N2032	N2027
N2321	N2022
N2343	N2300
N2310	N2347
N2345	N2330
N2031	N2334
N2332	N2026
N2025	N2035
N2024	N2315
N2316	N2322
N2037	N2303
N2023	N2338
N2342	N2341
N2314	N2033
N2326	N2306
N2028	N2308
N2323	N2039
N2339	N3126
N2325	N3128
N2312	N2337
N2304	N2340
N2036	N2333
N2324	N2298
N2336	L7538
N2344	N2331
N2328	N2021
N2335	N2309
N2040	N2320
N2311	N2307