

January 25, 2006



U.S. Department
of Transportation

400 Seventh Street, S.W.
Washington, D.C. 20590

**Pipeline and
Hazardous Materials
Safety Administration**

DOT-SP 12411
(THIRD REVISION)

EXPIRATION DATE: November 30, 2009

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: UTC Fuel Cells, L.L.C.
South Windsor, CT
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of a fuel cell gasoline reforming apparatus containing non-bulk quantities of certain Division 4.2 self-heating solid catalyst pellets within several non-DOT specification stainless steel process vessels. 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.
 - c. No party status will be granted for this special permit.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.212 in that a non-DOT specification packaging is not authorized, except as specified herein.
5. BASIS: This special permit is based on the application of UTC Fuel Cells, L.L.C. dated November 21, 2005, submitted in accordance with § 107.109.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Self-heating solid, inorganic, n.o.s. (Nickel metal de-sulfurizing catalyst pellets)	4.2	UN3190	II
Self-heating solid, inorganic, n.o.s. (Copper/Zinc shift conversion catalyst pellets)	4.2	UN3190	II

7. SAFETY CONTROL MEASURES:a. PACKAGING -

(1) The Nickel metal de-sulfurizing catalyst pellets must be packaged and transported under 1.5 to 2.5 psig of dry inert gas pressure within a totally sealed stainless steel vessel which is fabricated, welded, proof tested to a maximum allowable working pressure of 209 psig and inspected according to the ANSI B31.1 Power Piping Code. The total net weight of Nickel de-sulfurizing catalyst pellets may not exceed 20 pounds per gasoline reforming apparatus.

(2) The Copper/Zinc shift-conversion catalyst pellets shall be packaged and transported under 1.5 to 2.5 psig of dry, inert gas pressure within a totally sealed stainless steel vessel which is fabricated, welded, proof tested to a maximum allowable working pressure of 14 psig and inspected according to the ANSI B31.1 Power Piping Code. The total net weight of copper/zinc shift-conversion catalyst pellets may not exceed 110 pounds per gasoline reforming apparatus.

(3) The vessel must be designed in accordance with the IFC Drawing on file with the Office of Hazardous Materials Special Permits and Approvals.

b. OPERATIONAL CONTROLS - The entire gasoline reforming apparatus module incorporating the hazardous materials may not contain other hazardous materials (e.g., gasoline or other flammable liquids) when transported. The apparatus

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module must be over-packed in a non-specification wooden, metal or plastic transport container.

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. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

c. Packagings permanently marked 'DOT-E 12411', 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. Packagings marked on or after October 1, 2007 must be marked 'DOT-SP 12411'.

d. Shipping papers displaying 'DOT-E 12411' may continue to be used until October 1, 2007, provided the special permit remains valid.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, cargo vessel, and cargo aircraft only.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel, aircraft or motor vehicle 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.

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- 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.

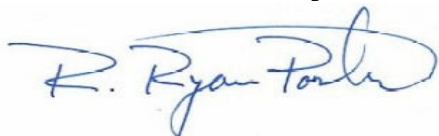
Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

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 exemption 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 exemption 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 exemption.

Issued in Washington, D.C.:



for Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.

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: scw/AM