



**Update for the DOE Coordinating Committee Meeting
May 6, 2010**

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1. Powered Industrial Truck Applications

The scope of the CSA Standards activity was discussed at the DOE Early Adopter workshop held April 28, 2010 at Sandia National Laboratory. The subject will be presented/discussed at the U.S. Fuel Cell Council Fork Lift Task Force meeting, May 17, 2010.

Generally, the scopes of the CSA activity address development of coverage, specific to powered industrial truck applications, to supplement the provisions contained in the existing CSA hydrogen on-board components and hydrogen fueling station and component documents.

HPIT 1- Components Powered Industrial Truck Applications

In Person meeting held April 29, 2010 at Sandia National Laboratory. Work is ongoing in development of coverage for on-board components for these early adopter applications.

The next meeting will be held September 28-29, 2010.

Anyone that is not involved and would like to participate, please contact Josip Novkovic, josip.novkovic@csa-america.org or 216-524-4990, Ext. 8062.

Scope: This TAG shall develop standard(s) which provides performance based criteria and applicable details of construction for serially produced compressed hydrogen gas fuel storage and handling components constructed entirely of new unused parts and materials. This applies to powered industrial trucks powered by fuel cells or internal combustion engines. Such components include, but are not limited to (1) refillable containers intended only for the storage of compressed hydrogen for powered industrial truck operation, (2) pressure relief devices produced for use on compressed hydrogen fuel containers, and (3) other fuel handling system components. This TAG is intended to develop coverage to supplement the provisions contained in the existing hydrogen component documents listed below and provides coverage specific to powered industrial truck applications.

- *Compressed Hydrogen Gas Vehicle Fuel Containers (CSA America HGV2)*



- *Pressure Relief Devices for Compressed Hydrogen Vehicle Fuel Containers (CSA America HPRD1)*
- *Fuel System Components for Compressed Hydrogen Powered Vehicles (CSA America HGV 3.1)*

HPIT 2- Fueling Powered Industrial Truck Applications

Applications/participants have been solicited and the group is in the process of being formalized.

The first meeting is anticipated in June 2010.

Anyone that is not involved and would like to participate, please contact Josip Novkovic, josip.novkovic@csa-america.org or 216-524-4990, Ext. 8062.

Scope: This TAG shall develop standard(s) which provides mechanical and electrical features and construction of newly manufactured systems that dispense hydrogen gas for powered industrial trucks, intended primarily to dispense fuel directly into the powered industrial truck fuel storage container.

This TAG is intended to develop coverage to supplement the provisions contained in the existing hydrogen fueling station and component documents listed below and provides coverage specific to powered industrial truck applications.

- *Compressed Hydrogen Dispensers (CSA America HGV 4.1)*
- *Hoses and Hose Assemblies (CSA America HGV 4.2)*
- *Fueling Parameter Verification (CSA America HGV 4.3)*
- *Breakaway Devices for Hoses (CSA America HGV 4.4)*
- *Priority and Sequencing Equipment (CSA America HGV 4.5)*
- *Manually Operated Valves (CSA America HGV 4.6)*
- *Automatic Pressure Operated Valves (CSA America HGV 4.7)*
- *Hydrogen Gas Vehicle Fueling Station Compressor (CSA America HGV 4.8)*
- *Hydrogen Fueling Station Guideline (CSA America HGV 4.9)*
- *Hydrogen Fittings, (CSA America HGV 4.10)*

2. CHMC 1- Material Compatibility in Compressed Hydrogen Applications

Background:

Industry has expressed a need for a standard that will provide a generic method for evaluating suitability of materials for use in hydrogen environments. CSA Standards and SAE have agreed to work as co-SDO's on this activity. CSA Standards will serve as the lead.



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3. CSA Annual Meetings: Sept 27-30, 2010 in Orland, FL

Date	
September 27, 2010	Automotive Technical Committee Fuel Cell Technical Committee
September 28, 2010	HPIT1 HGV 4.9
September 29, 2010	HGV 4.3 HPIT1
September 30, 2010	HGV 2 TAG HPIT 2 TAG

4. Work Continues on the following documents

- Fueling Parameter Verification (CSA America HGV 4.3)
- Hydrogen Gas Vehicle Fueling Station Compressor (CSA America HGV 4.8)
- Hydrogen Fueling Station Guideline (CSA America HGV 4.9)
- Fuel System Components for Hydrogen Vehicles (CSA America HGV 3.1)
- Compressed Hydrogen Gas Vehicle Fuel Containers (CSA America HGV 2) (harmonizing coverage with approach in SAE J2579)

5. Published Documents

Available for purchase from <http://www.shopcsa.ca/onlinestore>

- Compressed Hydrogen Dispensers (CSA America HGV 4.1)
- Hoses and Hose Assemblies (CSA America HGV 4.2)
- Breakaway Devices for Hoses (CSA America HGV 4.4)
- Priority and Sequencing Equipment (CSA America HGV 4.5)
- Manually Operated Valves (CSA America HGV 4.6)
- Standard for Automatic Pressure Operated Valves (CSA America HGV 4.7)
- Hydrogen Fittings, (CSA America HGV 4.10)
- Pressure Relief Devices for Compressed Hydrogen Vehicle Fuel Containers (CSA America HPRD1)