

## Vehicles

**Controlling Authority:**  
**DOT/NHTSA** (Crashworthiness)  
**EPA** (Emissions)

**Standards Development:**  
**General FC Vehicle Safety:** SAE  
**Fuel Cell Vehicle Systems:** SAE  
**Fuel System Components:** CSA  
**Containers:** SAE  
**Reformers:** SAE  
**Emissions:** SAE  
**Recycling** SAE  
**Service/Repair:** SAE

## Interface

**Fuel Specs:** SAE  
ASTM, API  
**Analytical Methods:** ASTM  
**Wts/Measures:** NIST, API,  
ASME  
**Fueling:** SAE, CSA  
**Sensors/Detectors:** UL,  
NFPA, SAE, CSA  
**Connectors:** SAE, CSA  
**Communications :** SAE  
UL, CSA, API, IEEE

## Fuel Delivery, Storage

**Controlling Authority:**  
**DOT/PHMSA** (Over-road  
Transport, Pipeline Safety)

**Standards Development:**  
**Composite Containers** ASME  
CSA, CGA, NFPA  
**Pipelines** ASME, API, CGA, AGA  
**Equipment** ASME, API, CGA,  
AGA  
**Fuel Transfer** NFPA, API

## Fueling, Service

## Parking Facility

**Controlling Authority: State, Local Govt.**  
Zoning, Building Permits

**Standards Development:**  
**Storage Tanks:** ASME, CSA, CGA, NFPA,  
API  
**Piping** ASME, CSA, CGA, NFPA  
**Dispensers** CSA, UL, NFPA,  
**On-site H2 Production:** CSA, UL, CGA, API  
**Codes for the Environment:** ICC, NFPA

**Controlling Authority:**  
**OSHA, Emissions – EPA**  
**Pipeline: DOT/PHMSA**  
**State, Local Government**  
**Zoning, Building Permits**

**Standards Development:**  
**Electrolyzers: UL, CSA**  
**Reformers: UL, CSA, API**  
**Performance Test**  
**Procedures: ASME, CSA**  
**Chemical Hydrides: UL,**  
**CSA, NFPA**

Hydrogen  
Generator

**Installation Piping: ASME, CSA, CGA,**  
**NFPA, ICC**  
**Storage: ASME, CGA, CSA, API, NFPA**  
**Compressors Safety Certification: CSA, UL**  
**Compressor Design, Performance &**  
**Safety: API**  
**Sensors/Detectors: UL, CSA, NFPA**  
**Fuel specifications: CGA, SAE, API, ASTM**  
**Weights/Measures: NIST, API, ASME**  
**Dispensers: NFPA, SAE, CSA, UL, API**  
**Non-vehicle Dispensing: CGA**  
**Codes for Built Environment: ICC, NFPA,**  
**CGA, ASHRAE**  
**Interconnection: IEEE , UL, NFPA**

Interface

Leads will change  
depending on type of  
environment.

**Controlling Authority:**  
**OSHA,**  
**State, Local Government**  
**Zoning, Building Permits**

**Standards Development:**  
**H2 ICEs: UL, CSA**  
**H2 Fueled Turbines: API,**  
**CSA, UL, ASME**  
**FC Systems: CSA, ASME, UL**  
**FC Installation: NFPA**  
**FC Performance Test**  
**Procedures: ASME, CSA,**  
**NHA-GTI**

Stationary  
Fuel Cells

**Controlling Authority: CPSC, DOT/PHMSA, OSHA,**  
**EPA (Methanol),**  
**State, Local Govt. (Zoning, Building Permits)**

**Standards Development:**  
**Handheld Systems: UL, CSA**  
**Portable Systems: CSA, UL, CGA**  
**Handheld Fuel Containers: UL, CSA, CGA**  
**Portable Fuel Containers: CGA, CSA, ASME**  
**H2 Fuel Specifications: CGA, SAE**  
**Performance Test Procedures: NHA-GTI, ASME, CSA**

Portable  
Fuel Cells