

National Template for Vehicle Systems

Vehicles

Controlling Authority:
NHTSA (Crashworthiness),
EPA (Emissions)

Fuel Cell Vehicle Systems: SAE
Fuel Delivery Systems: SAE,
Containers: CSA
Reformers: SAE
Emissions: SAE
Recycling SAE
Service/Repair: SAE

Interface

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

Fuel Delivery, Storage

Controlling Authority:
RSPA (Over-road Transport,
Pipeline Safety)

Composite Containers ASME
CSA, CGA, NFPA
Pipelines ASME, API, CGA, AGA
Equipment ASME, API, CGA,
AGA
Fuel Transfer NFPA, API

Fueling, Service

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

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 Built Environment: ICC, NFPA

Parking Facility

Lead SDO underlined

National Template for Hydrogen Generators and Stationary and Portable Fuel Cells

Controlling Authority:
OSHA, Emissions – EPA,
Pipeline: Office of Pipeline
Safety
State, Local Government
Zoning, Building Permits

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

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,
NCWM
Dispensers: CSA, UL, NFPA, SAE, API
Non-vehicle Dispensing: CGA
Codes for the Built Environment: ASHRAE,
ICC, NFPA, CGA
Interconnection: IEEE , UL, NFPA

Interface

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

H2 ICEs: CSA, UL
H2 Fueled Turbines: CSA,
UL, ASME, API
H2-O2 Steam Generators:
CSA, ASME, UL, NFPA
Performance Test
Procedures: ASME, CSA,
NHA-GTI

Hydrogen Generator

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

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

Stationary Fuel Cells

Portable Fuel Cells

Leads will change
depending on type of
environment.