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Propane Vehicle and Infrastructure Codes and Standards Chart

Many standards development organizations (SDOs) are working to develop codes and standards needed for the utilization of alternative fuel vehicle technologies. This chart shows the SDOs responsible for leading the support and development of key codes and standards for propane.

Vehicles

CONTROLLING AUTHORITIES:
DOT/NHTS (crashworthiness)
EPA (emissions)

Vehicle Systems Safety:

NFPA

Vehicle Tanks and Piping:

ASME

Vehicle Components:

UL

Dispensing

CONTROLLING AUTHORITIES:
State and Local Government
(zoning, building permits)

Vehicle Dispensing Systems:

NFPA

Vehicle Dispensing System Components:

UL

Storage

CONTROLLING AUTHORITIES:
State and Local Government
(zoning, building permits)

Storage Systems:

NFPA

Storage Containers and Piping:

ASME UL ASTM INTERNATIONAL

Storage Container Pressure Relief Devices and Venting:

Infrastructure

CONTROLLING AUTHORITIES:
DOT/PHMSA (over-road transport, pipeline safety)

Production Storage Systems:

NFPA

Production Process Safety:

energy API

Pipelines:

Building and Fire Code Requirements:

ICC INTERNATIONAL CODE COUNCIL NFPA

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Key for Standards Development Organizations (SDOs)

This key provides the acronyms, names, and standards development areas that correspond with the standards development organization logos in the chart above.

Organization Name			*Standards Development Areas*
	AGA	American Gas Association	Materials testing standards
	API	American Petroleum Institute	Equipment standards for petroleum production, storage and handling
	ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers	Promoting sustainability through research, standards writing, publishing, and education
	ASME	American Society of Mechanical Engineers	Mechanical and multidisciplinary engineering, design codes and standards
	ASTM	American Society for Testing and Materials	Technical test standards for materials, products, systems
	CGA	Compressed Gas Association	Equipment design and performance standards for compressed gas systems and components
	CSA	CSA Standards	US and Canadian equipment standards
	DOT	Department of Transportation	Federal transportation regulatory agency
	FERC	Federal Energy Regulatory Commission	Regulates interstate transmission of electricity, gas, and oil
	GTI	Gas Technology Institute	Supplies technical support and training for the energy industry
	ICC	International Code Council	Family of model building codes, including the International Fire Code
	IEEE	Institute of Electrical and Electronics Engineers	Electrical standards
	NERC	North American Electric Reliability Corporation	Produces standards for electric grid operation
	NFPA	National Fire Protection Association	Model codes and standards, including the National Electric Code
	NIST	National Institute of Standards and Technology	Measurement standards
	SAE	Society of Automotive Engineers	Vehicle standards
	NARUC	National Association of Regulatory Utility Commissioners	Represents state public service commissions
	UL	Underwriters Laboratory	Equipment and performance testing standards

National Renewable Energy Laboratory
1617 Cole Boulevard, Golden, Colorado 80401
303-275-3000 • www.nrel.gov

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