## **LNG Engine Fuel Systems**

**Disclaimer:** This checklist is not intended to be a definitive or exhaustive listing of all statutes, safety rules, regulations or codes that may be applicable. It is intended as a general guideline for assisting licensees and stakeholders in complying with state statutes, the Commission's safety rules and adopted national and federal codes that are specific to LNG ENGINE FUEL SYSTEMS. The officially published statute, rule or code shall prevail in the event of a conflict with those referenced in the checklist. The checklist may be used to verify compliance prior to placing equipment in service or for routine maintenance audits to ensure continued compliance with applicable safety requirements.

COMPONENTS	
Fuel-carrying components (excluding service valves, tubing, and fittings) shall be labeled or stamped with:	14.2604(c)
Manufacturer's name or symbol	14.2604(c)(1)
Model designation	14.2604(c)(2)
Maximum allowable working pressure	14.2604(c)(3)
Design temperature range	14.2604(c)(4)
Fuel flow direction	14.2604(c)(5)
Capacity or electrical rating	14.2604(c)(6)
FUEL DELIVERY	
Vaporizers permanently marked at readily visible point with maximum allowable working pressure	14.2613(a)
PRV vented to outside	14.2613(b)
Vents not to wheel well	14.2613(c)
Vents do not restrict PRV	14.2613(d)
Escaping gas does not impinge on container; vents to safe location	14.2613(e)
PRV vents not directed at container, any part of vehicle, other people or vehicles, or inside vehicle	14.2613(f)
At least two monitoring sensors	14.2613(g)
Piping shielded and protected	14.2619(a)
Fuel lines braced/supported every 21" to 27"	14.2619(b)
Fuel lines protected by grommets	14.2619(c)
Fuel lines, minimum 8" from exhaust or shielded	14.2619(d)
Hydrostatic relief valves	14.2619(f)
Fueling system has backflow check valve	14.2622(e)
Pressure gauge in driver's compartment has no gas	14.2625(b)
Wiring properly installed, supported, and secured	14.2631(a) 14.2631(b)
Fueling connection reliable and secure	14.2634(a)
CONTAINERS	
Containers shall have permanent ID markings, decals or stencils to ID:	14.2607(g)
Total volumetric capacity in gallons	14.2607(g)(1)
"FOR LNG ONLY" all caps, 1" letters	14.2607(g)(2)
Inlets and outlets marked "vapor" or "liquid"	14.2607(g)(3)
Valves readily accessible, operable without tools	14.2607(j)
Shut off valves on liquid and vapor and marked "VAPOR SHUT OFF VALVE" and "LIQUID SHUT OFF VALVE"	14.2607(j)

## LNG Engine Fuel Systems (continued)

Components and containers mounted to minimize damage from collision	14.2610(a)(2)
Road clearance	14.2610(a)(3)
No portion ahead of front axle or behind rear bumper	14.2610(a)(4)
8" from exhaust or shielded	14.2610(a)(5)
Mountings minimize corrosion	14.2610(a)(6)
Container external or sealed	14.2610(b)(1)
Brackets marked with manufacturer's name or logo	14.2610(b)(2)
Weight of container not supported by outlet, service valves, manifolds, or other fuel connections	14.2610(b)(4)
Container markings readable after installation	14.2610(b)(d)
Remote fill door hinged or latched, not locked	14.2610(b)(f)
MAINTENANCE	
General maintenance	14.2643(a)
Pressure relief valves and fuel lines, not repairable	14.2643(b)
SIGNS AND LABELING	
Signs and labeling readily visible, weather-resistant	14.2637(a)
"LNG FUELED VEHICLE" — 2" high — fueling receptacle and engine	14.2637(a)
Name and number of licensee (not if OEM) in engine compartment	14.2637(a)
"Maximum allowable working pressure" — Fueling receptacle	14.2637(a)
"Container CapacityGallons" at fueling receptacle	14.2637(a)
Weather-resistant diamond-shaped label — "LNG" 4 ¾" X 3 ¼"	14.2637(b)
Licensee info for conversions: name, number, year and month	14.2637(c)
	Road clearance  No portion ahead of front axle or behind rear bumper  8" from exhaust or shielded  Mountings minimize corrosion  Container external or sealed  Brackets marked with manufacturer's name or logo  Weight of container not supported by outlet, service valves, manifolds, or other fuel connections  Container markings readable after installation  Remote fill door hinged or latched, not locked  MAINTENANCE  General maintenance  Pressure relief valves and fuel lines, not repairable  SIGNS AND LABELING  Signs and labeling readily visible, weather-resistant  "LNG FUELED VEHICLE" — 2" high — fueling receptacle and engine  Name and number of licensee (not if OEM) in engine compartment  "Maximum allowable working pressure" — Fueling receptacle  "Container CapacityGallons" at fueling receptacle  Weather-resistant diamond-shaped label — "LNG" 4 %" X 3 ¼"