

## Light-Duty Vehicles and Light-Duty Trucks: Tier 1 and National Low Emission Vehicle (NLEV) Evaporative Emission Standards and Implementation Schedule

		Vehicle Type	Useful Life (years / miles)	Evaporative Test Fuel	Test Procedure					
					(2) 1-hour Hot Soaks (g/test)	3-Day Diurnal plus Hot Soak (g/test)	2-day Diurnal plus Hot Soak (g/test)	Running Losses (g/mi)	Spitback (grams fuel)	ORVR (g/gal of fuel dispensed)
<b>Federal</b>	Standard (Pre-enhanced)	LDV	5 / 50,000	EPA Gasoline	2.0 <sup>a</sup>	-	-	-	-	-
				Methanol (M10)	2.0 <sup>b</sup>	-	-	-	-	-
		LDT	11 / 120,000	EPA Gasoline	2.0 <sup>a, c</sup>	-	-	-	-	-
				Methanol (M10)	2.0 <sup>b, c</sup>	-	-	-	-	-
	Enhanced Evaporative and ORVR	LDV, LDT 1 & 2, LDT 3 & 4 (< 30 gal fuel tank)	10 / 100,000 10 / 100,000 11 / 120,000	EPA Gasoline	-	2.0 <sup>a</sup>	2.5 <sup>a</sup>	0.05 <sup>a</sup>	1.0	0.2 <sup>a</sup>
				Methanol (M10)	-	2.0 <sup>b</sup>	2.5 <sup>b</sup>	0.05 <sup>b</sup>	1.0	0.2 <sup>b</sup>
				Ethanol (E10) <sup>d</sup>	-	2.0 <sup>b</sup>	2.5 <sup>b</sup>	0.05 <sup>b</sup>	1.0	0.2 <sup>b</sup>
				CNG	-	2.0 <sup>a</sup>	-	-	-	f
				LPG	-	2.0 <sup>a</sup>	-	-	-	0.15 <sup>a</sup>
		LDT 3 & 4 (< 30 gal fuel tank)	11 / 120,000	Diesel Fuel	-	-	-	-	-	0.20 <sup>a, g</sup>
				EPA Gasoline	-	2.5 <sup>a</sup>	3.0 <sup>a</sup>	0.05 <sup>a</sup>	1.0	0.2 <sup>a</sup>
				Methanol (M10)	-	2.5 <sup>b</sup>	3.0 <sup>b</sup>	0.05 <sup>b</sup>	1.0	0.2 <sup>b</sup>
				Ethanol (E10) <sup>d</sup>	-	2.5 <sup>b</sup>	3.0 <sup>b</sup>	0.05 <sup>b</sup>	1.0	0.2 <sup>b</sup>
				CNG	-	2.0 <sup>a</sup>	-	-	-	f
				LPG	-	2.0 <sup>a</sup>	-	-	-	0.15 <sup>a</sup>
				Diesel Fuel	-	-	-	-	-	0.20 <sup>a</sup>

### Implementation Schedule

		Vehicle Type	Emission Standards	Year											
				1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<b>Federal</b>	Pre-enhanced	LDV, LDT	Cert & In-use	100%	80% max	60% max	10% max	-	-	-	-	-	Tier 2 Requirements Begin		
	Enhanced	LDV, LDT	Cert & In-use <sup>e</sup>	-	20% min	40% min	90% min	100%	100%	100%	100%	100%			
	ORVR	LDV, LDT	Cert & In-use <sup>e</sup>	-	-	-	40% min	80% min	100%	100%	100%	100%			
		LDT 1 & 2	Cert & In-use <sup>e</sup>	-	-	-	-	-	-	40% min	80% min	100%	40% min	80% min	100%
		LDT 3 & 4	Cert & In-use <sup>e</sup>	-	-	-	-	-	-	-	-	-	40% min	80% min	100%

Notes on following page.

**Notes:**

- a** Total hydrocarbon (THC).
- b** Total hydrocarbon equivalent (THCE).
- c** 2.6 grams per test at high altitude prior to 1996 model year.
- d** Compliance required for National Low Emission Vehicle (NLEV) and Clean Fuel Vehicle flexible fuel vehicles under defeat device regulations.
- e** Small volume manufacturer exempt until last year of phase-in.
- f** Must meet American National Standards Institute / American Gas Association Natural Gas Vehicle 1 (NGV) receptical requirements.
- g** Waivers allowed.

**Code of Federal Regulations (CFR) citations:**

- 40 CFR 86 Subpart A
- 40 CFR 86 Subpart R - National Low Emission Vehicle program