



**Federal Certification Evaporative Emission Standards  
 for Light-Duty Vehicles (Passenger Cars) and Light-Duty Trucks:  
 Evaporative and Onboard Refueling (ORVR) Test Procedures**  
 (including NLEV and CVF programs)

	Emission Standards	Vehicle Class	Useful Life (years/miles)	Evaporative Test Fuel	Test Procedure					
					(2) 1-hour Hot Soaks (grams/test)	3-Day Diurnal plus Hot Soak (grams/test)	2-Day Diurnal plus Hot Soak (grams/test)	Running Losses (grams/mile)	Spitback <sup>[48]</sup> (grams liquid)	ORVR (grams/gal of fuel dispensed)
Federal	Standard (Pre-Enhanced)	LDV	5/50,000	EPA Gasoline	2.0 (THC)					
				Methanol (M10)	2.0 (THCE)					
		LDT	11/120,000	EPA Gasoline	<sup>[51]</sup> 2.0 (THC)					
				Methanol (M10)	<sup>[51]</sup> 2.0 (THCE)					
	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 (THC)	2.5 (THC)	0.05 (THC)	1.0 (fuel)	0.20 (THC)
				Methanol (M10)		2.0 (THCE)	2.5 (THCE)	0.05 (THCE)	1.0 (fuel)	0.20 (THCE)
				Ethanol (E10) <sup>[47]</sup>		2.0 (THCE)	2.5 (THCE)	0.05 (THCE)	1.0 (fuel)	0.20 (THCE)
				CNG		2.0 (THC)				<sup>[49]</sup> NA
				LPG		2.0 (THC)				0.15 (THC)
				Diesel Fuel						<sup>[50]</sup> 0.20 (THC)
		LDT 3 & 4 (≥30 gal fuel tank)	11/120,000	EPA Gasoline		2.5 (THC)	3.0 (THC)	0.05 (THC)	1.0 (fuel)	0.20 (THC)
				Methanol (M10)		2.5 (THCE)	3.0 (THCE)	0.05 (THCE)	1.0 (fuel)	0.20 (THCE)
				Ethanol (E10) <sup>[47]</sup>		2.5 (THCE)	3.0 (THCE)	0.05 (THCE)	1.0 (fuel)	0.20 (THCE)
				CNG		2.0 (THC)				<sup>[49]</sup> NA
				LPG		2.0 (THC)				0.15 (THC)
				Diesel Fuel						<sup>[50]</sup> 0.20 (THC)



### Federal Evaporative & Onboard Refueling (ORVR) Implementation Schedule for Light-Duty Vehicles (Passenger Cars) and Light-Duty Trucks

	Emission Standards	Vehicle Class	Emission Standards													
				1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	
<b>Federal</b>	<b>Pre-Enhanced</b>	<b>LDV, LDT</b>	Cert & In-use	100%	80% Max	60% Max	10% Max							<b>Tier 2 Requirements Begin</b> See <a href="http://www.epa.gov/oms/tr2home.htm">www.epa.gov/oms/tr2home.htm</a>		
	<b>Enhanced</b>	<b>LDV, LDT</b>	Cert & In-use <sup>[44]</sup>		20% Min	40% Min	90% Min	100%	100%	100%	100%	100%				
	<b>ORVR</b>	<b>LDV</b>	Cert & In-use <sup>[44]</sup>				40% Min	80% Min	100%	100%	100%	100%				
		<b>LDT 1 &amp; 2</b>	Cert & In-use							40% Min	80% Min	100%				
		<b>LDT 3 &amp; 4</b>	Cert & In-use										40% Min	80% Min	100%	