Federal Certification Exhaust Emission Standards
for Light-Duty Vehicles (Passenger Cars) and Light Light-Duty Trucks:
Federal Test Procedure (FTP), Cold CO, and Highway & Idle Tests
(grams/mile)

	Vehicle Type	Emission Category	Vehicle Useful Life													
			5 Years / 50,000 Miles							10 Years / 100,000 Miles						
			THC[2,5,39]	NMHC[3]	NMOG	CO[35,39]	NOx	PM[29]	HCHO	THC[2,5]	NMHC[3]	NMOG	CO[38]	NOx	PM[29]	HCHO
Federal	**LDV** [37,40,43]	Tier 0	0.41	[6] 0.34	-	3.4	1.0	[4] 0.20	-							
		Tier 1	[28] 0.41	0.25	-	3.4	[7] 0.4	0.08	-	-	0.31	-	4.2	[9] 0.6	0.10	-
	LDT1 [37,40,43]	Tier 0[26]								0.80	[6] 0.67	-	10	1.2	[4] 0.26	-
		Tier 1	-	0.25	-	3.4	[7] 0.4	0.08	-	[26,28] 0.80	0.31	-	4.2	[9] 0.6	0.10	-
	LDT2 [37,40,43]	Tier 0[26]								0.80	[6] 0.67	-	10	1.7	[4] 0.13	-
		Tier 1	-	0.32	-	4.4	[8] 0.7	0.08	-	[26,28] 0.80	0.40	-	5.5	0.97	0.10	-
Federal National Low Emission Vehicle (NLEV) Program	**LDV** [36,40,41]	TLEV	[28] 0.41	-	[1,31] 0.125	3.4	[34] 0.4	0.08	0.015	-	-	[1,31] 0.156	4.2	[34] 0.6	[32] 0.08	0.018
		LEV[42]	[28] 0.41	-	[1,31] 0.075	3.4	[34] 0.2	0.08	0.015	-	-	[1,31] 0.090	4.2	[34] 0.3	[32] 0.08	0.018
		ULEV[42]	[28] 0.41	-	[1,31] 0.040	1.7	[34] 0.2	0.08	0.008	-	-	[1,31] 0.055	2.1	[34] 0.3	[32] 0.04	0.011
		ZEV	0.00	0.00	0.000	0.0	[34] 0.0	0.00	0.000	0.00	0.000	0.000	0.0	[34] 0.0	0.00	0.000
	LDT1 [36,40,41]	TLEV	-	-	[1,31] 0.125	3.4	[34] 0.4	0.08	0.015	[26,28] 0.80	-	[1,31] 0.156	4.2	[34] 0.6	[32] 0.08	0.018
		LEV[42]	-	-	[1,31] 0.075	3.4	[34] 0.2	0.08	0.015	[26,28] 0.80	-	[1,31] 0.090	4.2	[34] 0.3	[32] 0.08	0.018
		ULEV[42]	-	-	[1,31] 0.040	1.7	[34] 0.2	0.08	0.008	[26,28] 0.80	-	[1,31] 0.055	2.1	[34] 0.3	[32] 0.04	0.011
		ZEV	0.00	0.00	0.000	0.0	[34] 0.0	0.00	0.000	0.00	0.000	0.000	0.0	[34] 0.0	0.00	0.000
	LDT2 [36,40,41]	TLEV	-	-	[1,31] 0.160	4.4	[34] 0.7	0.08	0.018	[26,28] 0.80	-	[1,31] 0.200	5.5	[34] 0.9	[32] 0.10	0.023
		LEV[42]	-	-	[1,31] 0.100	4.4	[34] 0.4	0.08	0.018	[26,28] 0.80	-	[1,31] 0.130	5.5	[34] 0.5	[32] 0.10	0.023
		ULEV[42]	-	-	[1,31] 0.050	2.2	[34] 0.4	0.08	0.009	[26,28] 0.80	-	[1,31] 0.070	2.8	[34] 0.5	[32] 0.05	0.013
		ZEV	0.00	0.00	0.000	0.0	[34] 0.0	0.00	0.000	0.00	0.000	0.000	0.0	[34] 0.0	0.00	0.000
Federal Clean Fueled Vehicle (CFV) Program	**LDV** [37,40,41]	LEV	[28] 0.41	-	[30] 0.075	3.4	[34] 0.2	-	0.015	-	-	[30] 0.090	4.2	[34] 0.3	[10] 0.08	0.018
		ILEV[33]	[28] 0.41	-	0.075	3.4	[34] 0.2	-	0.015	-	-	0.090	4.2	[34] 0.3	[10] 0.08	0.018
		ULEV	[28] 0.41	-	[30] 0.040	1.7	[34] 0.2	-	0.008	-	-	[30] 0.055	2.1	[34] 0.3	[10] 0.04	0.011
		ZEV	0.00	0.00	0.000	0.0	[34] 0.0	0.00	0.000	0.00	0.000	0.000	0.0	[34] 0.0	0.00	0.000
	LDT1 [37,40,41]	LEV	-	-	[30] 0.075	3.4	[34] 0.2	-	0.015	[26,28] 0.80	-	[30] 0.090	4.2	[34] 0.3	[10] 0.08	0.018
		ILEV[33]	-	-	0.075	3.4	[34] 0.2	-	0.015	[26,28] 0.80	-	0.090	4.2	[34] 0.3	[10] 0.08	0.018
		ULEV	-	-	[30] 0.040	1.7	[34] 0.2	-	0.008	[26,28] 0.80	-	[30] 0.055	2.1	[34] 0.3	[10] 0.04	0.011
		ZEV	0.00	0.00	0.000	0.0	[34] 0.0	0.00	0.000	0.00	0.000	0.000	0.0	[34] 0.0	0.00	0.000
	LDT2 [37,40,41]	LEV	-	-	[30] 0.100	4.4	[34] 0.4	-	0.018	[26,28] 0.80	-	[30] 0.130	5.5	[34] 0.5	[10] 0.08	0.023
		ILEV[33]	-	-	0.100	4.4	[34] 0.4	-	0.018	[26,28] 0.80	-	0.130	5.5	[34] 0.5	[10] 0.08	0.023
		ULEV	-	-	[30] 0.050	2.2	[34] 0.4	-	0.009	[26,28] 0.80	-	[30] 0.070	2.8	[34] 0.5	[10] 0.04	0.013
		ZEV	0.00	0.00	0.000	0.0	[34] 0.0	0.00	0.000	0.00	0.000	0.000	0.0	[34] 0.0	0.00	0.000