FINAL REGULATION ORDER

AMENDMENTS TO SECTIONS 1960.1, 1956.8, 1965, 2101, 2061 AND 2292.1, AND ADOPTION OF SECTION 2062, TITLE 13, CALIFORNIA CODE OF REGULATIONS

Note: Amendments are shown by underline and ~~strikeout~~ to indicate additions and deletions, respectively.

Amend Title 13, California Code of Regulations, section 1960.1 to read as follows:

Section 1960.1. Exhaust Emission Standards and Test Procedures - 1981 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.

(a) through (d) [No Change]
(e)(1) and (e)(2) [No Change]
(e)(3) The exhaust emissions from new 1992 and subsequent model-year transitional low-emission vehicles, low-emission vehicles, ~~and~~ ultra-low-emission vehicles, and super ultra-low-emission vehicles, including fuel-flexible and dual-fuel vehicles, shall meet all the requirements of (g)(1) and (h)(2) with the following additions:

FORMALDEHYDE EXHAUST EMISSION STANDARDS ~~FOR TRANSITIONAL LOW-EMISSION VEHICLES, LOW-EMISSION VEHICLES, AND ULTRA-LOW-EMISSION VEHICLES~~ IN THE LIGHT-DUTY AND MEDIUM-DUTY VEHICLE WEIGHT CLASSES[5,6,7]
["milligrams per mile" (or "mg/mi")]

Vehicle Type[1]	*Vehicle Weight (lbs.)[2]*	*Durability Vehicle Basis (mi)*	*Vehicle Emission Category[3]*	*Formaldehyde (mg/mi)[4,5]*
PC and LDT	All	50,000	TLEV	15 (23)
	0-3750		LEV	15 (15)
			ULEV	8 (12)
		100,000	TLEV	18
			LEV	18
			ULEV	11
	3751-5750	50,000	TLEV	18 (27)
			LEV	18 (18)
			ULEV	9 (14)
		100,000	TLEV	23
			LEV	23
			ULEV	13

MDV	0-3750	50,000	LEV	15 (15)
			ULEV	8 (12)
		120,000	LEV	22
			ULEV	12
MDV	3751-5750	50,000	LEV	18 (18)
			ULEV	9 (14)
			SULEV	4 (7)
		120,000	LEV	27
			ULEV	13
			SULEV	6
MDV	5751-8500	50,000	LEV	22 (22)
			ULEV	11 (17)
			SULEV	6 (8)
		120,000	LEV	32
			ULEV	16
			SULEV	8
MDV	8501-10,000	50,000	LEV	28 (28)
			ULEV	14 (21)
			SULEV	7 (10)
		120,000	LEV	40
			ULEV	21
			SULEV	10
MDV	10,001-14,000	50,000	LEV	36 (36)
			ULEV	18 (27)
			SULEV	9 (14)
		120,000	LEV	52
			ULEV	26
			SULEV	13

(1) "PC" means passenger cars.
"LDT" means light-duty trucks.
"MDV" means medium-duty vehicles.

(2) For light-duty or medium-duty vehicles, Vehicle Weight shall mean "Loaded Vehicle Weight" (or "LVW") or "Test Weight" (or "TW"), respectively.

(3) "TLEV" means transitional low-emission vehicle.
"LEV" means low-emission vehicle.
"ULEV" means ultra-low-emission vehicle.
"SULEV" means super ultra-low-emission vehicle.

(4) Formaldehyde exhaust emission standards apply to vehicles certified to operate on any available fuel, including fuel-flexible and dual-fuel vehicles.

(5) The standards in parentheses are intermediate in-use compliance standards for 50,000 miles.

a. For PCS and LDTs from 0-5750 lbs. LVW, including fuel-flexible and dual-fuel vehicles, intermediate in-use compliance standards shall apply to TLEVs through the 1995 model year, and LEVs and ULEVs through the 1998 model year. In-use compliance with standards beyond 50,000 miles shall be waived through 1995 for TLEVs, and through 1998 for LEVs and ULEVs.

b. For MDVs from 0-14,000 lbs. TW, including fuel-flexible and dual-fuel vehicles, intermediate in-use compliance standards shall apply to LEVs, ~~and~~ ULEVs and SULEVs through the 1999 model year. In-use compliance with standards beyond 50,000 miles shall be waived through the 1999 model year for LEVs ~~and~~ ULEVs, and SULEVs.

(6) Manufacturers shall demonstrate compliance with the above standards for formaldehyde at 50° F, according to the procedures specified in section 11k of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k). Hybrid electric, natural gas, and diesel-fueled vehicles shall be exempt from 50° F test requirements.

(7) In-use compliance testing shall be limited to PCS and LDTs with fewer than 75,000 miles and MDVs with fewer than 90,000 miles.

(f)(1) [No Change]
(f)(2) [No Change]
(g)(1) The exhaust emissions from new 1992 and subsequent model-year light-duty transitional low-emission vehicles, low-emission vehicles, and ultra-low-emission vehicles in the passenger car and light-duty truck classes shall not exceed:

EXHAUST EMISSION STANDARDS
FOR TRANSITIONAL LOW-EMISSION VEHICLES, LOW-EMISSION VEHICLES AND ULTRA-LOW-EMISSION VEHICLES IN PASSENGER CAR AND LIGHT-DUTY TRUCK VEHICLE CLASSES[6,7,8,9,10]
[grams per mile (or "g/mi")]

Vehicle Type[1]	*Loaded Vehicle Weight (lbs)*	*Durability Vehicle Basis(mi)*	*Vehicle Emission Category[2]*	*Non-Methane Organic Gases[3,4]*	*Carbon Monoxide*	*Oxides of Nitrogen[5]*
PC and LDT	All 0-3750	50,000	TLEV	0.125~~(0.188)~~	3.4 ~~(3.4)~~	0.4 ~~(0.4)~~
			LEV	0.075 ~~(0.100)~~	3.4 ~~(3.4)~~	0.2 ~~(0.3)~~
			ULEV	0.040 ~~(0.058)~~	1.7 ~~(2.6)~~	0.2 ~~(0.3)~~
		100,000	TLEV	0.156	4.2	0.6
			LEV	0.090	4.2	0.3
			ULEV	0.055	2.1	0.3
LDT	3751-5750	50,000	TLEV	0.160 ~~(0.238)~~	4.4 ~~(4.4)~~	0.7 ~~(0.7)~~
			LEV	0.100 ~~(0.128)~~	4.4 ~~(4.4)~~	0.4 ~~(0.5)~~
			ULEV	0.050 ~~(0.075)~~	2.2 ~~(3.3)~~	0.4 ~~(0.5)~~
		100,000	TLEV	0.200	5.5	0.9
			LEV	0.130	5.5	0.5
			ULEV	0.070	2.8	0.5

(1) "PC" means passenger cars.
"LDT" means light-duty trucks.
"LVW" means loaded vehicle weight.
"Non-Methane Organic Gases" or "NMOG" means the total mass of oxygenated and non-oxygenated hydrocarbon emissions.

(2) "TLEV" means transitional low-emission vehicle.
"LEV" means low-emission vehicle.
"ULEV" means ultra-low-emission vehicle.

(3) *Compliance with NMOG Standard.* ~~"Non-Methane Organic Gases" (or "NMOG") shall mean the total mass of oxygenated and non-oxygenated hydrocarbon emissions.~~ To demonstrate compliance with an NMOG standard, NMOG emissions shall be measured in

accordance with the "California Non-Methane Organic Gas Test Procedures" as adopted July 12, 1991 and last amended ~~September 22, 1993~~ June 24, 1996, which is incorporated herein by reference.

a. *Reactivity Adjustment.* For TLEVs, LEVs, and ULEVs certified to operate exclusively on any fuel other than conventional gasoline, and for fuel-flexible and dual-fuel TLEVs, LEVs, and ULEVs when certifying on a fuel other than gasoline, manufacturers shall multiply NMOG exhaust certification levels by the applicable reactivity adjustment factor set forth in section 13 of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k), or established by the Executive Officer pursuant to Appendix VIII of the foregoing test procedures. In addition, natural gas vehicles certifying to TLEV, LEV or ULEV standards shall calculate a reactivity-adjusted methane exhaust emission value by multiplying the methane exhaust certification level by the applicable methane reactivity adjustment factor set forth in section 13 of the above-referenced test procedures. The product of the NMOG exhaust certification levels and the reactivity adjustment factor shall be compared to the exhaust NMOG mass emission standards established for the particular vehicle emission category to determine compliance. For natural gas vehicles, the reactivity-adjusted NMOG value shall be added to the reactivity-adjusted methane value and then compared to the exhaust NMOG mass emission standards established for the particular vehicle emission category to determine compliance.

~~a~~b. *Fleet Average Requirement.* Each manufacturer shall certify PCS or LDTs to meet the exhaust mass emission standards for TLEVs, LEVs, ULEVs, or the exhaust emission standards of sections 1960.1 (e)(1), 1960.1 (f)(1), or 1960.1 (f)(2), Title 13, California Code of Regulations, or as Zero-Emission Vehicles, such that the manufacturer's fleet average NMOG values for California-certified PCS and LDTs from 0-3750 lbs. ~~"Loaded Vehicle Weight" (or "LVW")~~, and LDTs from 3751-5750 lbs. LVW produced and delivered for sale in California are less than or equal to the requirement for the corresponding Model Year, Vehicle Type, and LVW Class in section 1960.1 (g)(2), Title 13, California Code of Regulations.

(4) *NMOG Standards for Fuel-Flexible and Dual-Fuel Vehicles.* Fuel-flexible and dual-fuel PCS and LDTs from 0-5750 lbs. LVW shall be certified to exhaust mass emission standards for NMOG established for the operation of the vehicle on any available fuel other than gasoline, and gasoline.

a. *Reactivity Adjustment.* For TLEVs, LEVs, and ULEVs, when certifying for operation on a fuel other than gasoline, manufacturers shall multiply exhaust NMOG certification levels by the applicable reactivity adjustment factor. In addition to multiplying the exhaust NMOG certification levels by the applicable reactivity adjustment factor, exhaust methane certification levels for natural gas vehicles shall be multiplied ~~multiply the exhaust methane certification level~~ by the applicable methane reactivity adjustment factor and the resulting value shall be added ~~add that value~~ to the reactivity-adjusted NMOG value. The exhaust NMOG certification levels for fuel-flexible or dual-fuel vehicles when certifying on gasoline shall not be multiplied by a reactivity adjustment factor.

b. *Standards for Fuel-Flexible and Dual-Fuel Vehicles Operating on Gasoline.* For PCS and LDTs from 0-~~3750~~ 5750 lbs. LVW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on gasoline shall be:

Vehicle Type	*Loaded Vehicle Weight (LVW)*	*Emission Category*	*Durability Vehicle Basis (g/mi)*	
			50,000 Mile	*100,000 Mile*
PCS, LDT	All, 0-3750	TLEV	0.25	0.31
		LEV	0.125	0.156
		ULEV	0.075	0.090
LDT	3751-5750	TLEV	0.32	0.40
		LEV	0.160	0.200
		ULEV	0.100	0.130

~~(i) For TLEVs, 0.25 g/mi and 0.31 g/mi for 50,000 and 100,000 miles, respectively.~~

~~(ii) For LEVs, 0.125 g/mi and 0.156 g/mi for 50,000 and 100,000 miles, respectively.~~

~~(iii) For ULEVs, 0.075 g/mi and 0.090 g/mi for 50,000 and 100,000 miles, respectively.~~

~~c. For LDTs from 3751-5750 lbs. LVW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on gasoline shall be:~~

~~(i) For TLEVs, 0.32 g/mi and 0.40 g/mi for 50,000 and 100,000 miles, respectively.~~

~~(ii) For LEVs, 0.160 g/mi and 0.200 g/mi for 50,000 and 100,000 miles, respectively.~~

~~(iii) For ULEVs, 0.100 g/mi and 0.130 g/mi for 50,000 and 100,000 miles, respectively.~~

(5) *Highway NOx.* The maximum projected emissions of "Oxides of Nitrogen" (or "NOx") measured on the federal Highway Fuel Economy Test (HWFET; 40 CFR 600 Subpart B) shall be not greater than 1.33 times the applicable light-duty vehicle standards shown in the table. Both the projected emissions and the HWFET standard shall be rounded in accordance with ASTM E29-67 to the nearest 0.1 g/mi before being compared.

(6) *Intermediate In-Use Compliance Standards.* The following standards ~~in parentheses~~ are intermediate in-use compliance standards for 50,000 and 100,000 miles. ~~f~~For PCS and LDTs from 0-5750 lbs. LVW, including fuel-flexible and dual-fuel vehicles when operating on any available fuel other than gasoline.~~;~~ Intermediate in-use compliance standards shall apply to TLEVs through the 1995 model year as follows: ~~, and LEVs and ULEVs through the 1998 model year~~.

	NMOG (g/mi)
PCS and LDTs 0-3750 lbs. LVW	0.188
LDTs 3751-5750 lbs. LVW	0.238

In-use compliance with standards beyond 50,000 miles shall be waived through the 1995 model year for TLEVs, and through the 1998 model year for LEVs and ULEVs. For LEVs and ULEVs, the following intermediate in-use standards shall apply:

Vehicle Type	*Durability Vehicle Basis*	*LEV (g/mi)*			*ULEV (g/mi)*			
		Model Year	*NMOG*	*NOx*	*Model Year*	*NMOG*	*CO*	*NOx*
PCS, 0-3750 lb. LVW LDTs	50,000	through 1998	0.100	0.3	through 1998	0.058	2.6	0.3
	50,000	1999	0.100	0.3	1999-2002	0.055	2.1	0.3
	100,000	1999	0.125	0.4	1999-2002	0.075	3.4	0.4
3751-5750 lb. LVW LDTs	50,000	through 1998	0.128	0.5	through 1998	0.075	3.3	0.5
	50,000	1999	0.130	0.5	1999-2002	0.070	2.8	0.5
	100,000	1999	0.160	0.7	1999-2002	0.100	4.4	0.7

a. *Reactivity Adjustment.* For TLEVs, LEVs, and ULEVs designed to operate on any fuel other than conventional gasoline, including fuel-flexible and dual-fuel vehicles when operating on any fuel other than gasoline, exhaust NMOG mass emission results shall be multiplied by the applicable reactivity adjustment factor to determine compliance with intermediate in-use compliance standards for NMOG. In addition to multiplying the exhaust NMOG emission results by the applicable reactivity adjustment factor, ~~natural gas vehicles shall multiply~~ the exhaust methane emission results for natural gas vehicles shall be multiplied by the applicable methane reactivity adjustment factor and the resulting value shall be added ~~add that value~~ to the reactivity-adjusted NMOG value. Exhaust NMOG mass emissions from fuel-flexible or dual-fuel vehicles when operating on gasoline shall not be multiplied by a reactivity adjustment factor.

b. *Intermediate In-Use Standards for Fuel-Flexible and Dual-Fuel Vehicles Operating on Gasoline.* For fuel-flexible and dual-fuel PCS and LDTs from 0-~~3750~~ 5750 lbs. LVW, intermediate in-use compliance standards for NMOG emissions at 50,000 miles when the vehicle is operated on gasoline shall be:

Vehicle Type	*Loaded Vehicle Weight (LVW)*	*Emission Category*	*Durability Vehicle Basis (g/mi) 50,000 mi*
PCS, LDT	All, 0-3750	TLEV	0.32
		LEV	0.188
		ULEV	0.100
LDT	3751-5750	TLEV	0.41
		LEV	0.238
		ULEV	0.128

Intermediate in-use compliance standards shall apply to TLEVs through the 1995 model year, and to LEVs and ULEVs through the 1998 model year. In-use compliance with standards beyond 50,000 miles shall be waived through the 1995 model year for TLEVs and through the 1998 model year for LEVs and ULEVs.

~~0.32 g/mi, 0.188 g/mi, and 0.100 g/mi for TLEVs, LEVs, and ULEVs, respectively.~~

~~c. For fuel-flexible and dual-fuel LDTs from 3751-5750 lbs. LVW, intermediate in-use compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on gasoline, shall be 0.41 g/mi, 0.238 g/mi, and 0.128 g/mi for TLEVs, LEVs, and ULEVs, respectively.~~

(7) *Diesel Standards.* Manufacturers of diesel vehicles shall also certify to particulate standards at 100,000 miles. For all PCS and LDTs from 0-~~5750~~ 3750 lbs. LVW, the particulate standard is 0.08 g/mi, 0.08 g/mi, and 0.04 g/mi for TLEVs, LEVs, and ULEVs, respectively. For LDTs from 3751-5750 lbs. LVW, the particulate standard is 0.10 g/mi, 0.10 g/mi, and 0.05 g/mi for TLEVs, LEVs and ULEVs, respectively. For diesel vehicles certifying to the standards set forth in Title 13, section 1960.1(g)(1), "NMOG" shall mean non-methane hydrocarbons.

(8) *50°F Requirement.* Manufacturers shall demonstrate compliance with the above standards for NMOG, CO, and NOx at 50°F, according to the procedure specified in section 11k of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k). Hybrid electric, natural gas and diesel-fueled vehicles shall be exempt from 50°F test requirements.

(9) *Limit on In-Use Testing.* In-use compliance testing shall be limited to vehicles with fewer than 75,000 miles.

(10) *HEV Requirements.* Deterioration factors for hybrid electric vehicles shall be based on the emissions and mileage accumulation of the auxiliary power unit. For certification purposes only, Type A hybrid electric vehicles shall demonstrate compliance with 50,000 mile emission standards (using 50,000 mile deterioration factors), and demonstrating compliance with 100,000 mile emission standards shall not be required. For certification purposes only, Type

B hybrid electric vehicles shall demonstrate compliance with 50,000 mile emission standards (using 50,000 mile deterioration factors) and 100,000 mile emission standards (using 75,000 mile deterioration factors). For certification purposes only, Type C hybrid electric vehicles shall demonstrate compliance with 50,000 mile emission standards (using 50,000 mile deterioration factors) and 100,000 mile emission standards (using 100,000 mile deterioration factors).

(g)(2) The fleet average non-methane organic gas exhaust emission values from the passenger cars and light-duty trucks produced and delivered for sale in California by a manufacturer each model year shall not exceed:

FLEET AVERAGE NON-METHANE ORGANIC GAS EXHAUST EMISSION REQUIREMENTS FOR LIGHT-DUTY VEHICLE WEIGHT CLASSES[7,8,9]

[grams per mile (or "g/mi")]

Vehicle Type[1]	*Loaded Vehicle Weight (lbs)*	*Durability Vehicle Basis[7] (mi)*	*Model Year*	*Fleet Average Non-Methane Organic Gases[2,3,4,5,6]*
PC and LDT	All 0-3750	50,000	1994	0.250
			1995	0.231
			1996	0.225
			1997	0.202
			1998	0.157
			1999	0.113
			2000	0.073
			2001	0.070
			2002	0.068
			2003 & subsequent	0.062
LDT	3751-5750	50,000	1994	0.320
			1995	0.295
			1996	0.287
			1997	0.260
			1998	0.205
			1999	0.150
			2000	0.099
			2001	0.098
			2002	0.095
			2003 & subsequent	0.093

(1) "PC" means passenger cars.
"LDT" means light-duty trucks.
"TLEV" means transitional low-emission vehicle.
"LEV" means low-emission vehicle.
"ULEV" means ultra-low-emission vehicle.
"LVW" means loaded vehicle weight.

(2) "Non-Methane Organic Gases" (or "NMOG") ~~shall~~ means the total mass of oxygenated and non-oxygenated hydrocarbon emissions.

(3) *HEV Categories.* For the purpose of calculating fleet average NMOG values, a manufacturer may adjust the certification levels of hybrid electric vehicles (or "HEVs") based on the range of the HEV without the use of the engine. For the purpose of calculating the adjusted NMOG emissions, the following definitions shall apply:

"*Type A HEV*" shall mean an HEV which achieves a minimum range of 60 miles over the All-Electric Range Test as defined in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k).

"*Type B HEV*" shall mean an HEV which achieves a range of 40 - 59 miles over the All-Electric Range Test as defined in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k).

"*Type C HEV*" shall mean an HEV which achieves a range of 0 - 39 miles over the All-Electric Range Test and all other HEVs excluding "Type A" and "Type B" HEVs as defined in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k).

a. For the purpose of calculating fleet average NMOG values, vehicles which have no tailpipe emissions but use fuel-fired heaters and which are not certified as ZEVs shall be treated as "Type A HEV ULEVs."

(4) *Calculation of Fleet Average NMOG Value (PCS and LDTs 0-3750 lbs. LVW).* Each manufacturer's fleet average NMOG value for the total number of PCS and LDTs from 0-3750 lbs. ~~"Loaded Vehicle Weight" (or "LVW")~~ produced and delivered for sale in California shall be calculated in units of g/mi NMOG according to the following equation, where the term "Produced" means produced and delivered for sale in California:

{[(No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1 (e)(1) and Produced) x (0.39)] +

[No. of Vehicles Certified to the Phase-In Exhaust Emission Standards in section 1960.1 (f)(1) and Produced x (0.25)] +

[No. of Vehicles Certified to the Phase-Out Exhaust Emission Standards in section 1960.1 (f)(1) and Produced x (0.39)] +

[(No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1(f)(2) and Produced) x (0.25)] +

[(No. of ~~Transitional Low-Emission Vehicles (or "TLEVs")~~ excluding HEVs and Produced) x (0.125)] +

[(No. of ~~Low-Emission Vehicles (or "LEVs")~~ excluding HEVs and Produced) x (0.075)] +

[(No. of ~~Ultra-Low-Emission Vehicles (or "ULEVs")~~ excluding HEVs and Produced) x (0.040)] +

(HEV contribution factor)} / ÷
(Total No. of Vehicles Produced, Including Zero-Emission Vehicles and HEVs):

a. "HEV contribution factor" shall mean the NMOG emission contribution of HEVs to the fleet average NMOG value. The HEV contribution factor shall be calculated in units of g/mi as follows, where the term "Produced" means produced and delivered for sale in California.

HEV contribution factor =

{[No. of "Type A HEV" TLEVs Produced] x (0.100) +
[No. of "Type B HEV" TLEVs Produced] x (0.113) +
[No. of "Type C HEV" TLEVs Produced] x (0.125)} +
{[No. of "Type A HEV" LEVs Produced] x (0.057) +
[No. of "Type B HEV" LEVs Produced] x (0.066) +
[No. of "Type C HEV" LEVs Produced] x (0.075)} +
{[No. of "Type A HEV" ULEVs Produced] x (0.020) +
[No. of "Type B HEV" ULEVs Produced] x (0.030) +
[No. of "Type C HEV" ULEVs Produced] x (0.040)}

b. "Zero-Emission Vehicles" (or "ZEVs") classified as LDTs 3751-5750 lbs. LVW which have been counted toward the ZEV requirements for PCS and LDTs 0-3750 lbs. LVW as specified in note (9) shall be included in the equation of note (4).

c. Beginning with the 1996 model year, manufacturers that produce and deliver for sale in California PCS and LDTs 0-3750 lbs. LVW that are certified to federal Tier I exhaust emission standards in 40 CFR 86.094-8 and 86.094-9 shall add the following term to the numerator of the fleet average NMOG equation in note (4) calculate their fleet average NMOG values accordingly:

[No. of Vehicles Certified to federal Tier I exhaust emission standards and Produced) x (0.25)]

(5) *Calculation of Fleet Average NMOG Value (LDTs 3751-5750 lbs. LVW).* Manufacturers that certify LDTs from 3751-5750 lbs. LVW, shall calculate a fleet average NMOG value in units of g/mi NMOG according to the following equation, where the term "Produced" means produced and delivered for sale in California:

{[(No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1 (e)(1), and Produced x (0.50)] +
[(No. of Vehicles Certified to the Phase-In Exhaust Emission Standards in section 1960.1 (f)(1), and Produced x (0.32)] +
[(No. of Vehicles Certified to the Phase-Out Exhaust Emission Standards in section 1960.1 (f)(1), and Produced x (0.50)] +
[(No. of Vehicles Certified to the Exhaust Emission Standards in section 1960.1 (f)(2), and Produced x (0.32)] +

[(No. of TLEVs Produced excluding HEVs) x (0.160)] + [(No. of LEVs Produced excluding HEVs) x (0.100)] +

[(No. of ULEVs Produced excluding HEVs) x (0.050)] +

(HEV contribution factor)} ~~/~~ ÷

(Total No. of Vehicles Produced, Including ZEVs and HEVs).

a. "HEV contribution factor" shall mean the NMOG emission contribution of HEVs to the fleet average NMOG. The HEV contribution factor shall be calculated in units of g/mi as follows, where the term "Produced" means produced and delivered for sale in California.

HEV contribution factor =

{[No. of "Type A HEV" TLEVs Produced] x (0.130) +
[No. of "Type B HEV" TLEVs Produced] x (0.145) +
[No. of "Type C HEV" TLEVs Produced] x (0.160)} +
{[No. of "Type A HEV" LEVs Produced] x (0.075) +
[No. of "Type B HEV" LEVs Produced] x (0.087) +
[No. of "Type C HEV" LEVs Produced] x (0.100)} +
{[No. of "Type A HEV" ULEVs Produced] x (0.025) +
[No. of "Type B HEV" ULEVs Produced] x (0.037) +
[No. of "Type C HEV" ULEVs Produced] x (0.050)}

b. Only ZEVs which have been certified as LDTs 3751-5750 lbs. LVW and which have not been counted toward the ZEV requirements for PCS and LDTs 0-3750 lbs. LVW as specified in note (9) shall be included in the equation of note (5).

c. Beginning with the 1996 model year, manufacturers that produce and deliver for sale in California LDTs 3751-5750 lbs. LVW that are certified to the Tier I exhaust emission standards in 40 CFR 86.094-9 shall add the following term to the numerator of the fleet average NMOG equation in note (5) and calculate their fleet average NMOG values accordingly:

[(No. of Vehicles Certified to federal Tier I exhaust emission standards and Produced and Delivered for Sale in California) x (0.32)]

(6) *Requirements for Small Volume Manufacturers.* As used in this subsection, the term "small volume manufacturer" shall mean any vehicle manufacturer with California sales less than or equal to 3000 new PCS, LDTs and MDVs per model year based on the average number of vehicles sold by the manufacturer each model year from 1989 to 1991, except as noted below. For manufacturers certifying for the first time in California, model-year sales shall be based on projected California sales. In 2000 and subsequent model years, small volume manufacturers shall comply with the fleet average NMOG requirements set forth below.

a. Prior to the model year 2000, compliance with the specified fleet average NMOG requirements shall be waived.

b. In 2000 and subsequent model years, small volume manufacturers shall not exceed a fleet average NMOG value of 0.075 g/mi for PCS and LDTs from 0-3750 lbs. LVW calculated in accordance with note (4).

c. In 2000 and subsequent model years, small volume manufacturers shall not exceed a fleet average NMOG value of 0.100 g/mi for LDTs from 3751-5750 lbs. LVW calculated in accordance with note (5).

d. If a manufacturer's average California sales exceeds 3000 units of new PCS, LDTs, and MDVs based on the average number of vehicles sold for any three consecutive model years, the manufacturer shall no longer be treated as a small volume manufacturer and shall comply with the fleet average requirements applicable for larger manufacturers as specified in section 1960.1(g)(2) beginning with the fourth model year after the last of the three consecutive model years.

e. If a manufacturer's average California sales falls below 3000 units of new PCS, LDTs, and MDVs based on the average number of vehicles sold for any three consecutive model years, the manufacturer shall be treated as a small volume manufacturer and shall be subject to requirements for small volume manufacturers as specified in section 1960.1(g)(2) beginning with the next model year.

(7) *Calculation of NMOG Credits/Debits and Procedure for Offsetting Debits.*

a. In 1992 and subsequent model years, manufacturers that achieve fleet average NMOG values lower than the fleet average NMOG requirement for the corresponding model year shall receive credits in units of g/mi NMOG determined as:

{[(Fleet Average NMOG Requirement) - (Manufacturer's Fleet Average NMOG Value)] x (Total No. of Vehicles Produced and Delivered for Sale in California, Including ZEVs and HEVs)}.

~~a.~~ Manufacturers with fleet average NMOG values greater than the fleet average requirement for the corresponding model year shall receive debits in units of g/mi NMOG equal to the amount of negative credits determined by the aforementioned equation. For any given model year, the total g/mi NMOG credits or debits earned for PCS and LDTs 0-3750 lbs. LVW and for LDTs 3751-5750 lbs. LVW shall be summed together. The resulting amount shall constitute the g/mi NMOG credits or debits accrued by the manufacturer for the model year.

b. For the 1994 through 1997 model years, manufacturers shall equalize emission debits within three model years and prior to the end of the 1998 model year by earning g/mi NMOG emission credits in an amount equal to their g/mi NMOG debits, or by submitting a commensurate amount of g/mi NMOG credits to the Executive Officer that were earned previously or acquired from another manufacturer. For 1998 and subsequent model years, manufacturers shall equalize emission debits by the end of the following model year. If emission debits are not equalized within the specified time period, the manufacturer shall be subject to the Health and Safety Code section 43211 civil penalty applicable to a manufacturer which sells a new motor vehicle that does not meet the applicable emission standards adopted by the state board. The cause of action shall be deemed to accrue when the emission debits are not equalized by the end of the specified time period. For the purposes of Health and Safety Code section 43211, the number of vehicles not meeting the

state board's emission standards shall be determined by dividing the total amount of g/mi NMOG emission debits for the model year by the g/mi NMOG fleet average requirement for PCS and LDTs 0-3750 lbs. LVW applicable for the model year in which the debits were first incurred.

c. The g/mi NMOG emission credits earned in any given model year shall retain full value through the subsequent model year. ~~d.~~ The g/mi NMOG value of any credits not used to equalize the previous model-year's debit, shall be discounted by 50% at the beginning of the second model year after being earned, discounted to 25% of its original value if not used by the beginning of the third model year after being earned, and will have no value if not used by the beginning of the fourth model year after being earned.

d. In order to verify the status of a manufacturer's compliance with the fleet average requirements for a given model year, and in order to confirm the accrual of NMOG credits or debits, each manufacturer shall submit an annual report to the Executive Officer which sets forth the production data used to establish compliance, by no later than March 1 of the calendar year following the close of the completed model year.

(8) *Credits for Pre-1994 Model-Year Vehicles.* Manufacturers that produce and deliver for sale in California vehicles certified to the phase-in exhaust emission standards in section 1960.1 (f)(1), or vehicles certified to the exhaust emission standards in sections 1960.1(f)(2) or 1960.1(g)(1) and/or ZEVs, in the 1992 and 1993 model years, shall receive emission credits as determined by the equations in footnotes (4), (5), and (7).

a. For PCS and LDTs from 0-3750 lbs. LVW, the fleet average NMOG requirement for calculating a manufacturer's emission credits shall be 0.390 and 0.334 g/mi NMOG for vehicles certified for the 1992 and 1993 model years, respectively.

b. For LDTs from 3751-5750 lbs. LVW, the fleet average NMOG requirement for calculating a manufacturer's emission credits shall be 0.500 and 0.428 g/mi NMOG for vehicles certified for the 1992 and 1993 model years, respectively.

c. Emission credits earned prior to the 1994 model year shall be considered as earned in the 1994 model year and discounted in accordance with the schedule specified in footnote (7).

(9) *ZEV Requirements*. While meeting the fleet average requirements, each manufacturer shall certify, produce, and deliver for sale in California at least 2% ZEVs each model year from 1998 through 2000, 5% ZEVs in 2001 and 2002, and 10% ZEVs in 2003 and subsequent model years. These percentages shall be applied to the manufacturer's total production of PCS and LDTs 0-3750 lbs. LVW delivered for sale in California.

a. *Calculation of ZEV Credits*. Manufacturers which produce for sale in California more ZEVs than required in a given model year shall earn ZEV credits, which shall be expressed in ~~have~~ units of g/mi NMOG. The amount of ZEV credits earned shall be equal to the number of ZEVs required to be produced and delivered for sale in California for the model year subtracted from the number of ZEVs produced and delivered for sale in the model year and then multiplied by the fleet average requirement for PCS and LDTs 0-3750 lbs. LVW for the model year. All ZEV credits earned prior to the 1998 model year shall be treated as if earned in the 1998 model year and shall be discounted in accordance with notes (7)c ~~and (7)~~d.

b. *Submittal of ZEV Credits.* A manufacturer may meet the ZEV requirements in any given model year by submitting to the Executive Officer a commensurate amount of ZEV credits. These credits may be earned previously by the manufacturer or acquired from another manufacturer. The amount of ZEV credits required to be submitted shall be calculated by subtracting the number of ZEVs produced and delivered for sale in California by the manufacturer for the model year from the number of ZEVs required to be produced by the manufacturer for the model year and then multiplying by the fleet average requirement for PCS and LDTs 0-3750 lbs. LVW for that model year.

c. *Requirement to Make Up a ZEV Deficit.* Manufacturers which certify, produce, and deliver for sale in California fewer ZEVs than required in a given model year shall make up the deficit by the end of the next model year by submitting to the Executive Officer a commensurate amount of ZEV credits. The amount of ZEV credits required to be submitted shall be calculated by subtracting the number of ZEVs produced and delivered for sale in California by the manufacturer for the model year from the number of ZEVs required to be produced by the manufacturer for the model year and then multiplying by the fleet average requirements for PCS and LDTs 0-3750 lbs. LVW for the model year in which the deficit is incurred.

d. *Penalty for Failure to Meet ZEV Requirements.* Any manufacturer which fails to produce and deliver for sale in California the required number of ZEVs or submit an appropriate amount of ZEV credits and does not make up ZEV deficits within the specified time period shall be subject to the Health and Safety Code section 43211 civil penalty applicable to a manufacturer which sells a new motor vehicle that does not meet the applicable emission standards adopted by the state board. The cause of action shall be deemed to accrue when the ZEV deficits are not balanced by the end of the specified time period. For the purposes of Health and Safety Code section 43211, the number of vehicles not meeting the state board's standards shall be calculated according to the following equation:

(No. of ZEVs required to be produced and delivered for sale in California for the model year) - (No of ZEVs actually produced and delivered for sale in California for the model year) - [(Amount of ZEV credits submitted for the model year) / (the fleet average requirement for PCS and LDTs 0-3750 lbs. LVW for the model year)].

e. *ZEV Credits for MDVs and LDTs 3751-5750 lbs. LVW.* ZEVs classified as ~~MDWs~~ MDVs or as LDTs 3751-5750 lbs. LVW may be counted toward the ZEV requirement for PCS and LDTs 0-3750 lbs. LVW and included in the calculation of ZEV credits as specified in note (9)a, if the manufacturer so designates.

f. Small volume manufacturers shall not be required to meet the percentage ZEV requirements. However, small volume manufacturers may earn and market credits for ZEVs they produce and deliver for sale in California.

g. Intermediate volume manufacturers shall not be required to meet the percentage ZEV requirements before the 2003 model year.

(h)(1) [No Change]

(h)(2) The exhaust emissions from new 1992 and subsequent model-year medium-duty low-emission vehicles, ~~and~~ ultra-low-emission vehicles, and super ultra-low-emission vehicles shall not exceed:

EXHAUST EMISSION STANDARDS FOR LOW-EMISSION VEHICLES, ~~AND~~ ULTRA-LOW EMISSION VEHICLES, AND SUPER-ULTRA-LOW-EMISSION VEHICLES IN THE MEDIUM-DUTY VEHICLE WEIGHT CLASS[8,9,10,11,12,14,15,16]

[grams per mile (or "g/mi")]

Test Weight (lbs)[1]	*Durability Vehicle Basis (mi)*	*Vehicle Emission Category[2]*	*Non-Methane Organic Gases[1,3,4]*	*Carbon Monoxide*	*Oxides of Nitrogen[3,5]*	*Particulates[6,7]*
0-3750	50,000	LEV	0.125 ~~(0.188)~~	3.4 ~~(3.4)~~	0.4 ~~(0.4)~~	n/a
		ULEV	0.075 ~~(0.100)~~	1.7 ~~(2.6)~~	0.2 ~~(0.3)~~	n/a
	120,000	LEV	0.180	5.0	0.6	0.08
		ULEV	0.107	2.5	0.3	0.04
3751-5750	50,000	LEV	0.160 ~~(0.238)~~	4.4 ~~(4.4)~~	~~0.7~~ 0.4 ~~(0.7)~~	n/a
		ULEV	0.100 ~~(0.128)~~	~~2.2 (3.3)~~ 4.4	0.4 ~~(0.5)~~	n/a
		SULEV	0.050	2.2	0.2	n/a
	120,000	LEV	0.230	6.4	~~1.0~~ 0.6	0.10
		ULEV	0.143	~~3.2~~ 6.4	~~0.5~~ 0.6	0.05
		SULEV	0.072	3.2	0.3	0.05
5751-8500	50,000	LEV	0.195 ~~(0.293)~~	5.0 ~~(5.0)~~	~~1.1~~ 0.6 ~~(1.1)~~	n/a
		ULEV	0.117 ~~(0.156)~~	~~2.5 (3.8)~~ 5.0	0.6 ~~(0.8)~~	n/a
		SULEV	0.059	2.5	0.3	n/a
	120,000	LEV	0.280	7.3	~~1.5~~ 0.9	0.12
		ULEV	0.167	~~3.7~~ 7.3	~~0.8~~ 0.9	0.06
		SULEV	0.084	3.7	0.45	0.06
8501-10,000	50,000	LEV	0.230 ~~(0.345)~~	5.5 ~~(5.5)~~	~~1.3~~ 0.7 ~~(1.3)~~	n/a
		ULEV	0.138 ~~(0.184)~~	~~2.8 (4.2)~~ 5.5	0.7 ~~(1.0)~~	n/a
		SULEV	0.069	2.8	0.35	n/a
	120,000	LEV	0.330	8.1	~~1.8~~ 1.0	0.12
		ULEV	0.197	~~4.1~~ 8.1	~~0.9~~ 1.0	0.06
		SULEV	0.100	4.1	0.5	0.06
10,001-14,000	50,000	LEV	0.300 ~~(0.450)~~	7.0 ~~(7.0)~~	~~2.0~~ 1.0 ~~(2.0)~~	n/a
		ULEV	0.180 ~~(0.240)~~	~~3.5 (5.3)~~ 7.0	1.0 ~~(1.5)~~	n/a
		SULEV	0.09	3.5	0.5	n/a
	120,000	LEV	0.430	10.3	~~2.8~~ 1.5	0.12
		ULEV	0.257	~~5.2~~ 10.3	~~1.4~~ 1.5	0.06
		SULEV	0.130	5.2	0.7	0.06

(1) "Test Weight" (or "TW") shall mean the average of the vehicle's curb weight and gross vehicle weight.
"Non-Methane Organic Gases" (or "NMOG") means the total mass of oxygenated and non-oxygenated hydrocarbon emissions.

(2) "LEV" means low-emission vehicle.
"ULEV" means ultra-low-emission vehicle.
"SULEV" means super-ultra-low-emission vehicle.

(3) *Compliance with NMOG Standards.* ~~"Non-Methane Organic Gases" (or "NMOG") shall mean the total mass of oxygenated and non-oxygenated hydrocarbon emissions.~~ To determine compliance with an NMOG standard, NMOG emissions shall be measured in accordance with "California Non-Methane Organic Gas Test Procedures" ~~as~~ adopted July 12, 1991 and last amended ~~September 22, 1993~~ June 24, 1996, which is incorporated herein by reference.

a. *Reactivity Adjustment.* For LEVs and ULEVs certified to operate on an available fuel other than conventional gasoline, including fuel-flexible or dual-fuel vehicles when certifying on a fuel other than ~~conventional~~ gasoline, manufacturers shall multiply the NMOG exhaust certification levels by the applicable reactivity adjustment factor set forth in Section 13 of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k), or established by the Executive Officer pursuant to Appendix VIII of the foregoing test procedures. In addition, natural gas vehicles certifying to LEV or ULEV standards shall calculate a reactivity-adjusted methane exhaust emission value by multiplying the methane exhaust certification level by the applicable methane reactivity adjustment factor set forth in section 13 of the above-referenced test procedures. The product of the exhaust NMOG certification levels and the reactivity adjustment factor shall be compared to the exhaust NMOG mass emission standard established for the particular vehicle emission category to determine compliance. For natural gas vehicles, the reactivity-adjusted NMOG value shall be added to the reactivity-adjusted methane value and then compared to the exhaust NMOG mass emission standards established for the particular vehicle emission category to determine compliance.

b. *Pre-1998 NOx standards.* Prior to the 1998 model year, the 50,000 mile and 120,000 mile LEV exhaust mass emission standards for NOx shall be: 0.7 and 1.0 g/mi for MDVs from 3751-5750 lbs. TW, 1.1 and 1.5 g/mi for MDVs from 5751-8500 lbs. TW, 1.3 and 1.8 g/mi for MDVs from 8501-10,000 lbs. TW, and 2.0 and 2.8 g/mi for MDVs from 10,001-14,000 lbs. TW, respectively.

(4) *NMOG Standards for Fuel-Flexible and Dual-Fuel Vehicles.* Fuel-flexible and dual-fuel "Medium-Duty Vehicles" (or "MDVs") from 0-14,000 lbs. TW shall be certified to exhaust mass emission standards for NMOG established for the operation of the vehicle on a fuel other than gasoline, and gasoline.

a. *Reactivity Adjustment.* For LEVs and ULEVs when certifying on the fuel other than gasoline, manufacturers shall multiply the exhaust NMOG certification levels by

the applicable reactivity adjustment factor. In addition to multiplying the exhaust NMOG certification levels by the applicable reactivity adjustment factor, ~~natural gas vehicles shall multiply~~ the exhaust methane certification level for natural gas vehicles shall be multiplied by the applicable methane reactivity adjustment factor and the resulting value shall be added ~~add that value~~ to the reactivity-adjusted NMOG value. When certifying on gasoline, the exhaust NMOG certification levels of fuel-flexible and dual-fuel vehicles shall not be multiplied by a reactivity adjustment factor.

b. *Standards for Fuel-Flexible and Dual-Fuel Vehicles Operating on Gasoline.* For MDVs from 0-~~3750~~ 14,000 lbs. TW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on gasoline shall be:

Test Weight (lbs.)	*Vehicle Emission Category*	*50,000 (g/mi)*	*120,000 (g/mi)*
0-3750	LEV	0.25	0.36
	ULEV	0.125	0.180
3751-5750	LEV	0.32	0.46
	ULEV	0.160	0.230
	SULEV	0.100	0.143
5751-8500	LEV	0.39	0.56
	ULEV	0.195	0.280
	SULEV	0.117	0.167
8501-10,000	LEV	0.46	0.66
	ULEV	0.230	0.330
	SULEV	0.138	0.197
10,001-14,000	LEV	0.60	0.86
	ULEV	0.300	0.430
	SULEV	0.180	0.257

~~(i) For LEVs, 0.25 g/mi and 0.36 g/mi for 50,000 and 120,000 miles, respectively.~~

~~(ii) For ULEVs, 0.125 g/mi and 0.180 g/mi for 50,000 and 120,000 miles, respectively.~~

~~c. For MDVs from 3751-5750 lbs. TW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on gasoline shall be:~~

~~(i) For LEVs, 0.32 g/mi and 0.46 g/mi for 50,000 and 120,000 miles, respectively.~~

~~(ii) For ULEVs, 0.160 g/mi and 0.230 g/mi for 50,000 and 120,000 miles, respectively.~~

~~d. For MDVs from 5751-8500 lbs. TW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on gasoline shall be:~~

~~(i) For LEVs, 0.39 g/mi and 0.56 g/mi for 50,000 and 120,000 miles, respectively.~~

~~(ii) For ULEVs, 0.195 g/mi and 0.280 g/mi for 50,000 and 120,000 miles, respectively.~~

~~e. For MDVs from 8501-10,000 lbs. TW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on gasoline shall be:~~

~~(i) For LEVs, 0.46 g/mi and 0.66 g/mi for 50,000 and 120,000 miles, respectively.~~

~~(ii) For ULEVs, 0.230 g/mi and 0.330 g/mi for 50,000 and 120,000 miles, respectively.~~

~~d. For MDVs from 10,001-14,000 lbs. TW, the applicable exhaust mass emission standard for NMOG when certifying the vehicle for operation on gasoline shall be:~~

~~(i) For LEVs, 0.60 g/mi and 0.86 g/mi for 50,000 and 120,000 miles, respectively.~~

~~(ii) For ULEVs, 0.300 g/mi and 0.430 g/mi for 50,000 and 120,000 miles, respectively.~~

(5) *Highway NOx.* The maximum projected emissions of "Oxides of Nitrogen" (or "NOx") measured on the federal Highway Fuel Economy Test (HWFET; 40 CFR Part 600 Subpart B) shall not be greater than 2.00 times the applicable MDV standards shown in the table. Both the projected emissions and the HWFET standard shall be rounded in accordance with ASTM E29-67 to the nearest 0.1 g/mi before being compared.

(6) Particulate standards are only applicable for diesel vehicles and shall be determined on a 120,000 mile basis.

(7) "n/a" means not applicable.

(8) *Certification of Incomplete and Diesel Vehicles.* Manufacturers have the option of certifying engines used in incomplete and diesel MDVs to the heavy-duty engine standards and test procedures set forth in Section 1956.8(g) or (h), Title 13, California Code of Regulations. Manufacturers certifying incomplete or diesel MDVs to the heavy-duty engine standards and test procedures shall specify in the application for certification an in-use compliance procedure as provided in Section 2139(c), Title 13, California Code of Regulations. For diesel vehicles certifying to the standards set forth in Title 13, section 1960.1(h)(2), "NMOG" shall mean non-methane hydrocarbons.

(9) *Intermediate In-Use Compliance Standards.* The following ~~standards in parentheses are~~ intermediate in-use compliance standards for 50,000 miles~~:~~ and 120,000 miles for ~~For~~ MDVs from 3751 ~~0~~-14,000 lbs. TW, including fuel-flexible and dual-fuel vehicles when operating on ~~any~~ an available fuel other than gasoline, shall apply for the specified model

years only: ~~intermediate in-use compliance standards shall apply to LEVs and ULEVs through the 1999 model year~~.

*Intermediate In-Use Compliance Standards** *(in grams per mile)*										
Emission Category	*Model Year*	*Durability Vehicle Basis (mi)*	*3751-5750 lbs.*		*5751 - 8500 lbs.*		*8501-10,000 lbs.*		*10,001-14,000 lbs.*	
			NMOG	*NOx*	*NMOG*	*NOx*	*NMOG*	*NOx*	*NMOG*	*NOx*
LEV	through 1997	50,000	0.238	0.7	0.293	1.1	0.345	1.3	0.450	2.0
	1998-1999	50,000	0.238	0.6	0.293	0.9	0.345	1.0	0.450	1.5
	2000	50,000	--	0.6	--	0.9	--	1.0	--	1.5
	2000	120,000	--	0.8	--	1.2	--	1.3	--	2.0
ULEV	through 1999	50,000	0.128	0.6	0.156	0.9	0.184	1.0	0.240	1.5
	2000	50,000	0.128	0.6	0.156	0.9	0.184	1.0	0.240	1.5
	2000	120,000	0.160	0.8	0.195	1.2	0.230	1.3	0.300	2.0
	2001-2002	50,000	0.128	--	0.156	--	0.184	--	0.240	--
	2001-2002	120,000	0.160	--	0.195	--	0.230	--	0.300	--
SULEV	through 2002	50,000	0.072	0.3	0.084	0.45	0.100	0.5	0.130	0.7
	2002	120,000	0.100	0.4	0.117	0.6	0.138	0.65	0.180	1.0

In-use compliance with ~~the~~ standards beyond 50,000 miles shall be waived through the 1999 model year for LEVs and ULEVs and through the 2001 model year for SULEVs. Dashes mean that the standard in the section (h)(2) table applies.

*Dashes mean that the standard in the section (h)(2) table applies.

a. *Reactivity Adjustment.* For LEVs and ULEVs designed to operate on an available fuel other than conventional gasoline, including fuel-flexible and dual-fuel vehicles when operating on an available fuel other than gasoline, NMOG exhaust mass emission results shall be multiplied by the applicable reactivity adjustment factor to determine compliance with intermediate in-use compliance standards for NMOG. In addition to multiplying the exhaust NMOG mass emission results by the applicable reactivity adjustment factor, natural gas vehicles shall multiply the exhaust methane mass emission results ~~level~~ by the applicable methane reactivity adjustment factor and add that

value to the reactivity-adjusted NMOG value. For fuel-flexible and dual-fuel vehicles when operating on gasoline, NMOG emission results shall not be multiplied by a reactivity adjustment factor.

b. *Gasoline Standards for Fuel-Flexible and Dual-Fuel Vehicles*. For fuel-flexible and dual-fuel MDVs from 0-~~3750~~ 14,000 lbs. TW, intermediate in-use compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on gasoline, shall be:

Fuel-Flexible and Dual-Fuel MDVs
Intermediate In-Use Compliance Standards

Test Weight (lbs.)	*Vehicle Emission Category*	*50,000 (g/mi)*
0-3750	LEV	0.32
	ULEV	0.188
3751-5750	LEV	0.41
	ULEV	0.238
	SULEV	0.128
5751-8500	LEV	0.49
	ULEV	0.293
	SULEV	0.156
8501-10,000	LEV	0.58
	ULEV	0.345
	SULEV	0.184
10,001-14,000	LEV	0.75
	ULEV	0.450
	SULEV	0.240

Intermediate in-use compliance standards shall apply to LEVs and ULEVs through the 1999 model year and to SULEVs through the ~~2005~~ 2001 model year. Compliance with the standards beyond 50,000 miles shall be waived through the 1999 model year for LEVs and ULEVs and through the 2001 model year for SULEVs. ~~0.32 g/mi and 0.188 g/mi for LEVs and ULEVs, respectively.~~

~~c. For fuel-flexible and dual-fuel MDVs from 3751-5750 lbs. TW, intermediate in-use compliance standards for NMOG emissions at 50,000 miles, when the~~

~~vehicle is operated on gasoline, shall be 0.41 g/mi and 0.238 g/mi for LEVs and ULEVs, respectively.~~

~~d. For fuel-flexible and dual-fuel MDVs from 5751-8500 lbs. TW, intermediate in-use compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on gasoline, shall be 0.49 g/mi and 0.293 g/mi for LEVs and ULEVs, respectively.~~

~~e. For fuel-flexible and dual-fuel MDVs from 8501-10,000 lbs. TW, intermediate in-use compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on conventional gasoline, shall be 0.58 g/mi and 0.345 g/mi for LEVs and ULEVs, respectively.~~

~~f. For fuel-flexible and dual-fuel MDVs from 10,001-14,000 lbs. TW, intermediate compliance standards for NMOG emissions at 50,000 miles, when the vehicle is operated on gasoline, shall be 0.75 g/mi and 0.450 g/mi for LEVs and ULEVs, respectively~~.

(10) *Medium-Duty Vehicle Phase-In Requirements.* Each manufacturer's MDV fleet shall be defined as the total number of California certified MDVs from 0-14,000 lbs. TW produced and delivered for sale in California.

a. Manufacturers of MDVs shall certify an equivalent <u>percentage</u> of ~~25% of~~ their MDV fleet ~~to~~ <u>according to the following phase-in schedule</u>: ~~LEV standards in the 1998 model year, 50% of their MDV fleet to LEV standards in the 1999 model year, 75% of their MDV fleet to LEV standards in the 2000 model year, 95% of their MDV fleet to LEV standards in the 2001 model year, 90% of their MDV fleet to LEV standards in the 2002 model year, and 85% of their MDV fleet to LEV standards in the 2003 and subsequent model years.~~

~~b. Manufacturers of MDVs shall certify an equivalent of 2% of their MDV fleet to ULEV standards in each model year from 1998 to 2000, 5% of their MDV fleet to ULEV standards in the 2001 model year, 10% of their MDV fleet to ULEV standards in the 2002 model year, and 15% of their MDV fleet to ULEV standards in the 2003 and subsequent model years.~~

Model Year	*Vehicles Certified to Title 13 CCR Section 1960.1(h)(1) or (h)(2) (%)*			*Vehicles Certified to Title 13 CCR Section 1956.8(g) or (h) (%)*		
	Tier 1	LEV	ULEV	Tier 1	LEV	ULEV
1998	73	25	2	100	0	0
1999	48	50	2	100	0	0
2000	23	75	2	100	0	0
2001	0	80	20	100	0	0
2002	0	70	30	0	100	0
2003	0	60	40	0	100	0
2004 +	0	60	40	0	0	100

c. The percentages shall be applied to the manufacturers' total production of California-certified medium-duty vehicles delivered for sale in California.

d. These requirements shall not apply to small volume manufacturers. Small volume manufacturers shall comply with the requirements of note (16) below.

(11) *Definition of HEV.* For the purpose of calculating "Vehicle Equivalent Credits" (or "VECs"), the contribution of hybrid electric vehicles (or "HEVs") will be calculated based on the range of the HEV without the use of the engine. For purpose of calculating the contribution of HEVs to the VECs, the following definitions shall apply:

"*Type A HEV*" shall mean an HEV which achieves a minimum range of 60 miles over the All-Electric Range Test as defined in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k).

"*Type B HEV*" shall mean an HEV which achieves a range of 40 - 59 miles over the All-Electric Range Test as defined in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k).

"*Type C HEV*" shall mean an HEV which achieves a range of 0 - 39 miles over the All-Electric Range Test and all other HEVs excluding "Type A" and "Type B" HEVs as defined in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k).

a. For the purpose of calculating VECs, electric vehicles which utilize fuel fired heaters and which are not otherwise certified as ZEVs shall be treated as "Type A HEV ULEVs."

(12) Calculation of Vehicle Equivalent Credits. In 1992 and subsequent model years, manufacturers that produce and deliver for sale in California MDVs in excess of the

equivalent requirements for LEVs and/or ULEVs certified to the exhaust emission standards set forth in this section (h)(2) or Title 13, CCR Section 1956.8(h), shall receive VECs calculated in accordance with the following equation, where the term "Produced" means produced and delivered for sale in California:

{[(No. of LEVs Produced excluding HEVs) + (No. of "Type C HEV" LEVs Produced)] +
[(No. of "Type A HEV" LEVs Produced) x (1.2)] +
[(No of "Type B HEV" LEVs Produced) x (1.1)] -
(Equivalent No. of LEVs Required to be Produced)} +
{(1.4) x [(No. of ULEVs Produced excluding HEVs) + (No. of "Type C HEV" ULEVs Produced)] +
[(1.7) x (No. of "Type A HEV" ULEVs Produced)] +
[(1.5) x (No. of "Type B HEV" ULEVs Produced)] -
[(1.4) x (Equivalent No. of ULEVs Required to be Produced)]} +
{[(1.7) x [(No. of SULEVs Produced excluding HEVs) + (No. of "Type C HEV" SULEVs Produced)] +
[(No. of "Type A HEV" SULEVs Produced) x (1.7)] +
[(No. of "Type B HEV" SULEVs) x (1.5)] -
[(1.7) x [(Equivalent No. of SULEVs Required to be Produced)]} +
[(2.0) x (No. of ZEVs Certified and Produced as MDVs)].

a. Manufacturers that fail to produce and deliver for sale in California the equivalent quantity of MDVs certified to LEV and/or ULEV exhaust emission standards, shall receive "Vehicle-Equivalent Debits" (or "VEDs") equal to the amount of negative VECs determined by the aforementioned equation.

b. Manufacturers shall equalize emission debits within one model year by earning VECs in an amount equal to their previous model-year's total of VEDs, or by submitting a commensurate amount of VECs to the Executive Officer that were earned previously or acquired from another manufacturer. Any manufacturer which fails to equalize emission debits within the specified time period shall be subject to the Health and Safety Code civil penalty applicable to a manufacturer which sells a new motor vehicle that does not meet the applicable emission standards adopted by the state board. The cause of action shall be deemed to accrue when the emission debits are not equalized by the end of the specified time period. For the purposes of Health and Safety Code section 43211, the number of vehicles not meeting the state board's emission standards shall be equal to the amount of VEDs incurred.

c. The VECs earned in any given model year shall retain full value through the subsequent model year.

d. The value of any VECs not used to equalize the previous model-year's debit, shall be discounted by 50% at the beginning of second model year after being earned, discounted to 25% of its original value if not used by the beginning of the third

model year after being earned, and will have no value if not used by the beginning of the fourth model year after being earned.

e. Any VECs earned prior to the 1998 model year shall be treated as earned in the 1998 model year and discounted in accordance with the schedule specified in note (12)(d).

f. Only ZEVs certified as MDVs shall be included in the calculation of VECs.

g. In order to verify the status of a manufacturer's compliance with the phase-in requirements of this section and in order to confirm the accrual of VECs or VEDs, each manufacturer shall submit an annual report to the Executive Officer which sets forth the production data used to establish compliance by no later than March 1 of the calendar year following the close of the model year.

(13) *50° F Requirement.* Manufacturers shall demonstrate compliance with the above standards for NMOG, carbon monoxide, and oxides of nitrogen at 50°F, according to the procedure specified in Section 11k of the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as incorporated by reference in section 1960.1(k). Hybrid electric, natural gas and diesel-fueled vehicles are exempt from 50°F test requirements.

(14) In-use compliance testing shall be limited to vehicles with fewer than 90,000 miles.

(15) *HEV Requirements.* Deterioration factors for hybrid electric vehicles shall be based on the emissions and mileage accumulation of the auxiliary power unit. For certification purposes only, Type A hybrid electric vehicles shall demonstrate compliance with 50,000 mile emission standards (using 50,000 mile deterioration factors), and demonstrating compliance with 120,000 mile emission standards shall not be required. For certification purposes only, Type B hybrid electric vehicles shall demonstrate compliance with 50,000 mile emission standards (using 50,000 mile deterioration factors) and 120,000 mile emission standards (using 90,000 mile deterioration factors). For certification purposes only, Type C hybrid electric vehicles shall demonstrate compliance with 50,000 mile emission standards (using 50,000 mile deterioration factors) and 120,000 mile emission standards (using 120,000 mile deterioration factors).

(16) *Requirements for Small Volume Manufacturers.* As used in Section 1960.1(h)(2), the term "small volume manufacturer" shall mean any vehicle manufacturer with California sales less than or equal to 3000 new PCs, LDTs, and MDVs per model year based on the average number of vehicles sold by the manufacturer each model year from 1992 to 1994, except as otherwise noted below. For manufacturers certifying for the first time in California, model-year sales shall be based on projected California sales. In 2001 and subsequent model years, small volume manufacturers shall comply with the requirements set forth below.

a. Prior to the model year 2001, small volume manufacturers shall not be required to certify, produce, or deliver LEVs and ULEVs for sale in California.

b. In 2001 and subsequent model years, small volume manufacturers shall certify, produce, and deliver for sale in California LEVs in a quantity equivalent to 100% of their MDV fleet.

c. If a manufacturer's average California sales exceeds 3000 units of new PCs, LDTs, and MDVs based on the average number of vehicles sold for any three consecutive model years, the manufacturer shall no longer be treated as a small volume manufacturer and shall comply with the LEV and ULEV requirements applicable for larger manufacturers as specified in Section 1960.1(h)(2) beginning with the fourth model year after the last of the three consecutive model years.

d. If a manufacturer's average California sales falls below 3000 units of new PCs, LDTs, and MDVs based on the average number of vehicles sold for any three consecutive model years, the manufacturer shall be treated as a small volume manufacturer and shall be subject to requirements for small volume manufacturers as specified in Section 1960.1(h)(2) beginning with the next model year.

(i) and (j) [No Change]

(k) The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1981 through 1987 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," adopted by the state board on November 23, 1976, as last amended May 20, 1987, and in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," adopted by the state board on May 20, 1987, as last amended ~~September 22, 1994~~ June 24, 1996, both of which are incorporated herein by reference.

(l) With respect to any new vehicle required to comply with the standards set forth in paragraphs (a) through (fh), the manufacturer's written maintenance instructions for in-use vehicles shall not require scheduled maintenance more frequently than or beyond the scope of maintenance permitted under the test procedures referenced in paragraph (k) above. Any failure to perform scheduled maintenance shall not excuse an emissions violation unless the failure is related to or causative of the violation.

(m) through (p) [No Change]

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43104, and 43105, Health and Safety Code. Reference: Sections 39002, 39003, 39667, 43000, 43009.5, 43013, 43018, 43100, 43101, 43101.5, 43102, 43103, 43104, 43105, 43106, 43107, and 43204 ~~and~~ - 43205.5, Health and Safety Code.

Amend Title 13, California Code of Regulations, section 1956.8, as follows:

Section 1956.8. Exhaust Emission Standards and Test Procedures - 1985 and Subsequent Model Heavy-Duty Engines and Vehicles.

(a) through (b) [No Change]

(c)(1) The exhaust emissions from (A) new 1987 ~~and subsequent~~ through 2003 model heavy-duty Otto-cycle engines~~;~~ (except methanol-fueled engines and except heavy-duty Otto-cycle natural-gas-fueled and ~~liquified~~ liquefied-petroleum-gas-fueled Otto-cycle engines derived from diesel-cycle engines) and (B) from new 1993 ~~and subsequent~~ through 2003 model heavy-duty methanol-fueled Otto-cycle engines~~;~~ (except in all cases engines used in medium-duty vehicles~~;~~) shall not exceed:

Exhaust Emission Standards
(grams per brake horsepower-hour)

Model Year	*Total Hydrocarbons or OMHCE*[A]	*Optional Non-Methane Hydrocarbons*[A]	*Carbon Monoxide*[B]	*Oxides of Nitrogen*
1987[C]	1.1[D] 1.9[E]		14.4[D] 37.1[E]	10.6 10.6
1988-1989	1.1[D] 1.9[E]		14.4[D] 37.1[E]	6.0 6.0
1990	1.1[D] 1.9[E]	0.9[D] 1.7[E]	14.4[D] 37.1[E]	6.0 6.0
1991-1994	1.1[D] 1.9[E]	0.9[D] 1.7[E]	14.4[D] 37.1[E]	5.0 5.0
1995 - 1997	1.9[E]	1.7[E]	37.1[E]	5.0
1995-1997	1.9[E]	1.7[E]	37.1[E]	2.5-0.5[F]
1998 ~~and subsequent~~ - 2003	1.9[E]	1.7[E]	37.1[E]	4.0
1998 ~~and subsequent~~ -2003	1.9[E]	1.7[E]	37.1[E]	1.5-0.5[F]

A The total or optional non-methane hydrocarbon standards apply to petroleum-fueled, natural-gas-fueled and liquefied-petroleum-gas-fueled engines. The Organic Material Hydrocarbon Equivalent, or OMHCE, standards apply to methanol-fueled engines.

B Carbon Monoxide emissions from engines utilizing exhaust aftertreatment technology shall also not exceed 0.5 percent of the exhaust gas flow at curb idle.

C Manufacturers with existing heavy-duty Otto-cycle engines certified to the California 1986 steady-state emission standards and test procedures may as an option certify those engines, for the 1987 model year only, in accordance with the standards and test procedures for 1986 heavy-duty Otto-cycle engines established in Section 1956.7.

D These standards are applicable to Otto-cycle engines intended for use in all heavy-duty vehicles.

E Applicable to heavy-duty Otto-cycle engines intended for use only in vehicles with a gross vehicle weight rating greater than 14,000 pounds. Also, as an option, a manufacturer may certify one or more 1988-1994 Otto-cycle heavy-duty engine configurations intended for use in all heavy-duty vehicles to these emission standards provided that the total model-year sales of such configurations(s) being certified to these emission standards represent no more than 5 percent of total model-year sales of all Otto-cycle heavy-duty engines intended for use in vehicles with a Gross Vehicle Weight Rating of up to 14,000 pounds by the manufacturer.

F These are optional standards and apply to all heavy-duty engines intended for use only in vehicles with a gross vehicle weight greater than 14,000 pounds. A manufacturer may elect to certify to an optional standard between the values, inclusive, by 0.5 grams per brake horsepower-hour increments.

(2) [No Change]

(3) The exhaust emissions from new 2004 and subsequent model heavy-duty Otto-cycle engines shall not exceed[A]:

(a) Non-Methane Hydrocarbons plus Oxides of Nitrogen: 2.5 grams per brake horsepower-hour with non-methane hydrocarbons not to exceed 0.5 grams per brake horsepower-hour; or 2.4 grams per brake horsepower-hour;
(b) Carbon Monoxide: 37.1 grams per brake horsepower-hour.

A. [The U.S. EPA is considering the adoption of amendments to the federal emission standards for heavy-duty Otto-cycle engines as they existed June 24, 1996. If the U.S. EPA promulgates amendments to the emission standards for this category, the ARB will hold a noticed public hearing within one year of such promulgation to consider the adoption of similar or identical standards in California.]

(d) The test procedures for determining compliance with standards applicable to 1987 and subsequent model heavy-duty Otto-cycle engines and vehicles are set forth in the "California Exhaust Emission Standards and Test Procedures for 1987 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles," adopted April 25, 1986, as last amended ~~June 29, 1995~~ June 24, 1996, which is incorporated by reference herein.

(e) through (g) [No Change]

(h) The exhaust emissions from new 1992 and subsequent model-year engines used in incomplete medium-duty low-emission vehicles, ~~and~~ ultra-low-emission vehicles, and super-ultra-low-emission vehicles, and for diesel engines used in medium-duty low-emission vehicles, ~~and~~ ultra-low-emission vehicles and super-ultra-low-emission vehicles shall not exceed:

Exhaust Emission Standards for Engines Used in Incomplete Medium-Duty Low-Emission Vehicles, ~~and~~ Ultra-Low-Emission Vehicles, and Super Ultra-Low-Emission Vehicles, and for Diesel Engines Used in Medium-Duty Low-Emission Vehicles, ~~and~~ Ultra-Low-Emission Vehicles, and Super Ultra-Low-Emission Vehicles[A,F]
(grams per brake horsepower-hour)

Model Year	*Vehicle Emissions Category[B]*	*Carbon Monoxide*	*Non-Methane Hydrocarbons and Oxides of Nitrogen[C]*	*Formaldehyde*	*Particulates[D]*
1992[E] ~~and subsequent~~ - 2001	LEV	14.4	3.5	0.050	0.10
2002-2003[E]	LEV	14.4	3.0	0.050	0.10
1992-2003[E,H]	ULEV	~~7.2~~ 14.4	2.5	~~0.025~~ 0.050	~~0.05~~ 0.10
2004 and subsequent	ULEV - Opt A.	14.4	2.5[G,I]	0.050	0.10
2004 and subsequent	ULEV - Opt. B	14.4	2.4[G,I]	0.050	0.10
1992 and subsequent	SULEV	7.2	2.0	0.025	0.05

A. This set of standards is optional. Manufacturers of engines used in incomplete medium-duty vehicles or diesel engines used in medium-duty vehicles from 8501-14,000 pounds~~,~~ gross vehicle weight may choose to comply with these standards as an alternative to the primary emission standards and test procedures specified in section 1960.1, Title 13, California Code of Regulations. Manufacturers that choose to comply with these optional

heavy-duty standards and test procedures shall specify, in the application for certification, an in-use compliance test procedure, as provided in section 2139(c), Title 13, California Code of Regulations.

B. "LEV" means low-emission vehicle.
"ULEV" means ultra-low-emission vehicle.
"SULEV" means super ultra-low-emission vehicle.

C. This standard is the sum of the individual non-methane hydrocarbon emissions and oxides of nitrogen emissions. For methanol-fueled engines, non-methane hydrocarbons shall mean organic material hydrocarbon equivalent ("OMHCE").

D. This standard shall only apply to diesel engines and vehicles.

E. Manufacturers may certify engines used in incomplete medium-duty vehicles or diesel engines used in medium-duty vehicles to these standards to meet the requirements of section 1956.8(g), Title 13, California Code of Regulations.

F. In-use compliance testing shall be limited to vehicles or engines with fewer than 90,000 miles.

G. [The U.S. EPA is considering the adoption of amendments to the federal emission standards for engines used in incomplete medium-duty vehicles or diesel engines used in medium-duty vehicles as they existed June 24, 1996. If the U.S. EPA promulgates amendments to the emission standards for this category, the ARB will hold a noticed public hearing within one year of such promulgation to consider the adoption of similar or identical standards in California.]

H. For engines certified to the 3.5 grams per brake horsepower-hour (g/bhp-hr) LEV standards, the in-use compliance standard shall be 3.7 g/bhp-hr for the first two model years of introduction. For engines certified to the 2002 and 2003 model year LEV standards, the in-use compliance standard shall be 3.2 g/bhp-hr. For engines certified to the 1992 through 2003 model year ULEV standards, the in-use compliance standard shall be 2.7 g/bhp-hr for the first two model years of introduction. For engines certified to the 1992 and subsequent SULEV standards, the in-use compliance standard shall be 2.2 g/bhp-hr for the first two model years of introduction.

I. Manufacturers have the option of certifying to either option A or B. Manufacturers electing to certify to Option A must demonstrate that the NMHC emissions do not exceed 0.5 g/bhp-hr.

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43103, 43104, and 43806, Health and Safety Code, and Vehicle Code section 28114. Reference: Sections 39002, 39003, 43000, 43013, 43018, 43100, 43101, 43101.5, 43102, 43103, 43104, 43106, 43204, and 43806, Health and Safety Code.

Amend Section 1965, Title 13, California Code of Regulations to read as follows:

Section 1965. Emission Control and Smog Index Labels - 1979 and Subsequent Model-Year Motor Vehicles.

In addition to all other requirements, emission control labels required by California certification procedures and smog index labels shall conform to the "California Motor Vehicle Emission Control and Smog Index Label Specifications," adopted March 1, 1978, as last amended ~~March 24, 1994~~ June 24, 1996 (as corrected September 20, 1996), which is incorporated herein by reference.

NOTE: Authority cited: Sections 39600, ~~and~~ 39601~~;~~ and 43200, Health and Safety Code. Reference: Sections 39002, 39003, 4300, 43013, 43100, 43101, 43102, 43103, 43104, ~~and~~ 43107~~;~~ and 43200, Health and Safety Code.

Amend Title 13, California Code of Regulations, section 2061 to read as follows:

Section 2061. Assembly-Line Test Procedures - 1983 and Subsequent Model-Years.

New 1983 ~~and subsequent~~ through 1997 model-year passenger cars, light-duty trucks, and medium-duty vehicles, excluding zero-emission vehicles and medium-duty vehicles certified according to the optional standards and test procedures of section 1956.8, Title 13, California Code of Regulations, subject to certification and manufactured for sale in California shall be tested in accordance with the "California Assembly-Line Test Procedures for 1983 ~~and Subsequent~~ Through 1997 Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles," adopted November 24, 1981, as last amended ~~September 22, 1993~~ June 24, 1996, which is incorporated herein by reference, including federally certified light-duty motor vehicles, except as provided in "Guidelines for Certification of 1983 and Subsequent Model-Year Federally Certified Light-Duty Motor Vehicles for Sale in California," adopted July 20, 1982, as last amended July 12, 1991, which is incorporated herein by reference. For vehicles certified to NMOG standards, any reference to NMHC standards in "California Assembly-Line Test Procedures for 1983 ~~and Subsequent~~ Through 1997 Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles" shall imply NMOG standards.

Note: Authority cited: Sections 39515, 39600, 39601, 43013, 43018, 43101, 43104, and 43210, Health and Safety Code. Reference: Sections 39002, 39003, 39500, 43000, 43013, 43018, 43100, 43101, 43101.5, 43102, 43103, 43104, 43105, 43106, 43204, 43210, 43211, and 43212, Health and Safety Code.

Add new Section 2062, Title 13, California Code of Regulations to read as follows:

Section 2062. Assembly-Line Test Procedures - 1988 and Subsequent Model Years.

New 1998 and subsequent model-year passenger cars, light-duty trucks, and medium-duty vehicles, subject to certification and manufactured for sale in California, except for zero-emission vehicles and medium-duty vehicles certified according to the optional standards and test procedures of section 1956.8, Title 13, California Code of Regulations, shall be tested in accordance with the "California Assembly-Line Test Procedures for 1998 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles," adopted June 24, 1996 which is incorporated herein by reference. These test procedures shall also apply to federally certified light-duty motor vehicles, except as provided in "Guidelines for Certification of 1983 and Subsequent Model-Year Federally Certified Light-Duty Motor Vehicles for Sale in California," adopted July 20, 1982, as last amended July 12, 1991, which is incorporated herein by reference.

NOTE: Authority cited: Sections 39515, 39600, 39601, 43013, 43018, 43101, 43104 and 43210, Health and Safety Code. Reference: Sections 39002, 39003, 39500, 43000, 43013, 43018, 43100, 43101, 43101.5, 43102, 43103, 43104, 43105, 43106, 43204, 43210, 43211, and 43212, Health and Safety Code.

Amend Section 2101, Title 13, California Code of Regulations to read as follows:

Section 2101. Compliance Testing and Inspection - New Vehicle Selection, Evaluation, and Enforcement Action.

(a) [No Change]

(b) If the vehicles are selected for compliance testing, the selection and testing of vehicles and the evaluation of data shall be made in accordance with the "California New Vehicle Compliance Test Procedures," adopted by the state board on June 24, 1976 and last amended ~~May 9, 1979~~ June 24, 1996. Motorcycles scheduled for compliance testing shall be selected, tested, and evaluated in accordance with the "California New Motorcycle Compliance Test Procedures," adopted by the state board on June 30, 1977, and amended November 24, 1981.

(c) [No Change]

NOTE: Authority cited: Sections 39600, 39601 and 43104, Health and Safety Code. Reference: Sections 39002, 39003, 39500, 43000, 43106, 43202, ~~and~~ 43210, 43211 and 43212, Health and Safety Code.

Amend Title 13, California Code of Regulations, section 2292.1 to read as follows:

Section 2292.1. Fuels Specifications for M100 Fuel Methanol

The following standards apply to M-100 fuel methanol
(The identified test methods are incorporated herein by reference):

Specifications for M-100 Fuel Methanol

Specification	*Value*	*Test Method*
* * * * *		
~~Luminosity~~	~~Shall produce a luminous flame, which is visible under maximum daylight conditions, throughout the entire burn duration. Applicable 1/1/95.~~[c]	
* * * * *		

[c] ~~This requirement shall not apply where the person selling, supplying, or using the M100 fuel methanol demonstrates that it will be used as a motor vehicle fuel only in vehicles that are equipped with a system for automatically detecting and suppressing on board fires or a system for on board luminosity enhancement.~~

NOTE: Authority cited: Section 39600, 39601, 43013, 43018, and 43101, Health and Safety Code; and *Western Oil and Gas Ass'n v. Orange County Air Pollution Control District,* 14 Cal3.d 411, 121 Cal.Rptr. 249 (1975). Reference: Sections 39000, 39001, 39002, 39003, 39010, 39500, 40000, 43000, 43016, 43018 and 43101, Health and Safety Code; and *Western Oil and Gas Ass'n v. Orange County Air Pollution Control District,* 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975).