State of California
AIR RESOURCES BOARD

PROPOSED

CALIFORNIA MOTOR VEHICLE EMISSION CONTROL AND SMOG INDEX LABEL SPECIFICATIONS

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NOTE: The regulatory amendments proposed in this rulemaking are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions from the version of the test procedures as amended on June 28, 1995. Modifications to the originally noticed text (August, 1995) are designated by ***bold italics*** and ~~***bold strikeout***~~ to represent additions and deletions, respectively. Modifications to the modified text (released October 20, 1995) are designed by ***underlined bold italics*** and ~~***underlined bold strikeout***~~ to represent additions and deletions, respectively.

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California Motor Vehicle Emission Control and Smog Index Label Specifications

1. *Purpose*. The Air Resources Board recognizes that certain emissions-critical or emissions-related parts must be properly identified and maintained in order for vehicles and engines to meet the applicable emission standards. The purpose of these specifications is: (1) to require motor vehicle or motor vehicle engine manufacturers to affix a label (or labels) on each production vehicle in order to provide the vehicle owner and service mechanic with information necessary for the proper maintenance of these parts in customer use and (2) to require that smog index labels be affixed to motor vehicle windows as provided in Health and Safety Code section 43200.5. These Emission Control and Smog Index Label Specifications are incorporated by reference in Section 1965, Title 13, California Code of Regulations.

2. *Applicability*.

(a) These specifications for tune-up labels, vehicle emission configuration bar-code labels, and vehicle identification number bar-code labels shall apply to all new 1979 and subsequent model-year passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty engines, and to all new 1982 and subsequent model year motorcycles certified to the applicable emission standards pursuant to California Health and Safety Code Sections 43100 and 43107. ***The 'unleaded gasoline only' labeling requirements in section 3.(d) do not apply to 1997 and subsequent model year vehicles.***

(b) The specifications for smog index labels shall apply to all new passenger cars and light-duty trucks. This labeling requirement shall ~~*apply 90 days after both of the following occur*~~ ***be effective starting with the 1998 model year.***

~~*(1) The system required by subdivision (b) of Section 44060 of the Health and Safety Code for the electronic filing of certificates of compliance or noncompliance is determined to be operational by the Department of Consumer Affairs and that fact is reported by the department to the California Secretary of State.*~~

~~*(2) Both the San Diego County Air Pollution Control District and the Ventura County Air Pollution Control District have sufficient funds available to implement the pilot program established pursuant to subdivision (b) of Section 43705 of the Health and Safety Code, as determined by each of those districts and reported by each district to the California Secretary of State.*~~

~~*The labeling requirement for smog index labels shall become inoperative five years from the date determined above.*~~

~~(b)~~(c) Any vehicles or classes of vehicles exempt from exhaust emission standards pursuant to ~~Article 2, Subchapter 1, Chapter 3,~~ Title 13 of the California Code of Regulations shall also be exempt from the requirements of these specifications except Zero-Emission Vehicles (ZEVs) certified by the Air Resources Board for use in California.

~~(c)~~(d) The responsibility for compliance with these specifications shall rest with the motorcycle, light-duty vehicle, medium-duty vehicle, or heavy-duty engine manufacturer who certified such vehicles or engines.

3. Emission Control *Labels* ~~*Content and Location*~~. A plastic or metal tune-up label, and in accordance with Section b, a machine-readable vehicle emission configuration (VEC) bar-code label made of paper, plastic, metal, or other permanent material, shall be welded, riveted or otherwise permanently attached to an area within the engine compartment (if any) or to the engine in such a way that it will be readily visible to the average person after installation of the engine in a vehicle. In accordance with Section b, a machine-readable vehicle identification number (VIN) bar-code label made of paper, plastic, metal, or other permanent material shall be affixed in a readily visible location to either the door-latch post next to the driver's seating position, the door edge that meets this door-latch post, or above the instrument panel in a location clearly visible through the lower left corner of the windshield.

In selecting an acceptable location, the manufacturer shall consider the possibility of accidental damage (e.g., possibility of tools or sharp instruments coming in contact with the label) and accessibility for a bar-code scanner, as applicable. Each label shall be affixed in such a manner that it cannot be removed without destroying or defacing the label, and shall not be affixed to any part which is likely to be replaced during the vehicle's useful life. For motorcycles, passenger cars, light-duty trucks, and medium-duty vehicles, the label(s) shall not be affixed to any equipment which is easily detached from the vehicle.

(a) The tune-up label shall contain the following information lettered in the English language in block letters and numerals which shall be of a color that contrasts with the background of the label:

i. The label heading shall read: "Vehicle Emission Control Information" for passenger cars and motorcycles; "Important Vehicle Information" for light-duty and medium-duty trucks; and "Important Engine Information" for heavy-duty engines.

ii. Full corporate name and trademark of the manufacturer.

iii. For 1993 and subsequent model-year vehicles and engines designed to be capable of operating on fuels other than gasoline, the statement "This _____ (specify vehicle or engine, as applicable) is certified to operate on _____ (specify operating fuel[s])."

iv. Engine family identification, model designation, engine displacement (in cubic centimeters or liters), and for all 1993 and subsequent model-year vehicles the statement, "_____ (specify OB~~H~~D I or OB~~H~~D II, as applicable) certified" or "OB~~H~~D Exempt" for all 1990 and subsequent model-year vehicles which do not have an Air Resources Board approved on-board diagnostic system. Motorcycles and ZEVs are exempt from these requirements.

v. Identification of the Exhaust Emission Control System: Abbreviations used shall be in accordance with SAE J1930, ~~JUN1988~~ JUN 1993, including the following nomenclature unless the Executive Officer approves a more current version of SAE J1930 (ZEVs are exempt from these requirements):

	OC -	Oxidation Catalyst Only;
	TWC -	Three-Way Catalyst;
	TWC+OC -	Three-Way Catalyst + Oxidation Catalyst;
*	EHOC -	Electrically Heated Oxidation Catalyst;
*	EHTWC -	Electrically Heated Three-Way Catalyst;
	WU-TWC -	Warm-Up Catalyst with Three-Way Catalyst;
	WU-OC -	Warm-Up Catalyst with Oxidation Catalyst;
	AIR -	Secondary Air Injection (Pump);
	PAIR -	Pulsed Secondary Air Injection;
	CAC -	Charge Air Cooler;
	SC -	Supercharger;
	TC -	Turbocharger;
	DFI -	Direct Fuel Injection ~~(Diesel)~~;
	~~ID~~FI -	Indirect Diesel Injection;
	~~TOC~~CTOX -	Continuous Trap Oxidizer ~~Continuous~~;
	~~TOP~~PTOX -	Periodic Trap Oxidizer ~~Periodic~~;
*	FFS -	Flexible Fuel Sensor;
	O2S -	Oxygen Sensor;
	HO2S -	Heated Oxygen Sensor;
	EGR -	Exhaust Gas Recirculation;
	EM -	Engine Modification;
	~~CIS~~ CFI -	Continuous Fuel Injection;
	~~MPI~~ MFI -	Multi~~point~~port (Electronic) Fuel Injection, (Central) Multiport Fuel Injection;
	TBI -	Throttle Body (Electronic) Fuel Injection;
	~~SMPI~~ SFI -	Sequential Multipoint (Electronic) Fuel Injection; and
	SPL -	Smoke Puff Limiter; ~~and~~
	~~TR -~~	~~Thermal Reactor.~~

* Pending confirmation as SAE protocol

The Executive Officer shall recommend abbreviations for components not listed in SAE J1930, ~~JUN1988~~ JUN 1993.

vi. For Otto-cycle engines the tune-up specifications and adjustments recommended by the manufacturer, including, if applicable: valve lash, ignition timing, idle air fuel mixture setting procedure and value (e.g., idle CO, idle speed drop), and high idle speed. For diesel engines the specifications and adjustments recommended by the manufacturer, including, if applicable: initial injection timing, and fuel rate (in mm^3/stroke) at advertised horsepower. For the specifications listed above, which are not recommended by the manufacturer for adjustment, the manufacturer shall

include in lieu of the "specifications" the single statement "no other adjustments needed." These specifications shall indicate the proper transmission position during tune-up and what accessories, if any (e.g., air conditioner), should be in operation, and what systems, if any (e.g., vacuum advance, air pump), should be disconnected during the tune-up. For all vehicles except ZEVs, the instructions for tune-up adjustments shall be sufficiently clear on the label so as to preclude the need for a mechanic or vehicle owner to refer to another document in order to correctly perform the adjustments.

vii. For motorcycles only, any specific fuel or engine lubricant requirements (e.g., lead content, research octane number, engine lubricant type).

viii. For heavy-duty engines, the date of engine manufacture (month and year). A manufacturer may, in lieu of printing the month of manufacture on the engine label, maintain a record of the month of engine manufacture. The manufacturer shall submit this record to the Executive Officer upon request.

ix. An unconditional statement of compliance with the appropriate model-year California regulations; for example, "This vehicle (or engine, as applicable) conforms to California regulations applicable to ___ model-year new ____ (for 1992 and subsequent model years, specify TLEV, LEV, ULEV, SULEV, or ZEV, as applicable) (specify motorcycles, passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty Otto-cycle engines, or heavy-duty diesel engines, as applicable)." For federally certified vehicles certified for sale in California the statement must include the phrase "conforms to U.S. EPA regulations and is certified for sale in California." For Class III motorcycles for sale in California, the statement must include the phrase "is certified to ___ HC engine family exhaust emission standard in California." For incomplete light-duty truck and incomplete medium-duty vehicles the label shall contain the following statement in lieu of the above:

> "This vehicle conforms to California regulations applicable to ___ model-year new ___ (for 1992 and subsequent model years specify LEV or ULEV as applicable) vehicles when completed at a maximum curb weight of ____ pounds and a maximum frontal area of ____ square feet."

For 1994 and later model year heavy heavy-duty diesel engines to be used in urban buses that are certified to the optional emission standards, the label shall contain the following statement in lieu of the above:

> "This engine conforms to California regulations applicable to ___ model year new urban bus engines and is certified to a NOx emission standard of ___ g/bhp-hr (for optional emission standards specify between 0.5 and 3.5 at 0.5 g/bhp-hr increments for 1994

and 1995 model years and between 0.5 and 2.5 at 0.5 g/bhp-hr increments for 1996 and later model years)."

For 1995 and later model year heavy-duty engines, other than those for use in urban buses, that are certified to the optional emission standards, the label shall contain the following statement in lieu of the above:

> "This engine conforms to California regulations applicable to ____ model-year new heavy-duty engines, other than those for use in urban buses, and is certified to a NOx emission standard of ____ g/bhp-hr (for optional emission standards specify between 0.5 and 3.5 at 0.5 g/bhp-hr increments for 1995 through 1997 model-year diesel engines, between 0.5 and 2.5 at 0.5 g/bhp-hr increments for 1998 and later model-year diesel engines, between 0.5 and 2.5 at 0.5 g/bhp-hr increments for 1995 through 1997 model-year Otto-cycle engines, and between 0.5 and 1.5 at 0.5 g/bhp-hr increments for 1998 and later model year Otto-cycle engines)."

Manufacturers may elect to use a supplemental label in addition to the original label if there is not sufficient space to include all the required information. The supplemental label must conform to all specifications as the original label. In the case that a supplemental label is used, the original label shall be number "1 of 2" and the supplemental label shall be numbered "2 of 2."

x. For 1985 and subsequent model year heavy-duty diesel engines and 1987 and subsequent model year heavy-duty Otto-cycle engines, if the manufacturer is provided an alternate useful life period under the provisions of 40 CFR 86.085-21(f), 86.087-21(f), 86.088-21(f), 86.090-21(f), or 86.091-21(f) the prominent statement: "This engine has been certified to meet California standards for a useful life period of ___ years or ____ miles of operation, whichever occurs first. This engine's actual life may vary depending on its service application." The manufacturer may alter this statement only to express the assigned alternate useful life in terms other than years or miles (e.g., hours, or miles only).

xi. For 1985 and subsequent model year heavy-duty diesel engines, the prominent statement: "This engine has a primary intended service application as a _____ heavy-duty engine." (The primary intended service applications are light, medium, and heavy, as defined in 40 CFR 86.085-2.)

xii. For 1987 and subsequent model year heavy-duty Otto-cycle engines, one of the following prominent statements as applicable:

(1) For engines certified to the emission standards under 40 CFR 86.087-10(a)(1)(I), 86.088-10(a)(1)(I), 86.090- 10(a)(1)(I), 86.090-10(a)(1)(iii), 86.091-10(a)(1)(I), and 86.091-10(a)(1)(iii) the statement: "This engine is certified for use in all heavy-duty vehicles."

(2) For engines certified under the provisions of 40 CFR 86.087-10(a)(3)(I), 86.088-10(a)(3)(I), 86.090- 10(a)(3)(I),

86.090-10(a)(3)(ii), 86.091-10(a)(3)(I), or 86.091-10(a)(3)(ii) the statement, "This engine is certified for use in all heavy-duty vehicles. It is certified to the emission standards applicable to heavy- duty vehicles with a gross vehicle weight rating above 14,000 lbs. and to U.S. EPA regulations applicable in California."

(3) For engines certified to the emission standards under 40 CFR 86.087-10(a)(1)(ii), 86.088-10(a)(1)(ii), 86.090- 10(a)(1)(ii), 86.090-10(a)(1)(iv), 86.091-10(a)(1)(ii), or 86.091-10(a)(1)(iv) the statement: "This engine is certified for use only in heavy-duty vehicles with a gross vehicle weight rating above 14,000 lbs."

xiii. For 1988 model heavy-duty Otto-cycle engines and vehicles for which nonconformance penalties are to be paid in accordance with 86.1113-87(b), the following prominent statement: "The manufacturer of this engine/vehicle will pay a nonconformance penalty to be allowed to introduce it into commerce at an emission level higher than the applicable emission standard. The compliance level (or new emission standard) for this engine/vehicle is _____." (The manufacturer shall insert the applicable pollutant and compliance level calculated in accordance with 86.1112-87(a).)

(1) The above statement shall be printed on the label required in these specifications or on a separate permanent legible label in the English language and located in proximity to the label required in these specifications. The manufacturer shall begin labeling production engines or vehicles within ten days after the completion of the Production Compliance Audit (PCA).

(2) If a manufacturer introduces an engine or vehicle into commerce prior to the compliance level determination of 86.1112-87(a), it shall provide the engine or vehicle owner with a label as described above to be affixed in a location in proximity to the label required in these specifications within 30 days of the completion of the PCA.

Such statements shall not be used on labels placed on vehicles or engines which, in fact, do not comply with all applicable California regulations, including assembly-line test requirements, if any.

(b) The machine-readable VEC bar code and the machine-readable VIN bar code shall be designed in accordance with SAE standards J1892 (OCT 1993) and SAE J1877 (JUL 1994) as appropriate for the label material. These labeling requirements shall be applicable to 1990 and subsequent model-year vehicles and engines except ~~ZEVs~~, motorcycles, and diesel-fueled vehicles and diesel engines not subject to inspection and maintenance requirements. The Executive Officer may, as necessary, specify new character codes for the VEC label (as part of the "ECS Component Combination" table, Section 4.1.3., SAE J1892 (OCT 1993)) to designate new emission control systems or components as they are introduced for use in motor vehicles subject to the label requirements. For ZEVs, and ZEVs certified as HEVs because the fuel-fired heater operates above 40°F, the first eight characters of the VEC bar code label shall be ZZZZZZZZ.

The eighth character of the VEC bar-code label is the code for the Emission Control System (ECS) Combination and the engine ignition frequency. Coding for this character is as follows:

Ignition Frequency	Label Code	Air Injection	EGR	OBD II
One ignition frequency per two engine revolutions	A	none	none	no
	B	yes	none	no
	C	none	yes	no
	D	yes	yes	no
	E	none	none	yes
	F	yes	none	yes
	G	none	yes	yes
	H	yes	yes	yes
One ignition frequency per one engine revolution	S	none	none	no
	T	yes	none	no
	U	none	yes	no
	V	yes	yes	no
	W	none	none	yes
	X	yes	none	yes
	Y	none	yes	yes
	Z	yes	yes	yes

The ninth character of the VEC bar-code label is the code for the emission standard to which the vehicle was certified. This character shall apply to all 1998 and subsequent model passenger cars, light-duty trucks, medium-duty vehicles and heavy-duty engines. Coding for this character is as follows:

TLEV	A
LEV	B
ULEV	C
ZEV	Z
TLEV HEV	D
LEV HEV	E
ULEV HEV	F
SULEV	G
Federally-Certified Vehicles	H
Title 13, CCR, Section 1960.1(f)(2) Vehicles	L
Title 13, CCR, Section 1956.8(a) Vehicles	M
Title 13, CCR, Section 1956.8(c) Vehicles	N

The ninth character shall not be necessary if the sixth character of the VEC bar-code label correctly identifies the California emission standard to which the vehicle is certified.

For label identification, the VEC and VIN labels shall include the heading "VEC" and "VIN", respectively, above the bar coded information. If the VEC or VIN label is incorporated as part of the tune-up label or the federal certification label required pursuant to the Federal Motor Vehicle Safety Regulations No. 567, respectively, or at the location

above the instrument panel, no heading shall be required. The heading shall be printed in block letters in the English language and printed pursuant to Section 5 of these procedures.

(c) The tune-up label shall include a vacuum hose routing diagram showing all emissions-related and emissions-critical parts that are actuated by vacuum and the correct routing of vacuum hoses if one or more vacuum hoses are employed. This diagram shall contain no more than two different vacuum hose routing patterns; if there are two routings on a single diagram each routing must be easily understandable. The hose diagram may be separated from the tune- up label provided that the vacuum hose diagram is placed in a visible and accessible position as provided in this section. If a separate label is used, it shall be of a permanent type; however the destruction limits in this section do not apply. ZEVs are exempt from these requirements.

(d) The manufacturer of any vehicle equipped with an emission control device which the Executive Officer has determined will be significantly impaired by the use of leaded gasoline shall:

i. At the time of vehicle manufacture, affix two or more permanent legible labels specifying the appropriate operating fuel(s) (for example "Methanol Fuel or Unleaded Gasoline Only" for fuel-flexible vehicles) as follows:

(1) One label shall be located on the instrument panel so as to be readily visible to the operator of the vehicle: Provided, however, that the required statement may be incorporated into the design of the instrument panel rather than provided on a separate label; and

(2) One label shall be located immediately adjacent to each fuel tank filler inlet, outside of any filler inlet compartment, and shall be located so as to be readily visible to any person introducing fuel to such filler inlet: Provided, however, that the Executive Officer may, upon application from a motor vehicle manufacturer, approve other label locations that achieve the purpose of this paragraph.

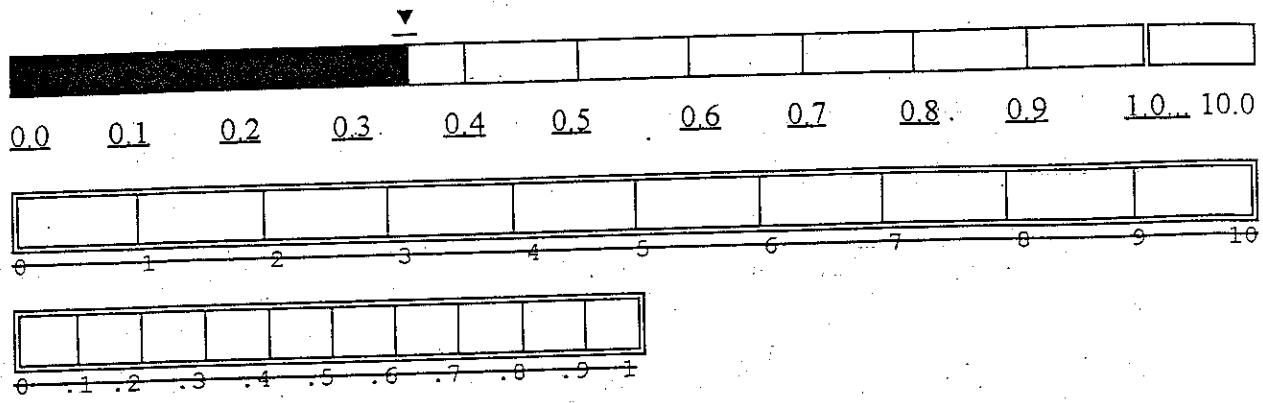
(3) Such labels shall be in the English language in block letters which shall be of a color that contrasts with their background.

ii. For purposes of this section a motor vehicle shall be deemed to be equipped with an emission control device which will be significantly impaired by the use of leaded gasoline if any alcohol fuel, unleaded gasoline, or a blend of these fuels was used in any testing or service accumulation relating to the emission certification of said motor vehicles or engines installed therein.

3.5 Smog Index Labels. A smog index label made of paper or plastic shall be securely affixed in a readily visible location ~~*either on a side window to the rear of the driver or, if it cannot be so placed, to the windshield of the motor vehicle*~~. The smog index label shall include the smog index for the vehicle and information to inform purchasers of the significance of the smog index. This explanatory information ~~*shall*~~ *may* take the following form:

The Smog Index of this vehicle is

0.34



Note: The Smog Index (SI) indicates the relative level of pollutants emitted by the vehicle. The lower the SI, the lower the vehicle's emissions.

An alternative label may be used if shown to yield equivalent clarity and if approved in advance by the Executive Officer.

The following smog indices shall ~~be~~ apply to 1998 and subsequent model-year light-duty vehicles:

(a) For passenger cars and light-duty trucks (0-3750 lbs. loaded vehicle weight)

i. Vehicles which certify to the following emission standards shall be assigned a smog index of 1.

Exhaust Non-methane Hydrocarbons	0.25 g/mi at 50,000 miles
Exhaust Oxides of Nitrogen	0.4 g/mi at 50,000 miles
Exhaust Carbon Monoxide	3.4 g/mi at 50,000 miles
Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 50,000 miles

ii. Vehicles which certify to the following emission standards shall be assigned a smog index of 0.70.

Exhaust Non-methane Hydrocarbons	0.25 g/mi at 50,000 miles
Exhaust Oxides of Nitrogen	0.4 g/mi at 50,000 miles
Exhaust Carbon Monoxide	3.4 g/mi at 50,000 miles
Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 100,000 miles
Running Loss	0.05 g/mi at 100,000 miles

iii. TLEVs which certify to the following evaporative emission standards shall be assigned a smog index of 0.89.

Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 50,000 miles

iv. TLEVs which certify to the following evaporative emission standards shall be assigned a smog index of 0.59.

Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 100,000 miles
Running Loss	0.05 g/mi at 100,000 miles

v. LEVs which certify to the following evaporative emission standards shall be assigned a smog index of 0.67.

Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 50,000 miles

vi. LEVs which certify to the following evaporative emission standards shall be assigned a smog index of 0.37.

Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 100,000 miles
Running Loss	0.05 g/mi at 100,000 miles

vii. ULEVs which certify to the following evaporative emission standards shall be assigned a smog index of 0.64.

Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 50,000 miles

viii. ULEVs which certify to the following evaporative emission standards shall be assigned a smog index of 0.34.

Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 100,000 miles
Running Loss	0.05 g/mi at 100,000 miles

ix. ZEVs shall be assigned a smog index of 0.00.

(b) For light-duty trucks (3751-5750 lbs. loaded vehicle weight)

i. Vehicles which certify to the following emission standards shall be assigned a smog index of 1.

Exhaust Non-methane Hydrocarbons	0.32 g/mi at 50,000 miles
Exhaust Oxides of Nitrogen	0.7 g/mi at 50,000 miles
Exhaust Carbon Monoxide	4.4 g/mi at 50,000 miles
Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 50,000 miles

ii. Vehicles which certify to the following emission standards shall be assigned a smog index of 0.77.

Exhaust Non-methane Hydrocarbons	0.32 g/mi at 50,000 miles
Exhaust Oxides of Nitrogen	0.7 g/mi at 50,000 miles
Exhaust Carbon Monoxide	4.4 g/mi at 50,000 miles
Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 100,000 miles
Running Loss	0.05 g/mi at 100,000 miles

iii. TLEVs which certify to the following evaporative emission standards shall be assigned a smog index of 0.89.

Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 50,000 miles

iv. TLEVs which certify to the following evaporative emission standards shall be assigned a smog index of 0.67.

Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 100,000 miles
Running Loss	0.05 g/mi at 100,000 miles

v. LEVs which certify to the following evaporative emission standards shall be assigned a smog index of 0.65.

Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 50,000 miles

vi. LEVs which certify to the following evaporative emission standards shall be assigned a smog index of 0.43.

Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 100,000 miles
Running Loss	0.05 g/mi at 100,000 miles

vii. ULEVs which certify to the following evaporative emission standard shall be assigned a smog index of 0.62.

Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 50,000 miles

viii. ULEVs which certify to the following evaporative emission standard shall be assigned a smog index of 0.39.

Evaporative Hydrocarbons	
Diurnal + Hot Soak	2.0 g/test at 100,000 miles
Running Loss	0.05 g/mi at 100,000 miles

ix. ZEVs shall be assigned a smog index of 0.00.

4. The provisions of these specifications shall not prevent a manufacturer from also reciting on the label that such vehicle or engine conforms to any applicable federal emission standards for new motor vehicles or new motor vehicle engines or any other information that such manufacturer deems necessary for, or useful to, the proper operation and satisfactory maintenance of the vehicle or engine.

5. As used in these specifications, readily visible to the average person shall mean that the label shall be readable from a distance of eighteen inches (46 centimeters) without any obstructions from vehicle or engine parts (including all manufacturer available optional equipment) except for flexible parts (e.g., vacuum hoses, ignition wires) that can be moved out of the way without disconnection. Alternatively, information required by these specifications to be printed on the label shall be no smaller than 8 point type size provided that no vehicle or engine parts, (including all manufacturer available optional equipment), except for flexible parts, obstruct the label. For the VEC and VIN labels, sufficient clearance shall be provided to use a non-contact bar-code scanner.

6. For the tune-up label and vacuum hose routing diagram label, the labels and any adhesives used shall be designed to withstand, for the vehicle's total expected life, typical vehicle environmental conditions in the area where the label is attached. Typical vehicle environmental conditions shall include, but are not limited to, exposure to engine lubricants and coolants (e.g., gasoline, motor oil, brake fluids, water, ethylene glycol), underhood temperatures, steam cleaning, and paints or paint solvents. The manufacturer shall submit, with its certification application, a statement attesting that its labels comply with this requirement.

   VEC and VIN machine-readable labels shall meet the applicable functional test specifications contained in SAE standards J1892 (OCT 1993) and J1877 (JUL 1994).

7. The manufacturer shall obtain approval from the Executive Officer for all ***emission control*** label formats and locations prior to use. Approval of the specific tune-up settings is not required; however, the format for all such settings and tolerances, if any, is subject

to review. If the Executive Officer finds that the information on the label is vague or subject to misinterpretation, or that the location does not comply with these specifications, he or she may require that the label or its location be modified accordingly.

8. Samples of all actual production ***emission control*** labels used within an engine family shall be submitted to the Executive Officer within thirty days after the start of production.

9. The Executive Officer may approve alternate label locations or may, upon request, waive or modify the label content requirements provided that the intent of these specifications is met.

10. If the Executive Officer finds any motor vehicle or motor vehicle engine manufacturer using labels which are different from those approved or which do not substantially comply with the readability or durability requirements set forth in these specifications, the Executive Officer may invoke Section 2109, ~~Article 2, Subchapter 2, Chapter 3~~, Title 13, California Code of Regulations.