

State of California  
AIR RESOURCES BOARD

**GUIDELINES FOR CERTIFICATION OF ~~1983~~ 2003 AND SUBSEQUENT  
MODEL-YEAR FEDERALLY CERTIFIED LIGHT-DUTY MOTOR  
VEHICLES FOR SALE IN CALIFORNIA**

Adopted: July 30, 2002

Note: These are new Guidelines that have been updated with a 2003 and subsequent model year applicability date. The preexisting “Guidelines for Certification of 1983 and Subsequent Model-Year Federally Certified Light-Duty Motor Vehicles for Sale in California” have been amended to be applicable through the 2002 model year only. In order to facilitate a comparison of the new guidelines to the preexisting guidelines, this document shows changes to the text previously applicable to the 2003 and subsequent model years in underline to indicate additions and ~~strikeout~~ to indicate deletions.

GUIDELINES FOR CERTIFICATION OF ~~1983~~ 2003 AND SUBSEQUENT  
MODEL-YEAR FEDERALLY CERTIFIED LIGHT-DUTY MOTOR  
VEHICLES FOR SALE IN CALIFORNIA

I. APPLICABILITY

These guidelines adopted pursuant to Section 43102(b) of the California Health and Safety Code are applicable to ~~1983~~ 2003 and subsequent model year federally certified light-duty motor vehicles proposed for sale in California. These guidelines are not applicable to medium-duty trucks, motorcycles, heavy-duty engines, heavy-duty vehicles, emergency vehicles, or vehicles with engines having a displacement less than 50 cubic inches.

II. DEFINITIONS

For the purposes of these guidelines:

1. "Basic Engine" means a unique combination of manufacturer, engine displacement, number of cylinders, fuel system (as distinguished by use of carburetor or fuel injection), and catalyst usage.
2. "California vehicle" means a motor vehicle originally certified in California by an Executive Order.
3. "Car Line" means a name denoting a group of vehicles within a make or car division that has a degree of commonality in construction (e.g., body, chassis). Car line does not consider any level of décor or opulence and is not generally distinguished by characteristics as roof line, number of doors, seats, or windows, except for station wagons or light-duty trucks. Station wagons and light-duty trucks are considered to be different car lines than passenger cars.
4. "Federal vehicle" means a motor vehicle originally certified federally by a Certificate of Conformity.
5. "Light-duty motor vehicle" means a vehicle having a manufacturer's maximum gross vehicle weight rating of under 6001 pounds (California and Safety Code Section 39035).
6. "Loaded Vehicle Weight (LVW)" has the meaning set forth in subparagraph 86.082-2(b), Title 40, Code of Federal Regulations, as last amended ~~November 2, 1982~~ June 6, 1997.
7. "Model" means a unique combination of car line, basic engine, and transmission class, or as defined by a manufacturer with the approval of the Executive Officer.
8. "Tier 2 Test Group" means any federal test group certified to the federal emission bins contained in Tables S04-1 and S04-2 of Title 40, Code of Federal Regulations, §1811-04(c) as adopted February 10, 2000.
- 89 "Transmission Class" means a group of transmissions having the following common features: basic transmission type (manual, automatic, or semi-automatic), number of forward speeds (e.g., manual four-speed, three-speed automatic, two-speed semi-automatic).

### III. CERTIFICATION OF FEDERAL VEHICLES

To receive certification for federal vehicle sales in California, a manufacturer shall:

- A. Provide to the Executive Office evidence of federal certification, and a statement that the model(s) for which certification is requested are not available in California.
- B. Provide a warranty on emission-related parts in accordance with Sections 2035 et seq., Title 13, California Code of Regulations, as they apply to vehicles certified under the primary California standards.
- C. Provide: 1) certification emission levels of federal models intended for sale in California, 2) quarterly production reports, by model and ~~engine family test group~~, of vehicles intended for sale or sold in California, and 3) other information which the Executive Officer deems necessary to calculate emissions offset credits, emission deficits, or air quality impacts.
- D. Label each vehicle on the assembly-line with the statement "conforms to federal regulations and is certified for sale in California" to distinguish federal vehicles certified for sale in California from other federal and California vehicles.

### IV. ~~ASSEMBLY-LINE~~ IN-USE VERIFICATION AND ENFORCEMENT TESTING

- ~~A. All federal vehicles certified and intended for sale in California shall comply with all provisions of the applicable California Assembly Line Test procedures, except that:~~
  - ~~1. The Executive Officer, at his or her discretion, may accept quality audit emissions data from other sources in lieu of a 2 percent quality audit of federal vehicle production intended for sale in California.~~
  - ~~2. Manufacturers which have projected sales of less than 1,000 federal vehicles per model year in California shall be exempt from the 2 percent quality audit requirement. However, such manufacturers shall submit to the Executive Officer any other similar data which may be available.~~
  - ~~3. Data submitted in lieu of 2 percent quality audit data shall be accompanied either by a statement that the data were generated according to California Assembly Line Test Procedures, or by a description of how the testing and analysis procedures used depart from California Assembly Line Test procedures.~~
- A. All Federal vehicle test groups certified for sale in California shall be subject to the in-use verification testing requirements of §86.1845, 40 Code of Federal Regulations, Part 86.
- B. All Federal vehicles certified for sale in California shall be subject to the compliance testing requirements of Title 13, California Code of Regulations.

V. OFFSETTING PROCEDURE

- A. Emissions offsetting shall be limited as follows:
1. By manufacturer. A manufacturer shall not trade, sell, transfer, or in any other manner exchange emissions credits with another manufacturer, except that a manufacturer which supplies engines to a vehicle manufacturer may also supply offsetting emissions credits if the vehicle manufacturer's total production for California is less than 200 units per model year.
  2. By vehicle category. Vehicle categories are: (a) passenger cars and (b) light-duty trucks (less than 6,001 pounds gross vehicle weight rating). Emission credits from vehicles in one category shall not offset vehicles in the other category.
  3. By durability option. Federal vehicles that are offset by California vehicles with higher durability demonstration mileage requirements must demonstrate equivalent durability subject to the approval of the Executive Officer.
  4. By model. No federally certified vehicle shall be certified or sold in California if a comparable California model of the same manufacturer is offered in the same model year.
  5. By pollutant. Hydrocarbons and oxides of nitrogen (NOx) are the only pollutants that may be offset for passenger cars. Hydrocarbons, carbon monoxide and NOx may be offset for light-duty trucks. Evaporative hydrocarbons and particulates are not eligible for offsets. Total hydrocarbon data shall be compared directly to non-methane hydrocarbon data or non-methane organic gas (NMOG) data, as applicable, for purposes of calculating offsets.
- B. Each manufacturer shall submit to the Executive Officer by October 1 of each year, or as soon thereafter as is practicable: (1) an estimate of the emissions credits which it will accrue based upon each manufacturer's California fleet average emissions values ~~certified emissions levels~~ and projected sales of California vehicles; and (2) an estimate of the emissions credits which it will use based upon federal certification emissions ~~levels~~ standards and estimated sales of federal vehicles in California. These estimates may be changed at any time within the model year, subject to the approval of the Executive Officer. A change shall be deemed approved unless the Executive Officer disapproves the change in writing within 30 days of the Executive Officer's receipt of the change.
- C. Within the bounds of Part A, emissions credits that can be accrued by a ~~California certified vehicle~~ manufacturer shall be the difference between the applicable California ~~standard~~ fleet average emissions requirement and ~~the certification emissions level~~ each manufacturer's fleet average emissions value, calculated for California and Tier 2 vehicles certified for sale in California only.

$$\text{Estimated Credits} = \sum_{i=1}^m \text{Calsales}_i (\text{Calstd} - \text{FltAveEm} - \text{Calcert}_i)$$

Where:  $m$  = Total number of California plus Tier 2 engine families test groups certified to a set of California standards for sale in California (passenger cars and light-duty trucks) for a given manufacturer.

$\text{Calsales}$  = Manufacturer's projected California sales by engine family test group.

$\text{FltAveEm}$  = Fleet Average Emission levels as provided in Table 1.

$\text{Calstd}$  = Applicable California standard.

$\text{Calcert}$  = California engine family test group certification emission standard level listed on the Executive Order for the applicable engine family or the federal Tier 2 test group certification emission standard, as applicable.

**Table 1**  
**FltAveEm (g/mi)**  
**(derived from 50K stds)**

<u>Model Year</u>	<u>Passenger Cars</u>		<u>Light-Duty Trucks</u>					
	<u>HC</u>	<u>NOx</u>	<u>HC</u>		<u>CO</u>		<u>NOx</u>	
			<u>T1</u>	<u>T2</u>	<u>T1</u>	<u>T2</u>	<u>T1</u>	<u>T2</u>
<u>2003</u>	<u>0.062</u>	<u>0.180</u>	<u>0.062</u>	<u>0.093</u>	<u>2.81</u>	<u>3.15</u>	<u>0.180</u>	<u>0.400</u>
<u>2004</u>	<u>0.053</u>	<u>0.158</u>	<u>0.053</u>	<u>0.085</u>	<u>2.36</u>	<u>3.09</u>	<u>0.158</u>	<u>0.313</u>
<u>2005</u>	<u>0.049</u>	<u>0.120</u>	<u>0.049</u>	<u>0.076</u>	<u>2.18</u>	<u>2.99</u>	<u>0.120</u>	<u>0.225</u>
<u>2006</u>	<u>0.046</u>	<u>0.083</u>	<u>0.046</u>	<u>0.062</u>	<u>2.01</u>	<u>2.58</u>	<u>0.083</u>	<u>0.145</u>
<u>2007</u>	<u>0.043</u>	<u>0.045</u>	<u>0.043</u>	<u>0.055</u>	<u>1.87</u>	<u>2.41</u>	<u>0.045</u>	<u>0.050</u>
<u>2008</u>	<u>0.040</u>	<u>0.045</u>	<u>0.040</u>	<u>0.050</u>	<u>1.73</u>	<u>2.19</u>	<u>0.045</u>	<u>0.050</u>
<u>2009</u>	<u>0.038</u>	<u>0.045</u>	<u>0.038</u>	<u>0.047</u>	<u>1.63</u>	<u>2.02</u>	<u>0.045</u>	<u>0.050</u>
<u>2010</u>	<u>0.035</u>	<u>0.044</u>	<u>0.035</u>	<u>0.043</u>	<u>1.52</u>	<u>1.85</u>	<u>0.044</u>	<u>0.050</u>

where: T1 indicates 0-3750 lbs. LVW category  
T2 indicates 3751-5750 lbs. LVW category

- D. Within the bounds of Part A., the emissions required to offset a federal vehicle shall be the difference between the federal certification emission standard level and the sales-weighted mean certification level of all California engine families (Calmean) fleet average emission level as shown in Table 1. If a new standard is implemented, an estimated Calmean shall be determined at 80 percent of the standard. In order to

accommodate multiple standard, Calmean for the 2003 model year is provided in the following table:

**Calmean (g/mi)  
(derived from 50K stds)**

Model Year	Passenger Cars		Light-Duty Trucks					
	HC	NOx	HC		CO		NOx	
			T1	T2	T1	T2	T1	T2
2003	0.050	0.144	0.050	0.074	2.25	3.26	0.144	0.320

where: T1 indicates 0-3750 lbs. LVW category  
 T2 indicates 3751-5750 lbs. LVW category

$$\text{Estimated Withdrawals} = \sum_{j=1}^n \text{Fedsales}_j (\text{Fedcert}_j - \text{Calmean FltAveEm})$$

Where: n = Number of unavailable passenger car and light-duty trucks by model types.

Fedsales = Estimated sales of unavailable federal model types in California for a given model year.

Fedcert = Federal certification level emission standard of the engine family test group containing the unavailable model. Federal certification level shall be taken as the highest level, for each pollutant, of any emission data vehicle in an engine family.

Calmean = Sales weighted mean certification emission level of all California engine families (industry wide) within the appropriate standards category.

- E. The estimates referred to in parts B, C, and D shall be updated at the end of the model year production period to final estimates using vehicle production data and, to the extent available, assembly line certification emissions data. Within 60 days By March 1 after the end of the model year production period, the manufacturer shall submit final estimates for the model year.
- F. For the purposes of withdrawals, the 0 to 3,750 lbs. and 3,751 to 5,750 lbs. LVW groups may be combined for light-duty trucks.

G. ~~Manufacturers shall individually be limited to withdrawing the following~~  
may withdraw 100 percentages of the accrued credits for offsetting federal  
 vehicles.;

Model Year	Passenger Cars		Light-Duty Trucks		
	HC	NO <sub>x</sub>	HC	CO	NO <sub>x</sub>
2003	56	46	100	46	100

~~H. Using calculation methods consistent with those used for the 1994 through 2003 model years, the withdrawal limits shall be revised by the Executive Office if California or Federal standards change for the 1994 through 2003 model years.~~

I. H. An emission deficit in the final estimate for a model year caused by misjudging sales of California vehicles shall be carried over and offset in the next model year.

J. I. A manufacturer with an emission deficit for the same vehicle category for two consecutive model years based on final estimates shall not receive certification under these guidelines for any federal vehicles within that vehicle category produced during a 12-month period commencing 15 days after receipt of written notification from the Executive Officer. The manufacturer shall during the 12-month period offset all emissions deficits accumulated for the vehicle category. The manufacturer shall not receive certification under these guidelines for any federal vehicles within the vehicle category produced after the end of the 12-month period but before all of the accumulated emissions deficits are offset. A manufacturer with an emission deficit existing for the vehicle category after the 12-month period shall be subject to a maximum civil penalty of \$500 per vehicle pursuant to Section 43016 of the Health and Safety Code. The number of federal vehicles on which the penalty shall be calculated shall be computed as follows:

$$\text{No. of federal vehicles} = \text{Emission deficit after the suspension period} \div (\text{Fedcert assy} - \text{Calmean FltAveEm})$$

where Fedcert = Federal certification emission standard of the test group containing the unavailable model for the preceding model year.

~~Fed assy = federal assembly line or certification emission level of the engine family containing the unavailable model taken as the mean of the engine family quality audit of the preceding model year.~~

~~Calmean = sales weighted mean certification emission level of all California engine families within the appropriate standards taken on the preceding model year.~~

FltAveEm = Fleet Average Emission levels as provided in Table 1 for the preceding model year.

- ~~K.~~ J. A manufacturer shall be subject to a maximum civil penalty of \$5,000 per vehicle pursuant to Section 43154 of the Health and Safety Code under either of the following situations:
  - a. Sales of federal vehicles in excess of a manufacturer's final estimate regardless of whether or not a deficit was incurred.
  - b. Sales of federal vehicles which under Section V. J. are not entitled to certification under these guidelines.
- ~~L.~~ K. Vehicles with ~~engine family test group~~ certification emission levels which are equal to or less than the appropriate '~~Calmean~~' value Fleet Average Emission levels are not eligible for offsetting.