

Proposed Regulation Order

Amend Title 13, California Code of Regulations, section 1958 to read as follows:

[Note: Proposed amendments for this rulemaking as noticed in the 45-day comment period are shown in **bold underlined** text to indicate additions and ~~strikeout~~ to indicate deletions. Changes proposed at the December 10, 1998 Board Hearing are shown in **highlighted bold double underlined** text to indicate additions and ~~**highlighted bold strikeout**~~ to indicate deletions.]

§1900(b)(17) “Motorcycle Engine” means an engine which is used to propel a new, street-use motorcycle.

§1958. Exhaust Emission Standards and Test Procedures — Motorcycles and Motorcycle Engines Manufactured on or after January 1, 1978.

(a) This section shall be applicable to motorcycles, **motorcycle engines, and the manufacturers of either motorcycles or motorcycle engines** produced on or after January 1, 1978. Motorcycles **and motorcycle engines** are excluded from the requirements of this section if:

- (1) The engine displacement is less than 50 cubic centimeters, or
- (2) An 80 kilogram (176 pound) driver cannot:
 - (A) start from a dead stop using only the engine, or
 - (B) exceed a maximum speed of 40 kilometers per hour (24.9 miles per hour) on a level paved surface.

- (b) Exhaust emissions from new street-use motorcycles **and motorcycle engines**, subject to registration and sold and registered in this state, shall not exceed:

Exhaust Emission Table of Standards
(grams per kilometer)

Model-Year	Engine <u>Displacement</u> (in cubic centimeters)	<u>Exhaust Emission Standards (grams per kilometer)</u>	
		Hydrocarbon (HC) <u>+ Oxides of Nitrogen (NOx)</u>	Carbon Monoxide
1978 to 1979	50 to less than 170	5.0 (HC only)	17
1978 to 1979	170 to less than 750	5.0 + 0.0155(D-170)* (HC only)	17
1978 to 1979	750 or greater	14 (HC only)	17
1980 to 1981	All (50 cc or larger)	5.0 (HC only)	17
1982 and subsequent	50 cc to 279 cc	1.0 (HC only)	12
1982 through 1985 (manufactured prior to March 1, 1985)	280 cc or greater	2.5 (HC only)	12
1985 (manufactured after February 28, 1985) through 1987	280 cc or greater	1.4 (HC only), applied as a corporate average, ** provided that each engine family shall have only one applicable standard	12
1988 and subsequent <u>through</u> <u>2003</u>	280 cc to 699 cc	1.0 (HC only), applied as a corporate average, ** provided that each engine family shall have only one applicable standard	12
1988 and subsequent <u>through</u> <u>2003</u>	700 cc or greater	1.4 (HC only), applied as a corporate average, ** provided that each engine family shall have only one applicable standard	12
<u>2004 through 2007</u>	<u>280 cc or greater</u>	<u>1.4 (HC + NOx), applied as a corporate average, ** provided that each engine family shall have only one applicable standard</u>	<u>12</u>
<u>2008 and subsequent</u>	<u>280 cc or greater</u>	<u>0.8 (HC + NOx), applied as a corporate average, ** provided that each engine family shall have only one applicable standard</u>	<u>12</u>

*D = engine displacement of motorcycles in cubic centimeters.

**Compliance with a standard to be applied as a “corporate average” shall be determined as follows:

$$\frac{\sum_{j=1}^n (\text{PROD}_{jx}) (\text{STD}_{jx})}{\sum_{j=1}^n (\text{PROD}_{jx})} = \text{STD}_{\text{Ca}}$$

where,

n = Class III motorcycle engine families (**engines with displacement of 280 cc or greater manufactured after February 28, 1985).**

PROD_{jx} = Number of units of Class III engine family j produced for sale in California in model year x

STD_{jx} = The manufacturer designated HC **or HC + NO_x** emission standard, **whichever applies,** for engine family j in model year x, which shall be determined by the manufacturer subject to the following conditions:

~~(1) no individual engine family exhaust emission standard shall exceed 2.5 g/km, and~~

(1) **for Model Year 1988 through 2003 motorcycle engines and motorcycles with engine displacement of 280 cc or greater, no individual engine family exhaust emission standard shall exceed 2.5 g/km HC, and**

(2) **for Model Year 2004 and subsequent motorcycle engines and motorcycles with engine displacement of 280 cc or greater, no individual engine family exhaust emission standard shall exceed 2.5 g/km HC+NO_x, and**

(3) no engine family designation or engine family exhaust emission standard shall be amended in a model year after the engine family is certified for the model year, and

(4) prior to sale or offering for sale in California, each engine family shall be certified in accordance with Section 1958(c) and shall be required to meet the manufacturer's designated HC **or HC + NO_x** standard, **whichever applies,** as a condition of the certification Executive Order. Prior to certification the manufacturer shall also submit estimated production volumes for each engine family to be offered for sale in California.

STD_{Ca} = A manufacturer's corporate average HC **or HC + NO_x** exhaust emissions, **whichever applies,** from those California motorcycles **or motorcycle engines** subject to the California corporate average HC **or HC + NO_x** exhaust emission standard, as established by an Executive Order certifying the California production for the model year. This order must be obtained prior to the issuance of certification Executive Orders for individual engine families for the model year and shall include but not be limited to the following requirements:

(1) During the manufacturer's production year, for each engine family, the manufacturer shall provide the following information to the Executive Officer within 30 days after the last day in each calendar quarter:

- (~~a~~**A**) vehicle identification numbers and an explanation of the identification code;
- (~~b~~**B**) the total number of vehicles or motorcycle engines produced for sale in California and their applicable designated emissions standards.

(2) The manufacturer's average HC or HC + NO_x exhaust emissions, whichever applies, shall meet the applicable corporate average standard at the end of the manufacturer's production for the model year.

[Note: No changes are proposed for Section 1958(b)(3) through (e)]

(f) (1) **Small Volume Manufacturers:** Exhaust emission standards for ~~from~~ Class III motorcycles and motorcycle engines of produced by small volume manufacturers ~~shall not be exceeded~~ are as follows:

- (A) For Model Year 1984 through 2007, Class III motorcycle engines and no motorcycles with engine displacements between 280 cc and 699 cc shall emit no more than 1.0 gram per kilometer hydrocarbon, applied as a corporate average, provided that no engine family shall emit greater than 2.5 grams per kilometer hydrocarbon for the 1984, 1985, 1986, and 1987 model years; Class III motorcycle engines and motorcycles with engine displacements of 700 cc or greater shall emit no more than 1.4 gram per kilometer hydrocarbon, applied as a corporate average, provided that no engine family shall emit greater than 2.5 grams per kilometer hydrocarbon.
- (B) For Model Year 2008 and subsequent, Class III no motorcycles and motorcycle engines shall exceed emit no more than 1.4 grams per kilometer HC+NO_x, applied as a corporate average, provided that no engine family shall emit greater than 2.5 grams per kilometer HC + NO_x.

To obtain certification as a small volume manufacturer pursuant to this subsection, the manufacturer shall submit product information and estimated sales data with the certification application for each engine family sold in California. As a condition of obtaining certification as a small volume manufacturer, the manufacturer shall submit annually to the ~~state board~~ **Executive Officer** a summary of its efforts and progress toward meeting more stringent hydrocarbon HC + NO_x exhaust emission standards. The summary shall include a description of the manufacturer's current hydrocarbon HC + NO_x emission control development status, along with supporting test data, and future planned development work.

- (2) For purposes of this subsection **(f)(1)(A)**, a small volume manufacturer is one which sells less than 5,000 new Class I, II, and III motorcycles per model year in California. **For purposes of subsection (f)(1)(B), a small volume manufacturer is one which sells no more than 1,000 300 new Class I, II, and III (combined) motorcycles or motorcycle engines for use in model year 2004 or any subsequent model year in California.**

(g) Early-Compliance Credits

Manufacturers which sell Class III motorcycles or motorcycle engines in California certified as meeting either a 0.8 g/km or 0.4 g/km HC+NOx level prior to Model Year 2008 can receive credits for use in the Model Year 2008 corporate average upon written approval by the Executive Officer. Each unit of Class III motorcycle or motorcycle engine sold between Model Years 1999 and 2008 and which meets the requirements of this subsection shall be multiplied by whichever X multiplier applies, as shown in the following table:

Table of Multipliers to Encourage Early Compliance with the Proposed Tier-2 Standard and Beyond

<u>Model Year Sold</u>	<u>Multiplier (X) for Use in MY 2008 Corporate Averaging</u>	
	<u>Early Tier-2 Compliant</u>	<u>Certified at 0.4 g/km HC+NOx</u>
<u>1999 through 2004</u>	<u>1.5</u>	<u>3.0</u>
<u>2005</u>	<u>1.375</u>	<u>2.5</u>
<u>2006</u>	<u>1.250</u>	<u>2.0</u>
<u>2007</u>	<u>1.125</u>	<u>1.5</u>
<u>2008 and subsequent</u>	<u>1.0</u>	<u>1.0</u>

Note: Each unit of early Tier-2 compliant and 0.4 g/km certified motorcycles and motorcycle engines is counted cumulatively toward the MY 2008 corporate average.

(h) Sunset Review

Within five years from the effective data of adoption or date of implementation, which ever comes later, the Air Resources Board, in consultation with the Secretary for Environmental Protection, shall review the provisions of this section to determine whether it should be retained, revised, or repealed.

Note: Authority cited: Sections 39600, 39601, 43013, 43101, 43104, and 43107, Health and Safety Code. Reference: Sections 39002, 39003, 43000, 43013, 43100, 43101, 43104, and 43107, Health and Safety Code; and Cal. Stats. 83, Ch. 103.