

FINAL REGULATION ORDER

NOTE: This document is written in a style to indicate changes from the existing provisions. All existing language is indicated by plain text. All additions to language are indicated by underlined text. All deletions to language are indicated by ~~strikeout~~. Only those portions containing the suggested modifications from existing provisions are included. All other portions remain unchanged and are indicated by the symbol “* * * *” for reference.

Amend sections 2111, 2112, 2411, 2412, 2413, and 2415, title 13 California Code of Regulations, and the incorporated California Exhaust Emission Standards and Test Procedures for 1997 and Later Off-Highway Recreational Vehicles, to read as follows:

§ 2412. Emission Standards and Test Procedures – New Off-Highway Recreational Vehicles and Engines.

(a) This section applies to all off-highway recreational vehicles and engines used in such vehicles produced on or after January 1, 1997.

(b) For purposes of certification in California, manufacturers must comply with the following exhaust and evaporative emissions from new off-highway recreational vehicles and engines that are sold, leased, used, or introduced into commerce in California.

(1) Exhaust emissions must not exceed:

Emission Standards

<i>Vehicle & Model Year</i>	<i>Hydro-carbon</i>	<i>Oxides of Nitrogen</i>	<i>Carbon Monoxide</i>	<i>Particulate Matter¹</i>
Off-Road Motorcycles and All-Terrain Vehicles with Engines Greater Than 90 cc ³ —1997 and Later (g/km) ⁴	1.2 ²	-	15.0	-
Off-Road motorcycles and All-Terrain Vehicles with Engines 90 cc or Less —1999 and Later (g/km)	1.2 ²	-	15.0	-
All-Terrain Vehicle Option —1997 and Later	Shall comply with exhaust emission standards equivalent to the off-road motorcycle and all-terrain vehicle standard using the utility test procedures set forth in CCR, Title 13, section 2403, and the incorporated document "California Exhaust Emission Standards and Test Procedures for 1995 and Later Small Off-Road Engines," which is hereby incorporated by reference herein. ⁵			
Golf Carts in Federal Ozone Non-Attainment Areas —1997 and Later	ZERO	ZERO	ZERO	ZERO
Off-Road Motorcycle and All-Terrain Vehicle Option: 1997 and Later Vehicles with Engines Greater Than 90 cc, and 1999 and Later Vehicles with Engines 90 cc or Less	Vehicles and engines that do not meet the emissions standards noted above may be certified subject to the use restrictions described in subsection (f) below.			
	<ol style="list-style-type: none"> 1. — Applicable to diesel and two-stroke spark ignited engines only. 2. — Compliance with the 1.2 grams per kilometer HC standard to be applied as a "corporate average" shall be determined as provided in subsection (d). Each engine family shall have only one applicable standard. 3. — Cubic centimeter. 4. — Grams per kilometer. 5. — Compliance with the equivalent all-terrain vehicle HC standard to be applied as a "corporate average" shall be determined as provided in subsection (d). Each engine family shall have only one applicable standard. 			

Exhaust Emission Standards Based on
Chassis-Based Testing

<u>Vehicle & Model Year</u>	<u>Hydro-carbon (HC)</u>	<u>Oxides of Nitrogen (NO_x)</u>	<u>Carbon Monoxide (CO)</u>	<u>Particulate Matter⁽⁴⁾</u>
<u>Off-Road Motorcycles and All-Terrain Vehicles with Engines Greater Than 90 cc⁽¹⁾</u> <u>1997 and Later (g/km)⁽²⁾</u>	<u>1.2⁽³⁾</u>	=	<u>15.0</u>	=
<u>Off-Road motorcycles and All-Terrain Vehicles with Engines 90 cc or Less</u> <u>1999 and Later (g/km)</u>	<u>1.2⁽³⁾</u>	=	<u>15.0</u>	=
<u>Off-Road Motorcycle and All-Terrain Vehicle Option:</u> <u>1997 and Later Vehicles with Engines Greater Than 90 cc, and</u> <u>1999 and Later Vehicles with Engines 90 cc or Less</u>	<u>Vehicles and engines that do not meet the emissions standards noted above may be certified subject to the use restrictions described in subsection (f) below.</u>			
<u>Off-Road Sport Vehicles and</u> <u>Off-Road Utility Vehicles</u> <u>2007 and Later (g/km)</u>	<u>1.2⁽³⁾</u>	=	<u>15.0</u>	=
<u>Sand Cars</u> <u>2007 and Later (g/km)</u>	<u>1.2⁽³⁾</u>	=	<u>15.0</u>	=
<u>Golf Carts in Federal Ozone Non-Attainment Areas</u> <u>1997 and Later</u>	<u>ZERO</u>	<u>ZERO</u>	<u>ZERO</u>	<u>ZERO</u>

1. Cubic centimeters.
2. Grams per kilometer.
3. Compliance with the 1.2 grams per kilometer HC standard to be applied as a "corporate average" shall be determined as provided in subsection (d). Each engine family shall have only one applicable standard.
4. Applicable to diesel and two-stroke spark ignited engines only.

Emission Standards Based on
Optional Engine-Based Testing⁽¹⁾

<u>Vehicle & Model Year</u>	<u>Hydrocarbon plus Oxides of Nitrogen (HC+NO_x)</u>	<u>Carbon Monoxide (CO)</u>	<u>Particulate Matter⁽⁵⁾</u>
<u>All-Terrain Vehicles with engines less than 225 cc⁽²⁾ 1997 and Later (g/kW-hr)⁽³⁾</u>	<u>16.1⁽⁴⁾</u>	<u>400</u>	=
<u>All Terrain Vehicles with engines greater than or equal to 225 cc 1997 and Later (g/kW-hr)</u>	<u>13.4⁽⁴⁾</u>	<u>400</u>	=
<u>Off-Road Sport Vehicles and Off-Road Utility Vehicles 2007 and Later (g/kW-hr)</u>	<u>12.0⁽⁴⁾</u>	<u>400</u>	=
<u>Sand Cars 2007 and Later (g/kW-hr)</u>	<u>13.4⁽⁴⁾</u>	<u>400</u>	=

1. All-Terrain Vehicles, Off-Road Sport Vehicles, Off-Road Utility Vehicles, and Sand Cars may use the utility test procedures set forth in the "California Exhaust Emission Standards and Test Procedures for 1995-2004 Small Off-Road Engines," as incorporated by reference in CCR, title 13, section 2403(d). The test cycle is limited to the 6-mode Test Cycle A only.
2. Cubic centimeters.
3. Grams per kilowatt-hour.
4. Compliance with the optional HC+NO_x standard to be applied as a "corporate average" shall be determined as provided in subsection (d). Each engine family shall have only one applicable standard.
5. Applicable to diesel and two-stroke spark ignited engines only.

(2) Evaporative emissions. With the exception of vehicles certified solely with compression-ignition engines, evaporative emissions must not exceed:

Evaporative Emissions

<u>Vehicle & Model Year</u>	<u>Emission Component</u>	<u>Permeation Standard</u>	<u>Test Temperature</u>
<u>ALL Off-Highway Recreational Vehicles 2008 and Later</u> <u>g/m²/day⁽¹⁾</u>	<u>Fuel Tank Permeation</u>	<u>1.5</u>	<u>28 °C (82 °F)</u>
	<u>Hose Permeation</u>	<u>15.0</u>	<u>23 °C (73 °F)</u>

1. Grams per square meter per day.

(c)(1) The test procedures for determining certification and compliance with the standards for exhaust and evaporative emissions from new ~~off-road motorcycles, all-terrain vehicles, and golf carts~~ off-highway recreational vehicles are set forth in "California Exhaust Emission Standards and Test Procedures for 1997 and Later Off-Highway Recreational Vehicles and Engines," adopted November 23, 1994, and last amended ~~October 22, 1999~~ August 15, 2007, which are hereby incorporated by reference herein and which in turn incorporate by reference Subparts E and F, of Part 86, and Subparts A, B, C, F and I of Part 1051, Title 40, Code of Federal Regulations. Manufacturers of the following are not required to perform emissions testing, but must file an application of certification and comply with the administrative requirements outlined in the procedures to certify their vehicles for sale in California:

A) Golf carts.

B) Off-road motorcycles and all-terrain vehicles, and engines used in such vehicles, as described in subsection (f) below.

(2) The test procedures for determining certification and compliance with the standards for exhaust emissions from all-terrain vehicle, off-road sport vehicle, off-road utility vehicle, and sand car engines (those engines utilizing the engine-based optional standards noted in (b) above) are set forth in "California Exhaust Emission Standards and Test Procedures for 1995 and Later 2004 Small Off-Road Engines," adopted March 20, 1992, and last amended ~~March 23, 1999~~ July 26, 2004.

(d)(1) For chassis-based testing, ~~C~~ compliance with a standard to be applied as a "corporate average" shall be determined as follows:

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

n = ~~Off-road motorcycle and all-terrain~~Off-highway recreational vehicle engine families.

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

STD_{jx} = The manufacturer designated HC exhaust emission standard 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 (2) 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 (3) prior to sale or offering for sale in California, each engine family shall be certified in accordance with "California Exhaust Emissions Standards and Test Procedures for 1997 and Later Off-highway Recreational Vehicles and Engines" adopted November 23, 1994, and shall be required to meet the manufacturer's designated HC exhaust emission standard 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 exhaust emissions from those California ~~off-road motorcycles and all-terrain~~ off-highway recreational vehicles subject to the California corporate average HC exhaust emissions 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 in subsection (e) below:

(2) For the optional engine-based testing, compliance with a standard to be applied as a "corporate average" shall be determined as follows:

$$\frac{\sum_{j=1}^n (FEL_j)(Sales_j)(Power_j)(Load Factor)(EDP_j)}{(Sales_j)(Power_j)(Load Factor)(EDP_j)} = STD_{ca}$$

where

n = the number of small off-road engine families.

FEL = the Family Emission Level for an engine family.

Sales_j = the eligible sales of engine family *j*.

Power_j = the sales-weighted maximum modal power (in kilowatts) of engine family *j*, or an alternative approved by the Executive Officer.

EDP_j = the Emissions Durability Period of engine family *j*.

Load Factor = the Load Factor is 47% (i.e., 0.47).

STD_{ca} = A manufacturer's corporate average HC+NO_x exhaust emissions from those California off-highway recreational vehicles subject to the California corporate average HC+NO_x exhaust emissions 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 in subsection (e) below:

(e)(1) During the manufacturer's production year, for each vehicle produced for sale in California, the manufacturer must provide the following information to the Executive Officer within 30 days after the last day in each calendar quarter:

(i A) vehicle identification numbers and an explanation of the identification code if applicable;

(ii B) model number and engine size of vehicle;

(iii C) the total number of vehicles marketed and produced for sale in California and their applicable designated emissions standards.

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

(3) Production and sale of vehicles which result in noncompliance with the California standard for the model year shall cause a manufacturer to be subject to civil penalties, according to applicable provisions of the Health and Safety Code. All excess emissions resulting from non-compliance with the California standard shall be made up in the following model year.

(4) For a period of up to one year following the end of the model year, for each model the manufacturer shall submit California sales and registration data as it becomes available.

~~(e) — As an option to the standards set forth in subsection (b) above, exhaust emissions from 1997 and later all terrain vehicle engines must not exceed the equivalent to the off road motorcycle and all terrain vehicle standard using the utility test procedures set forth in "California Exhaust Emission~~

~~Standards and Test Procedures for 1995 and Later Small Off-Road Engines," adopted March 20, 1992, and last amended March 23, 1999, which is hereby incorporated by reference herein.~~

(f) Off-road motorcycles and ATVs, and engines used in such vehicles, that do not meet the emissions standards in subsection (b) above may operate only during certain periods of time at certain off-highway vehicle (OHV) riding areas. Section 2415 of this Article lists these California OHV riding areas and their associated riding seasons for off-highway recreational vehicles that are subject to use restrictions.

(g)(1) On or after January 1, 1997, no new engines greater than 90 cc may be produced for sale to replace off-road motorcycles, all-terrain vehicles and engines used in such vehicles, unless those engines comply with the emission control standards in effect at the time of replacement.

(2) On or after January 1, 1997, manufacturers may not produce for sale in federal ozone nonattainment areas of California new, non-zero emission engines for golf carts.

(3) On or after January 1, 1999, no new engines 90 cc or less may be produced for sale to replace off-road motorcycle and all-terrain vehicle engines, unless those engines comply with the emission control standards in effect at the time of replacement.

(4) On or after January 1, 2007, no new engines may be produced for sale to replace engines in off-road sport vehicles, off-road utility vehicles, or sand cars, unless those engines comply with the emission control standards in effect at the time of replacement.

(h) The Executive Officer may find that any ~~off-road motorcycles, all-terrain~~ off-highway recreational vehicles or engines used in such vehicles certified to comply with California emission standards and test procedures for on-road or other off-road applications are in compliance with these regulations.

(i) No crankcase emissions shall be discharged into the ambient atmosphere from the following vehicles, or from engines used in such vehicles:

(1) 1997 and later off-road motorcycles, all-terrain vehicles, and golf carts;

(2) 2007 and later off-road sport vehicles, off-road utility vehicles, and sand cars.

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, and 43107, Health and Safety Code.

Reference: Sections 43013, 43018, 43102, 43104 and 43107, Health and Safety Code.