State of California
AIR RESOURCES BOARD

Resolution 96-47

September 26, 1996

Agenda Item No.: 96-7-3

WHEREAS, Section 39003 of the Health and Safety Code charges the Air Resources Board ("ARB") with coordinating efforts to attain and maintain ambient air quality standards;

WHEREAS, Sections 39600 and 39601 of the Health and Safety Code authorize ARB to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon ARB by law;

WHEREAS, in Section 43000.5 of the Health and Safety Code, the Legislature has declared that the burden for achieving needed reductions in vehicle emissions should be distributed equitably among various classes of vehicles, including both on- and off-road vehicles, light-duty cars and trucks, and heavy-duty vehicles, to achieve improvements in both the emissions levels and in-use performance;

WHEREAS, Sections 43013(b), of the Health and Safety Code authorizes ARB to adopt off-road vehicle and equipment emission standards and in-use performance standards which it finds to be necessary, cost-effective, and technologically feasible;

WHEREAS, Section 43018 of the Health and Safety Code directs ARB to endeavor to achieve the maximum degree of emission reduction from vehicular and other mobile sources to accomplish the attainment of state ambient air quality standards by the earliest practicable date;

WHEREAS, ARB has adopted regulations under Chapter 9 of Title 13, California Code of Regulations (CCR), and procedures and documents incorporated by reference therein for engines used in

off-road vehicles and equipment, including utility and lawn and garden engines, off-highway recreational vehicles and engines, and heavy-duty off-road diesel cycle engines;

WHEREAS, on January 25, 1996, ARB adopted amendments to Title 13, CCR, Section 2403 and the incorporated test procedures, modifying the Carbon Monoxide (CO) standard for Class I and II utility engines from 300 g/bhp-hr to 350 g/bhp-hr;

WHEREAS, the staff has proposed amendments to the regulations under Title 13, CCR, Section 2403, and procedures and documents to be incorporated by reference therein for 1995 and subsequent model utility and lawn and garden equipment engines, and to Section 2412, and procedures and documents to be incorporated by reference therein for 1995 and later off-highway recreational vehicles and engines;

WHEREAS, the California Environmental Quality Act and ARB regulations require that no project having significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to substantially reduce or avoid such impacts;

WHEREAS, pursuant to Section 43013(e) of the Health and Safety Code and Government Code Section 11346.3, ARB has considered the effects of the proposed amendments on the economy and businesses of the state, including the ability of businesses to compete with businesses in other states;

WHEREAS, Section 209(e) of the Federal Clean Air Act, as amended in 1990, requires that ARB receive authorization from the Administrator of the U.S. EPA to adopt and enforce standards relating to the control of emissions from engines or vehicles that are not otherwise preempted by federal law;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of Chapter 3.5 (commencing with section 11340), Part 1, Division 3, Title 2 of the Government Code;

WHEREAS, ARB finds that:

The proposed amendments are necessary, cost-effective, and technologically feasible.

Modifications to make the 1995 and later utility lawn and garden equipment hydrocarbon (HC) and oxides of nitrogen (NOx) standards optional for snowthrowers and ice augers will align Title 13, CCR, section 2403 with federal regulations for engines used in such equipment.

Modifications to raise the carbon monoxide (CO) standard from 300 grams per brake-horsepower-hour (g/bhp-hr) to 350 g/bhp-hr for 1995 and later off-highway recreational vehicles and engines under 25 horsepower, produced during model years 1996-1998, are necessary to align the standards for specialty vehicles with the amended standards for Class I and II utility and lawn and garden engines, Title 13, CCR, section 2403 that were adopted by ARB on January 25, 1996. The same engines are used in both utility and lawn and garden equipment and off-highway specialty vehicles that use engines under 25 horsepower.

The proposed amendments would ensure that engines used in snowthrowers, ice augers, and specialty vehicles will continue to be available in the marketplace and would avoid potential undue burdens and adverse economic consequences on manufacturers that would otherwise have to produce a separate engine for these products and on distributors and retail dealers that sell such engines and equipment.

WHEREAS, in accordance with the California Environmental Quality Act and ARB regulations, ARB further finds that:

Modifications to make the 1995 and later utility lawn and garden equipment hydrocarbon (HC) and oxides of nitrogen (NOx) standards optional for snowthrowers and ice augers could potentially cause a loss in air quality benefit 0.1 tons per day of HC plus NOx emission reductions. The impact of this on the environment should, however, be minimal because such engines' emissions do not contribute to summertime ozone nonattainment concentrations. Relatedly,

snowthrowers and ice augers are not used in the California air basins with the worst ozone levels, and thus the amendments should not affect the ozone attainment status of these air basins.

The amendments to the standards for engines used in specialty vehicles could result in a loss in air quality benefit of approximately 0.02 tons per day of carbon monoxide (CO)emission reductions. This represents approximately 0.004 percent of the total off-road CO emissions inventory. Most air basins within California are currently in compliance with National Ambient Air Quality Standards (NAAQS). For the two California air basins (Tahoe and South Coast) that are scheduled to achieve CO attainment by the year 2000, the increase of the CO emission standard, as amended, should not affect the scheduled attainment date or have any other adverse effects on the CO attainment schedule.

To the extent that some adverse environmental impacts may occur as a result of making optional the HC and NOx standards for snowthrowers and ice augers, and modifying the CO standard to 350 g/bhp-hr for off-highway recreational vehicles under 25 horsepower, overriding economic considerations exist to support the adoption of the new standards.

Requiring manufacturers to produce a distinct California engine for snowthrowers, ice augers, and specialty vehicles that would be applicable to only a small segment of the California market would not be cost-effective. If manufacturers chose not to certify these products for the California market because of the relatively small number sales in the state and because of concerns about poor performance of engines used in specialty vehicles, such engines would not be available to the market. If this occurred, it could potentially adversely affect both the environment and the economy. The environment could be affected by consumers not being able to purchase newer, environmentally cleaner products, viz, snowthrowers and ice augers with engines that meet the Tier I CO standard and specialty vehicles with engines that meet the Tier I combined HC + NOx standard and the 350 g/bhp standard, which

is considerably cleaner than CO emissions in pre-Tier I unregulated engines. The unavailability of products could also adversely affect the creation and growth of businesses and employment in California for those businesses that manufacture and sale such equipment and vehicles in the state.

There are no other feasible mitigation measures that would reduce the potential environmental impacts while at the same time providing the relief that manufacturers of snowthrower, ice auger, and off-highway recreational vehicle engines need, and would avert the harmful impacts on retailers and distributors.

NOW, THEREFORE, BE IT RESOLVED that ARB hereby adopts amendments to Section 2403, Title 13, CCR, the incorporated "Exhaust Emission Standards and Test Procedures for Utility and Lawn and Garden Engines," and Section 2412, Title 13, CCR, as set forth in Attachment A hereto.

BE IT FURTHER RESOLVED that ARB hereby determines that the regulations adopted herein will not cause California off-road emission standards for engines used in utility and lawn and garden equipment and off-highway recreational vehicles, in the aggregate, to be less protective of public health and welfare than applicable federal standards; and that California needs such standards to meet compelling and extraordinary conditions within the State.

BE IT FURTHER RESOLVED that ARB finds that the California emission standards and test procedures as adopted herein will not cause the California requirements to be inconsistent with Section 209 of the Clean Air Act and raise no new issues affecting previous waiver determinations of the Administrator of the U.S. EPA pursuant to Section 209(e) of the Clean Air Act.

BE IT FURTHER RESOLVED that the Executive Officer shall, upon adoption, forward the regulations to the U.S. EPA with a request that California be given authorization to adopt and enforce such provisions.

I hereby certify that the above is a true and correct copy of Resolution 96-47, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Clerk of the Board

ATTACHMENT A

PROPOSED AMENDMENTS TO REGULATION

State of California
Air Resources Board

Amendments to Title 13, California Code of Regulations,
Chapter 9, Article 1, Section 2403, .
CALIFORNIA REGULATIONS FOR 1995 AND LATER
UTILITY AND LAWN AND GARDEN EQUIPMENT ENGINES

NOTE: This document is printed in a style to indicate changes from the existing provisions. All existing language is indicated by plain type. All additions to language are indicated by underline. All deletions to language are indicated by ~~strikeout~~.

The standards as presented reflect the amendments adopted by ARB on January 25, 1996, which revised the carbon monoxide standard for Class I and II engines from 300 to 350 grams per brake horsepower.

2403. Exhaust Emission Standards and Test Procedures--Utility and Lawn and Garden Equipment Engines.

(a) This section shall be applicable to utility and lawn and garden equipment engines produced on or after January 1, 1995.

(b) Exhaust emissions from new utility and lawn and garden equipment engines, manufactured for sale, sold, offered for sale, introduced or delivered for introduction into commerce in, or imported into California, shall not exceed:

Exhaust Emission Standards
(grams per brake horsepower-hour)

Calendar Year	Engine Class (1)	Hydrocarbon plus oxides of nitrogen(2)	Hydrocarbon (2)	Carbon Monoxide	Oxides of Nitrogen	Particulate
1995	I	12.0	--	300	--	0.9(3)
	II	10.0	--	300	--	0.9(3)
	III(4)	--	220	600	4.0	--
	IV(4)	--	180	600	4.0	--
	V(4)	--	120	300	4.0	--
1996 to 1998	I	12.0(6)	--	350	--	0.9(3)
	II	10.0(6)	--	350	--	0.9(3)
	III(4)	--	220(6)	600	4.0(6)	--
	IV(4)	--	180(6)	600	4.0(6)	--
	V(4)	--	120(6)	300	4.0(6)	--
1999 and subsequent	I, II	3.2(6)	--	100	--	0.25(5)
	III, IV, V(4)	--	50(6)	130	4.0(6)	0.25(5)

(1) "Class I" means utility and lawn and garden equipment engines less than 225 cc in displacement.
"Class II" means utility and lawn and garden equipment engines greater than or equal to 225 cc in displacement.
"Class III" means hand held utility and lawn and garden equipment engines less than 20 cc in displacement.
"Class IV" means hand held utility and lawn and garden equipment engines 20 cc to less than 50 cc in displacement.
"Class V" means hand held utility and lawn and garden equipment engines greater than or equal to 50 cc in displacement.

(2) The Executive Officer may allow gaseous-fueled (i.e., propane, natural gas) engine families, that satisfy the requirements of the regulations, to certify to either the hydrocarbon plus oxides of nitrogen or hydrocarbon emission standard, as applicable. on the basis of the non-methane hydrocarbon (NMHC) portion of the total hydrocarbon emissions.

(3) Applicable to all diesel-cycle engines.

(4) These standards may be used for engines that meet the requirements of (I) and (ii) below, and for two-stroke engines that exclusively power snowthrowers.

(I) The engine must be used in a hand-held piece of equipment. To be classified as a hand-held piece of equipment, the equipment must require its full weight to be supported by the operator in the performance of its requisite function.

(ii) The engine and equipment must require multi-positional characteristics for use (e.g. it must be capable of operating in any position, upside down, or sideways as required to complete the job).

(5) Applicable to all diesel-cycle engines, and all two-stroke engines.

(6) Engines used exclusively in snowthrowers and ice augers need not certify to or comply with the HC and NOx standards at the option of the manufacturer.

(c) The test procedures for determining compliance with the standards for exhaust emissions from new utility and lawn and garden equipment engines are set forth in "California Exhaust Emission Standards and Test Procedures for 1995 and Later Utility and Lawn and Garden Equipment Engines", adopted March 20, 1992, and last amended May 26, 1995.

(d) In 1995 and subsequent years, fire and police departments, and other entities which specialize in emergency response may purchase emergency equipment powered by a non-California certified engine only when such equipment with a California-certified engine is

not available. For purposes of this section, a request to purchase emergency equipment powered by a non-California certified engine shall be submitted for approval to the Executive Officer.

(e) No new engines shall be produced for sale to replace pre-1995 model equipment after January 1, 1999, unless those engines comply with the 1995 model-emission standards.

(f) Any new equipment engine certified to comply with California emission standards and test procedures for on-road or other off-road applications may, upon approval by the Executive Officer be in compliance with these regulations.

NOTE: Authority cited: Sections 39600, 39601, 43103 and 43018, Health and Safety Code. Reference: Sections 43013, 43017 and 43018, Health and Safety Code.

State of California
AIR RESOURCES BOARD

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR 1995 AND LATER UTILITY AND LAWN AND GARDEN EQUIPMENT ENGINES

Adopted:	March 20, 1992
Amended:	April 8, 1993
Amended:	August 29, 1994
Amended:	May 26, 1995
Amended:	

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The numbering convention employed in this document, in order of priority, is: I.1.a.1.i.A.

Amend Title 13, California Code of Regulations, Part I, Section 9 of the incorporated "California Exhaust Emission Standards and Test Procedures for 1995 and Later Utility and Lawn and Garden Equipment Engines", to read as follows:

Part I. Emission Regulations for 1995 and Later New Lawn and Garden and Utility Equipment Engines, General Provisions.

1. through 8. [No Change]

9. Exhaust Emission Standards For 1995 and Later Utility and Lawn and Garden Engines.

(a) This Section shall be applicable to utility and lawn and garden engines produced on or after January 1, 1995.

(b) Exhaust emissions from new utility and lawn and garden equipment engines, manufactured for sale, sold, offered for sale, introduced or delivered for introduction into commerce, or imported into California, shall not exceed:

Exhaust Emission Standards
(grams per brake horsepower-hour)

Calendar Year	Engine Class (1)	Hydrocarbon plus oxides of nitrogen(2)	Hydrocarbon (2)	Carbon Monoxide	Oxides of Nitrogen	Particulate
1995	I	12.0	--	300	--	0.9(3)
	II	10.0	--	300	--	0.9(3)
	III(4)	--	220	600	4.0	--
	IV(4)	--	180	600	4.0	--
	V(4)	--	120	300	4.0	--
1996 to 1998	I	12.0(6)	--	350	--	0.9(3)
	II	10.0(6)	--	350	--	0.9(3)
	III(4)	--	220(6)	600	4.0(6)	--
	IV(4)	--	180(6)	600	4.0(6)	--
	V(4)	--	120(6)	300	4.0(6)	--
1999 and subsequent	I, II	3.2(6)	--	100	--	0.25(5)
	III, IV, V(4)	--	50(6)	130	4.0(6)	0.25(5)

(1) "Class I" means utility and lawn and garden equipment engines less than 225 cc in displacement.
"Class II" means utility and lawn and garden equipment engines greater than or equal to 225 cc in displacement.
"Class III" means hand held utility and lawn and garden equipment engines less than 20 cc in displacement.
"Class IV" means hand held utility and lawn and garden equipment engines 20 cc to less than 50 cc in displacement.
"Class V" means hand held utility and lawn and garden equipment engines greater than or equal to 50 cc in displacement.

(2) The Executive Officer may allow gaseous-fueled (i.e., propane, natural gas) engine families, that satisfy the requirements of Section 20 of Part

I, to certify to either the hydrocarbon plus oxides of nitrogen or hydrocarbon emission standard, as applicable, on the basis of the

Exhaust Emission Standards (continued)

non-methane hydrocarbon (NMHC) portion of the total hydrocarbon emissions.

(3) Applicable to all diesel-eycle engines.

(4) These standards may be used for engines that meet the requirements of (i) and (ii) below, and for two-stroke engines that power only snow throwers.

(i) The engine must be used in a hand-held piece of equipment. To be classified as a hand-held piece of equipment, the equipment must require its full weight to be supported by the operator in the performance of its requisite function.

(ii) The engine and equipment must require multi-positional characteristics for use (e.g. it must be capable of operating in any position, upside down, or sideways as required to complete the job).

(5) Applicable to all diesel-cycle engines, and all two-stroke engines.

(6) Engines used exclusively in snowthrowers and ice augers need not certify to or comply with the HC and Nox standards at the option of the manufacturer.

(c) In 1995 and subsequent years, fire and police departments, and other entities which specialize in emergency response may purchase emergency equipment powered by a non-California-certified engine only when such equipment with a California-certified engine is not available. For purposes of this Section, a request to purchase emergency equipment powered by a non- California-certified engine shall be submitted for approval to the Executive Officer.

PROPOSED AMENDMENTS TO REGULATIONS

State of California
AIR RESOURCES BOARD

Amendments to Title 13, California Code of Regulations,
Chapter 9, Article 3, Section 2412
California Exhaust Emissions Standards and Test Procedures
For 1995 And Later Off-Highway Recreational Vehicles and Engines

NOTE: This document is printed in a style to indicate changes from the existing provisions. All existing language is indicated by plain type. All additions to language are indicated by <u>underline.</u> All deletions to language are indicated by ~~strikeout~~.

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

(a) This section shall be applicable to specialty vehicle engines under 25 horsepower produced on or after January 1, 1995, and all other 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 shall comply with the following exhaust emissions from new off-highway recreational vehicles and engines that are sold, leased, used, or introduced into commerce in California. Exhaust emissions shall not exceed:

~~Proposed~~ Emission Standards

Vehicle & Model Year	Hydrocarbon	Oxides of Nitrogen	Carbon Monoxide	Particulate Matter[1]
Off-Road Motorcycles and All-Terrain Vehicles with Engines Greater Than 90 CC[3]				
1997 and Later (g/krn)[4]	1 ,2[2]	-	.... 15.0	-
Off-Road Motorcycles and All-Terrain Vehicles with Engines 90 cc or Less 1999 and Later (g/krn)	1 .2[2]	-	.... 15.0	-
All-Terrain Vehicles theOption 1997 and Later	Shall comply with exhaust emission standards equivalent to off-roadmotorcycle 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 Utility and Lawn and Garden Equipment Engines" which is hereby incorporated by reference herein[5]			
Golf Carts in Federal Ozone Non-Attainrnent Areas 1997 and Later	ZERO	ZERO	ZERO	ZERO
Specialty Vehicle Engines <25 horsepower				
1995-~~1998~~ [Date of Amendmentl	10.0/12.0[6] Combined		300	0.9
[DateofAmendment]-1998	100/12.0[6] Comhined		~~300~~ 350	0.9
1999 and Later (G/bhp-hr)'	3.2 Combined		100	0.25
Go-Karts and Specialty Vehicle Engines >25 horsepower 1997 and Later (g/bhp-hr)	3.2 Combined		100	0.25

1. Applicable to diesel and two-stroke spark ignited engines only.
2. Compliance with the 1.2 gram 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.
6. The standard is applicable based on the engine displacement. Engines <225 cubic centimeters (cc) shall comply with 12.0 g/Bhp-hr HC+NOx standard and engines 225cc and greater shall comply with the 10.0 g/Bhp-hr HC+NOx standard.
7. Grams per brake-horsepower-hour.

(c) (1) The test procedures for determining certification and compliance with the standards for exhaust emissions from new off-road motorcycles, all-terrain vehicles, and golf carts are set forth in "California Exhaust Emission Standards and Test Procedures for 1995 and Later Off-Highway Recreational Vehicles and Engines," adopted November 23, 1994, which incorporates by reference Subparts E and F, Title 40, Code of Federal Regulations. **There are no** emission test procedures for golf carts.[8]

(2) The test procedures for determining certification and compliance with the standards for exhaust emissions from new specialty vehicles and go-karts, and engines used in such vehicles, and all terrain vehicle engines (those engines utilizing the optional standards noted in (b) above) are set forth in "California Exhaust Emission Standards and Test Procedures for 1995 and Later Lawn and Garden and Utility Equipment Engines" adopted March 20, 1992, and last amended April 8, 1993.

(d) 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 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 Emission Standards and Test Procedures for 1995 and Later Off-Highway Recreational Vehicle and Engine" 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 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:

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

(i) vehicle identification numbers and an explanation ofthe identification code if applicable;

(ii) model number and engine size of vehicle;

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

(2) The manufacturer's average HC exhaust emissions 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 non-compliance 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, the manufacturer shall submit California sales and registration data as it becomes available, for each model.

(e) As an option to the standards set forth in section (b) above, exhaust emissions from 1997 and later all-terrain vehicle engines shall 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 Utility and Lawn and Garden Equipment Engines", adopted, March 20, 1992, and last amended April 8, 1993, which is hereby incorporated by reference herein.

(f) (1) On or after January 1, 1995, no new engines shall be produced for sale to replace specialty vehicle engines, unless the engines comply with the emission standards in effect at the time of replacement.

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

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

(4) On or after January 1, 1999, no new engines 90 cc or less shall 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.

(g) The Executive Officer may find that any off-road motorcycles, all-terrain vehicles, specialty vehicles, go-karts 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.

(h) No crankcase emissions shall be discharged into the ambient atmosphere from 1997 and later off-road motorcycles, all-terrain vehicles, golf carts, or engines used in such vehicles.

(i) Applicable to diesel and two-stroke spark ignited engines only. (2) Compliance with the 1.2 gram 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-telTain 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. (6) The standard is applicable based on the engine displacement. Engines <225 cubic centimeters(cc) shall co ply with 12.0 g/Bhp-hr HC+NOx standard and engines 225cc and greater shall comply with the 10.0 g/Bhp-hr HC+NOx standard. (7) Grams per brake-horsepower-hour. (8) Although golf cart manufacturers must file an application of certification and comply with the administrative requirements outlined in the procedures to certify their vehicles for sale in California, they are not required to perform emissions testing.

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