APPENDIX IV

STAFF'S SUGGESTED MODIFICATIONS TO THE ORIGINAL PROPOSAL, AS DISTRIBUTED AT THE NOVEMBER 17, 2005, BOARD HEARING

ATTACHMENT C

PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE CALIFORNIA REGULATIONS FOR NEW 2007 AND LATER SPARK-IGNITION INBOARD/STERNDRIVE PLEASURECRAFT

Staff's Suggested Modifications to the Original Proposal

TO BE PRESENTED AT THE NOVEMBER 17, 2005 HEARING
OF THE AIR RESOURCES BOARD

Shown below are the staff's suggested modifications to the originally proposed amendments set forth in Appendix A to the Staff Report: Initial Statement of Reasons released September 30, 2005. Only those portions containing the suggested modifications are included. The originally proposed regulatory language is shown in underline, and the text to be removed is shown in ~~strikeout~~. The suggested modifications are shown in double-underline to indicate additions to the original proposal and ~~double-strikeout~~ to indicate deletions from the original proposal. Other portions within the sections shown remain unchanged and are indicated by the symbol "* * * * *" for reference. All suggested modifications will be made available to the public for a fifteen-day comment period before final adoption.

Modifications to the Proposed Inboard-Sterndrive Tier II "Option 2"

The originally proposed amendments proposed Option 2, allowing manufacturers the option of postponing the 45% phase-in of the 5.0 g/kW-hr HC + NO_x standard in 2007 to a 100% phase-in of that standard in 2008, provided that emission reductions potentially lost from that postponement are made up elsewhere by using low permeation fuel line hose or equivalent alternatives. It was suggested that the Option 2 requirements regarding low permeation fuel line hose be further specified to indicate the responsible parties and the specifications for that hose. Staff agrees and proposes several modifications to the language of Title 13, California Code of Regulations sections 2441 and 2442 to reflect this change to the originally proposed language.

Modifications to Requirements Affecting High-Performance Inboard-Sterndrive Engines

It was suggested that engines between 373 and 485 kilowatts have a propensity for accelerated wear of mechanical components compared to less powerful engines. Staff agrees, and proposes several modifications to the language of Title 13, California Code of Regulations sections 2445.1 and 2445.2.

Other Conforming and Minor Modifications

It was suggested that manufacturers' sales and service literature descriptions of maximum rated power may not align with certification application information, and that the latter should control. Staff agrees and proposes a change to the definition in section 2441. It was also suggested that the structure of the industry warrants a longer period in which to gather and submit California sales data than originally proposed. Staff agrees and proposes a change to section 2442. Staff also determined that the originally proposed amendments to the warranty statement provisions restated regulatory provisions rather than providing a narrative statement, so additional changes are proposed for section 2445.2. As a result of the above-described changes, modifications to paragraph numbering are needed.

Following, then, is the proposed text of the suggested modifications described above:

Amend Title 13, California Code of Regulations, sections 2441, 2442, 2445.1, and 2445.2, to read:

§ 2441. Definitions.

(a) Definitions in section 1900(b), Division 3, Chapter 9, Title 13 of the California Code of Regulations, apply with the following additions:

* * * * *

(5) "Boat manufacturer," as it applies in Section 2442(b), means any person or business entity engaged in the manufacturing, assembling, or importing of new vessels equipped with inboard or sterndrive engines for sale in California, or engaged in the sale, offer for sale, introduction, delivery or importation of such vessels into California for introduction into commerce. Included are those who act for and are under the control of any such person or business entity in connection with the distribution of such vessels. The term boat manufacturer does not include any person or business entity whose sole activities are the direct sale of said vessels to ultimate purchasers or the servicing of said vessels.

~~(5)~~(6) "Capture rate" means the percentage of in-use engines subject to recall which must be corrected to bring the class of engines into compliance. The number of engines subject to recall shall be based on the actual number of engines in use as verified by engine registration records compiled and prepared by industry, or a comparable source as determined by the Executive Officer at the time a recall is initiated.

~~(6)~~(7) “Carryover engine family” means an engine family that undergoes certification using carryover test data from previous model years.

~~(7)~~(8) “CE10 fuel” is a blend of 45% toluene, 45% iso-octane, and 10% ethanol that has been standardized by the American Society of Testing and Materials (ASTM) as a reference fuel for evaluating the evaporative permeability of fuel-containing materials.

~~(7)~~~~(8)~~(9) “Certification” means, with respect to new spark-ignition marine engines, obtaining an Executive Order for an engine family complying with the spark-ignition marine engine exhaust emission standards and requirements specified in Title 13, California Code of Regulations, sections 2442 and 2447.

~~(8)~~~~(9)~~(10) “Complete engine assembly” or “complete engine configuration” means an assembly of a basic engine and all of the specific applicable components (e.g., air inlet, fuel and exhaust systems, etc.) and calibrations (e.g., carburetor jet size, valve timing, etc.) required for the assembly to be installed in a new unit of equipment.

~~(9)~~~~(10)~~(11) “Continuous monitoring” means sampling at a rate no less than two samples per second. If for engine control purposes, a computer input component is sampled less frequently, the value of the component may instead be evaluated each time sampling occurs.

~~(11)~~(12) “ECM hour-meter” means a device that is integrated into the engine control module (ECM) and that is capable of storing and incrementing time intervals based on the clock rate of the ECM.

~~(10)~~~~(12)~~(13) “Emission control system” means any device, system, or element of design that controls or reduces the emission of substances from an engine.

~~(11)~~~~(13)~~(14) “Enforcement test results” means data or information gathered through enforcement programs conducted by the Air Resources Board. These programs include, but are not limited to, field inspections, in-use compliance testing, assembly-line testing.

~~(12)~~~~(14)~~(15) “Engine family” means a subclass of a basic engine based on similar emission characteristics. The engine family is the grouping of engines that is used for the purposes of certification.

~~(13)~~~~(15)~~(16) “Engine identification number” means a unique specification (for example, model number/serial number combination) that allows each spark-ignition marine engine to be distinguished from other similar engines.

~~(14)~~~~(16)~~(17) “Engine manufacturer” means the manufacturer granted certification.

~~(15)~~~~(17)~~(18) “Engine misfire” means lack of combustion in the cylinder due to absence of spark, poor fuel metering, poor compression, or any other cause.

~~(16)~~~~(18)~~(19) “Engine start” is defined as the point at which normal, synchronized spark and fuel control is obtained or when the engine reaches a speed 150 revolutions per minute (rpm) below the normal, warmed-up idle speed.

~~(17)~~~~(19)~~(20) “Exhaust emissions” means matter emitted into the environment from any opening downstream from the exhaust port of a spark-ignition marine engine.

~~(18)~~~~(20)~~(21) “Executive Officer” means the Executive Officer of the Air Resources Board or his or her authorized representative.

~~(19)~~~~(21)~~(22) “Executive Order” means an order issued by the Executive Officer certifying engines for sale in California.

~~(20)~~~~(22)~~(23) “Family Emission Limit” means an emission value assigned by a marine engine manufacturer to an engine family for the purpose of complying with a corporate average exhaust emission standard. The Family Emission Limit (FEL) must not exceed the limit specified in this Article.

~~(21)~~~~(23)~~(24) “Fuel system” means all components involved in the transport, metering, and mixture of the fuel from the fuel tank to the combustion chamber(s) including, but not limited to the following: fuel tank, fuel tank cap, fuel pump, fuel lines, oil injection metering system, carburetor or fuel injection components, and all fuel system vents.

~~(22)~~~~(24)~~(25) “Fuel trim” refers to feedback adjustments to the base fuel schedule. Short-term fuel trim refers to dynamic or instantaneous adjustments. Long-term fuel trim refers to much more gradual adjustments to the fuel calibration schedule than short-term trim adjustments. These long-term adjustments compensate for engine differences and gradual changes that occur over time.

~~(23)~~~~(25)~~(26) “Functional check” for an output component means verification of proper response to a computer command. For an input component, functional check means verification of the input signal being in

the range of normal operation, including evaluation of the signal's rationality in comparison to all available information.

~~(24)~~~~(26)~~(27) “Inboard Engine” means a four-stroke spark-ignition marine engine not used in a personal watercraft that is designed such that the propeller shaft penetrates the hull of the marine watercraft while the engine and the remainder of the drive unit is internal to the hull of the marine watercraft.

~~(25)~~~~(27)~~(28) “Inspection criteria” means the pass and fail numbers associated with a particular sampling plan.

~~(28)~~(29) “Low-permeation fuel line hose” means a fuel hose that does not exceed a 15.0 grams per square meter per day permeation rate on CE10 fuel at 23º Celsius, as tested per SAE J1527.

~~(26)~~~~(29)~~(30) “Malfunction” means the inability of an emission-related component or system to remain within design specifications. Further, malfunction refers to the deterioration of any of the above components or systems to a degree that would likely cause the emissions of an aged engine with the deteriorated components or systems present at the beginning of the applicable certification emission test to exceed the $HC+NO_x$ emission standard by more than 50 percent, unless otherwise specified, as applicable pursuant to Subchapter 1 (commencing with Section 1900), Chapter 3 of Title 13.

~~(27)~~~~(30)~~(31) “Marine engine manufacturer” means any person engaged in the manufacturing or assembling of new spark-ignition marine engines or the importing of such engines for resale, or who acts for and is under the control of any such person in connection with the distribution of such engines. A spark-ignition marine engine manufacturer does not include any dealer with respect to new spark-ignition marine engines received by such person in commerce.

~~(28)~~~~(31)~~(32) “Marine warm-up cycle” means sufficient engine operation such that the coolant temperature has risen by at least 40 degrees Fahrenheit from engine starting and reaches a minimum temperature of at least 140 degrees Fahrenheit.

~~(29)~~~~(32)~~(33) “Marine watercraft” means every description of boat, ship or other artificial contrivance used, or capable of being operated on water.

~~(33)~~(34) “Maximum Rated Power” means the maximum brake kilowatt output of an engine at rated speed, as stated in the manufacturer’s ~~sales and service literature and in the~~ application for certification.

~~(30)~~~~(34)~~(35) “Model year” means the engine manufacturer’s annual new model production period which includes January 1 of the calendar year for which the model year is named, ends no later than December 31 of the calendar year, and does not begin earlier than January 2 of the previous calendar year. Where an engine manufacturer has no annual new model production period, model year means the calendar year.

~~(31)~~~~(35)~~(36) “New”, for purposes of this Article, means a spark-ignition marine engine or watercraft the equitable or legal title to which has never been transferred to an ultimate purchaser. Where the equitable or legal title to the engine or watercraft is not transferred to an ultimate purchaser until after the engine or watercraft is placed into service, then the engine or watercraft will no longer be new after it is placed into service. A spark-ignition marine engine or watercraft is placed into service when it is used for its functional purposes. With respect to imported spark-ignition marine engines or watercraft, the term “new” means an engine or watercraft that is not covered by an Executive Order issued under this Article at the time of importation, and that is manufactured after the effective date of a section in this Article which is applicable to such engine or watercraft, or which would be applicable to such engine or watercraft had it been manufactured for importation into the United States.

~~(32)~~~~(36)~~(37) “Nonconformity” or “Noncompliance”, for purposes of Title 13, California Code of Regulations, section 2444.1, means that:

(A) a significant number, determined by the Executive Officer, of a class of engines, although properly maintained and used, experience a failure of the same emission-related component(s) within their useful lives which, if uncorrected, results in the engines’ failure to comply with the emission standards prescribed under section 2442 which are applicable to the model year of such engines; or

(B) a class of engines that at any time within their useful lives, although properly maintained and used, on average does not comply with the emission standards prescribed under section 2442 which are applicable to the model year of such engines.

~~(33)~~~~(37)~~(38) “Operating cycle” consists of engine startup, engine run, and engine shutoff.

~~(34)~~~~(38)~~(39) “Original equipment manufacturer” means a manufacturer who purchases engines for installation in its equipment for sale to ultimate purchasers.

~~(35)~~~~(39)~~(40) “Outboard engine” means a spark-ignition marine engine that, when properly mounted on a marine watercraft in the position to operate, houses the engine and drive unit external to the hull of the marine watercraft.

~~(36)~~~~(40)~~(41) “Personal watercraft engine” means a spark-ignition marine engine that does not meet the definition of outboard engine, inboard engine or sterndrive engine, except that the Executive Officer may, in his or her discretion, classify a personal watercraft engine as an inboard or sterndrive engine if it is comparable in technology and emissions to an inboard or sterndrive engine.

~~(37)~~~~(41)~~(42) “Production-line tests” are emission tests performed on a sample of production engines produced for sale in California and conducted in accordance with Title 13, California Code of Regulations, section 2446(a).

~~(38)~~~~(42)~~(43) “Redline engine speed” means the engine manufacturer recommended maximum engine speed as normally displayed on instrument panel tachometers, or the engine speed at which fuel shutoff occurs.

~~(39)~~~~(43)~~(44) “Response rate,” with regards to oxygen sensors, refers to the delay (measured in milliseconds) between a switch of the sensor from lean to rich or vice versa in response to a change in fuel/air ratio above and below stoichiometric.

~~(40)~~~~(44)~~(45) “Sales” or “Eligible sales” means the actual or calculated sales of an engine family in California for the purposes of corporate averaging and production-line testing. Upon Executive Officer approval, an engine manufacturer may calculate its eligible sales through market analysis of actual federal production or sales volumes.

~~(41)~~~~(45)~~(46) “Scheduled maintenance” means any adjustment, repair, removal, disassembly, cleaning, or replacement of components or systems required by the engine manufacturer to be performed on a periodic basis to prevent part failure or marine watercraft or engine malfunction, or those actions anticipated as necessary to correct an overt indication of malfunction or failure for which periodic maintenance is not appropriate.

~~(42)~~~~(46)~~(47) “Spark-ignition marine engine” means any engine used to propel a marine watercraft, and which utilizes the spark-ignition combustion cycle; including, but not limited to personal watercraft, outboard, inboard and sterndrive engines.

~~(43)~~~~(47)~~(48) “Sterndrive engine” means a four-stroke spark-ignition marine engine not used in a personal watercraft that is designed such that the drive unit is external to the hull of the marine watercraft, while the engine is internal to the hull of the marine watercraft.

~~(44)~~~~(48)~~(49) “Test engine” means the engine or group of engines that an engine manufacturer uses during certification, production-line and in-use testing to determine compliance with emission standards.

~~(45)~~~~(49)~~(50) “Test Procedures” means the document entitled “California Exhaust Emission Standards and Test Procedures for 2001 Model Year and Later Spark-Ignition Marine Engines,” which includes the standards and test procedures applicable to 2001 and later spark-ignition personal watercraft, outboard, inboard and sterndrive marine engines, as adopted October 21, 1999 and as last amended ~~June 6, 2002~~ {insert date of adoption}. This document is incorporated by reference herein.

~~(46)~~~~(50)~~(51) “Ultimate purchaser” means, with respect to any new spark-ignition marine engine, the first person who in good faith purchases such new spark-ignition marine engine for purposes other than resale.

~~(47)~~~~(51)~~(52) “U.S.C.” means United States Code.

~~(48)~~~~(52)~~(53) “Used solely for competition” means exhibiting features that are not easily removed and that would render its use other than in competition unsafe, impractical, or highly unlikely.

~~(49)~~~~(53)~~(54) “Useful life” for spark-ignition marine engines means nine years for personal watercraft engines and sixteen years for outboard, sterndrive, and inboard engines.

~~(50)~~~~(54)~~(55) “Warranty period” means the period of time the engine or part is covered by the warranty provisions.

~~(51)~~~~(55)~~(56) “Warranty station” means any dealer, service center or other agent that is authorized by the engine manufacturer to perform diagnostic labor, repairs or replacements of warranted engine components.

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43102 and 43104, Health and Safety Code.
Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150-43154, 43205.5 and 43210-43212, Health and Safety Code.

§ 2442. Emission Standards.

* * * * *

(b) Model year 2003 and later model year spark-ignition inboard and sterndrive marine engines:

(1) Exhaust emissions from new model year 2003 and later spark-ignition inboard and sterndrive marine engines must not exceed the exhaust emission standards listed in Table 2 for the designated emission durability test period. Prior to Model Year 2007 certification, each engine manufacturer must select either Option 1 (OPT 1) or Option 2 (OPT 2) for its entire production for the 2007 and 2008 model years.

Table 2.

~~**Inboard and Sterndrive Exhaust Emission Standards (by Implementation Date)**~~		
~~**Model Year**~~	~~**$HC+NO_x$** (grams per kilowatt-hour)~~	~~**Durability Test Period** (hours)~~
~~2003-2008[1]~~	~~16.0[2]~~	~~—~~
~~2007 and Later[3]~~	~~5.0~~	~~480~~

1. ~~Engines with a maximum rated power exceeding 373 kilowatts (500 horsepower) are not required to comply with these standards.~~
2. ~~Compliance with the $HC+NO_x$ standard may be averaged on a sales-weighted basis, across the engine manufacturers' California production, based on projected California sales or the projected California percentage of national sales.~~
3. ~~For model year 2007, engine manufacturers shall certify a minimum of 45% of their California production (projected California sales or projected California percentage of national sales) to the standard. For model year 2008, engine manufacturers shall certify a minimum of 75% of their California production (projected California sales or projected California percentage of national sales) to the standard.~~

Inboard/Sterndrive Marine Engine Standards

MODEL YEAR	RATED POWER [kilowatts]	COMPLIANCE OPTION[1]	DURABILITY [hours / years]	EXHAUST STANDARD NMHC[2]+NOx [grams per kilowatt-hour]	EXHAUST STANDARD TYPE[3]	SUPPLEMENTAL MEASURE[4]
2003 - 2006	kW ≤ 373	N/A	N/A	16.0	AVE	None
2007	kW ≤ 373	OPT 1	N/A	16.0 (55%)	AVE	None
			480 / 10	5.0 (45%)	FIXED	
		OPT 2	N/A	14.0	FIXED	~~Evaporative~~ Low-Permeation ~~Liquid~~Fuel Line Hoses
2008	kW ≤ 373	OPT 1	N/A	16.0 (25%)	AVE	None
			480 / 10	5.0 (75%)	FIXED	
		OPT 2	480 / 10	5.0	FIXED	~~Evaporative~~ Low-Permeation ~~Liquid~~Fuel Line Hoses
2009 and later	kW ≤ 373	N/A	480 / 10	5.0[6]	FIXED	Carryover[7]
	373 < kW ≤ 485		480 / 10	5.0[6]	AVE	
	kW > 485		50[5] / 1	5.0[6]	AVE	

Notes:
1. Once a manufacturer has chosen an option, that option must continue to be used exclusively across product lines
2. The non-methane component of hydrocarbon
3. Corporate averaging (AVE) may be used to demonstrate compliance with the exhaust emission standard, except where a FIXED standard is …….required
~~3~~4. Supplemental measures may be different than shown, but must provide equal and verifiable emission reductions to those indicated
~~4~~5. Engine manufacturers may request a shorter durability period for high power engines provided they submit data supporting a shorter period
~~5~~6. All engines ≤ 373 kW must meet a 5.0 g/kW-hr NMHC+NOx capping standard. For engines > 373 kW, the standard may be met by sales-averaging with engines equal to or less than 373 kW
~~6~~7. The same or better supplemental emission control hardware used to meet the standard in 2007 must be used every model year thereafter

* * * * *

(2) Compliance with the standards on a corporate averaging basis is calculated as follows:

* * * * *

(E) For each engine family, the engine manufacturer shall submit California sales data within ~~ninety (90)~~one hundred eighty (180) days after the end of the model year.

* * * * *

(3) Requirements of engine manufacturers and boat manufacturers under Option 2 and using Low Permeation Fuel Line Hose:

(A) Each engine manufacturer that chooses Option 2 must provide written instructions, as part of the installation materials provided to purchasers of the engine, to use Low Permeation Fuel Line Hose for the primary fuel line connecting the fuel tank to the engine of any boat that is manufactured for sale, sold, or offered for sale in California, or that is introduced, delivered or imported into California for introduction into commerce.

(B) Each boat manufacturer must install Low Permeation Fuel Line Hose as for the primary fuel line connecting the fuel tank to the engine of any boat that is manufactured for sale, sold, or offered for sale in California that uses an engine from a manufacturer that chooses Option 2.

~~(3)~~(4) Supplemental Measures. Prior to Model Year 2007 certification, manufacturers choosing Option 2 may request Executive Officer approval of an ~~alternative~~ supplemental measure as an alternative to meeting the requirements of paragraph (b) (3). In determining whether to approve a request, the Executive Officer will consider the following:

(A) Whether the proposed supplemental measure would achieve reductions in NMHC+NOx equivalent to ~~the Evaporative~~ using Low-Permeation ~~Liquid~~Fuel Line Hoses,
(B) The engine manufacturer's measures to ensure successful implementation of the proposed supplemental measure,
(C) The durability of the proposed supplemental measure, and
(D) Any additional information the Executive Officer deems relevant.

* * * * *

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43102 and 43104, Health and Safety Code.
Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150-43154, 43205.5 and 43210-43212, Health and Safety Code.

§ 2445.1. Defects Warranty Requirements for Model Year 2001 and Later Spark-Ignition Marine Engines.

* * * * *

(c) Warranty Period. In the case of all new, spark-ignition marine engines, the warranty period will be:

* * * * *

(3) For model year ~~2009~~2006 and later spark-ignition inboard and sterndrive marine engines~~, a period of 3 years.~~ :

(A) Manufacturers certifying engines according to Option 1 in Section 2442(b)(1) for model years 2006-2008, a period of 2 years.

(B) Manufacturers certifying engines according to Option 2 in Section 2442(b)(1):
1. For model years 2006-2007, a period of 2 years.
2. For model year 2008, a period of 3 years or 480 hours, whichever first occurs.

(C) Model Year 2009 and Later:
1. Engines ~~485~~ 373 kilowatts or less, a period of 3 years or 480 hours, whichever first occurs.
2. Engines greater than 373 kilowatts, but less than or equal to 485 kilowatts:

~~(i) Electronic/emission-related components, a period of 3 years.~~

(i) A period of 3 years or 480 hours, whichever first occurs, for electronic emission-related components (including, but not limited to, sensors, solenoids, ignition components and pressure regulators), and for the following: Catalysts, Oxygen Sensors, Electronic Control Units, Fuel Injectors, Fuel Pumps, Evaporative Components (including low-permeation hoses), Exhaust Gas Recirculation, and other direct emission control components,

~~(ii) Mechanical/emission-related components, a period of 1 year or 50 hours (if equipped with an integrated ECM hour-meter).~~

(ii) A period of 3 years or 150 hours, whichever first occurs, for mechanical emission-related components, including but not limited to the engine block,

crankshaft, camshaft, connecting rods, valves, manifolds, rotating parts, pistons, and turbo/superchargers.

3. Engines greater than 485 kilowatts:

(i) A period of 3 years or 480 hours, whichever first occurs, for electronic emission-related components (including, but not limited to, sensors, solenoids, ignition components and pressure regulators), and for the following: Catalysts, Oxygen Sensors, Electronic and for the following: Catalysts, Oxygen Sensors, Electronic Control Units, Fuel Injectors, Fuel Pumps, Evaporative Components (including low-permeation hoses), Exhaust Gas Recirculation, and other direct emission control components,

(ii) A period of 1 year or 50 hours, whichever first occurs, for mechanical emission-related components, including but not limited to the engine block, crankshaft, camshaft, connecting rods, valves, manifolds, rotating parts, pistons, and turbo/superchargers.

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NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43102 and 43104, Health and Safety Code.
Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150-43154, 43205.5 and 43210-43212, Health and Safety Code.

§ 2445.2. Emission Control Warranty Statements.

(a) Each engine manufacturer must provide a verbatim copy of the following statement with each new 2001 model year and later spark-ignition personal watercraft and outboard marine engine and with each new 2003 model year and later spark-ignition inboard and sterndrive marine engine, using those portions of the statement applicable to the engine.

CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT
YOUR WARRANTY RIGHTS AND OBLIGATIONS

* * * * *

MANUFACTURER'S WARRANTY COVERAGE:

(For spark-ignition personal watercraft and outboard marine engines:)
Select emission control parts from model year 2001 and later (outboard, or personal watercraft) engines are warranted for 4 years, or for 250 hours of use, whichever occurs first.

(For 2003- ~~2008~~2005 spark-ignition inboard and sterndrive marine engines:)
Select emission control parts from model year 2003- ~~2008~~2005 (inboard or sterndrive) engines are warranted for 2 years.

~~(For 2009~~2006 ~~and later spark-ignition inboard and sterndrive marine engines:) Select emission control parts from model year 2009 and later (inboard or sterndrive) engines are warranted for 3 years.~~

~~(1) Manufacturers certifying engines according to Option 1 in Section 2442(b)(1) for model years 2006-2008, a period of 2 years.~~

(For 2006-2008 spark-ignition inboard and sterndrive marine engines certified according to Option 1 in Section 2442(b)(1):)
Select emission control parts from 2006-2008 (inboard or sterndrive) engines are warranted for 2 years.

~~(2) Manufacturers certifying engines according to Option 2 in Section 2442(b)(1):~~

~~(A) For model years 2006-2007, a period of 2 years.~~
~~(B) For model year 2008, a period of 3 years.~~

(For 2006-2007 spark-ignition inboard and sterndrive marine engines certified according to Option 2 in Section 2442(b)(1):)
Select emission control parts from 2006-2007 (inboard or sterndrive) engines are warranted for 2 years.

(For 2008 spark-ignition inboard and sterndrive marine engines certified according to Option 2 in Section 2442(b)(1):)
Select emission control parts from 2008 (inboard or sterndrive) engines are warranted for 3 years or 480 hours, whichever first occurs.

~~(3) Model Year 2009 and Later:~~

~~(A) Engines 485 kilowatts or less, a period of 3 years.~~
~~(B) Engines greater than 485 kilowatts:~~
~~1. Electronic/emission-related components, a period of 3 years.~~
~~2. Mechanical/emission-related components, a period of 1 year or 50 hours (if equipped with an integrated ECM hour-meter).~~

(For 2009 and later spark-ignition inboard and sterndrive marine engines 485 kilowatts and less:)
Select emission control parts from 2009 and later (inboard or sterndrive) engines are warranted for 3 years or 480 hours, whichever first occurs.

(For 2009 and later spark-ignition inboard and sterndrive marine engines greater than 485 kilowatts:)
Select electronic emission-related control parts from 2009 and later (inboard or sterndrive) engines are warranted for 3 years or 480 hours, whichever first occurs. Mechanical emission-related components are warranted for 1 year or 50 hours of operation, whichever first occurs, (if equipped with an integrated ECM hour-meter)

However, warranty coverage based on the hourly period is only permitted for outboard engines ~~and~~, personal watercraft, and inboard/sterndrive engines greater than 485 kilowatts that are equipped with appropriate hour meters or their equivalent. If any emission-related part on your engine is defective under warranty, the part will be repaired or replaced by (engine manufacturer's name).

OWNER'S WARRANTY RESPONSIBILITIES:

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NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43102 and 43104, Health and Safety Code.
Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150-43154, 43205.5 and 43210-43212, Health and Safety Code.

Modifications to Test Procedures:

The test procedures will also be modified to reflect the changes noted above.