Staff's Suggested 15-Day Modifications to the Adopted Regulations

The document shows the staff's suggested modifications to the adopted regulations. The suggested 30-day modifications are shown in <u>bold double-underline</u> to indicate additions and bold strikeout to indicate deletions. Suggested 15-day modifications are shown in <u>shaded bold double-underline</u> to indicate additions and <u>shaded bold strikeout</u> to indicate deletions. All proposed modifications will be made available to the public for a 15-day comment period.

Chapter 15. Off-Road Vehicles and Engines Pollution Control Devices

Article 1. Evaporative Emission Requirements for Off-Road Equipment

§2750. Purpose.

The purpose of these regulations is to:

(a) sSet performance standards for new equipment utilizing gasoline-fueled, spark-ignited small off-road engines rated at ______ less than ______
25 horsepower19 Kilowatts, and equipment utilizing such engines;

(b) In order to give manufacturers maximum flexibility, twothree compliance programs are available beginning with in the 2006 model year.

<u>The</u> <u>two options</u> <u>are identified in section 2754</u> (a) and in section 2754 (b), and assume <u>running loss emissions are controlled from being emitted into the</u> <u>atmosphere during engine operation, which result in greater</u> <u>evaporative emissions reductions. Manufacturers must select one</u> <u>option for each evaporative family they certify</u>.

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

§2751. Applicability.

- (a) For the model year engines or equipment subject to this Article, no person shall:
 - (1) manufacture for sale or lease for use or operation in California, or

- (2) sell or lease or offer for sale or lease for use or operation in California, or
- (3) deliver or import into California for introduction into commerce in California, or

(4) use or operate in California equipment that use small off-road engines subject to this Article.

without an evaporative emission control system that has been certified and labeled pursuant to this Article.

- (b) This Article does not apply to:
 - (1) engines or equipment that use compression-ignition engines, or engines or equipment powered with compressed natural gas (CNG), propane, liquefied petroleum gas (LPG), or liquefied natural gas (LNG).

This Article does not apply to

(2) engines or equipment that use small off-road engines manufactured in California for sale and use outside of California.

(3) snowthrowers or ice augers.

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

§2752. Definitions.

- (a) The definitions in section 2401 (a), <u>and section 2403 (b)</u>, Chapter 9, Title 13 of the California Code of Regulations, apply to this Article with the following additions:
 - (1) "Coextruded Multilayer Fuel Tank" means a multi-layered highdensity polyethylene fuel tank with a continuous nylon or ethylene vinyl alcohol layer(s) present within the walls of the tank.
 - (2) "CP-901" means "Certification and Approval Procedures for Small Off-Road Engine Fuel Tanks", adopted <u>September 25, 2003</u>.
 - "CP-902" means "Certification and Approval Procedures for Evaporative Emission Control Systems", adopted <u>September 25,</u> <u>2003</u>.
 - (4) "Diurnal Emissions" means evaporative emissions resulting from the daily cycling of ambient temperatures and include resting

losses, and permeation emissions, <u>as measured according to</u> <u>test procedures incorporated in this Article</u>.

- (5) "Equivalent Fuel Tank" means a metal or coextruded multilayer fuel tank used on a small off-road engine. <u>Fuel tanks approved per</u> <u>section 2767 are also deemed equivalent fuel tanks.</u> The volume of an equivalent tank must be less than or equal to a nominal tank. An equivalent tank must be functionally equivalent to a nominal tank.
- (6) "Equivalent Fuel Line" means a fuel line <u>that permeates less than</u> or equal to 15 grams per square meter per day when tested per <u>SAE J1737 at 40°C or higher</u>, and ambient pressure using Phase II California Reformulated Certification (CERT) fuel, <u>CE10, CM15, or Indolene</u>. meeting SAE J30 R9, SAE J30 R11-A, SAE J30 R-12-A (Revised, June 1998), or SAE J2260 (Issued Nov. 1996) Category 1 surface vehicle permeation standards.
- (7) "Evaporative Emissions" means emissions that result from the evaporation of reactive organic gases into the atmosphere.
- (8) "Evaporative Emission Control System" means the fuel system and associated components that are designed to control evaporative emissions.
- (9) "Evaporative Family" means a class of off-road engines or equipment that are grouped together based on similar fuel system characteristics as they relate to evaporative emissions. For equipment less than or equal to 80 cc, the engine family and evaporative family are considered equivalent. For integrated equipment greater than 80 cc the engine family and the evaporative family may be considered equivalent at the manufacturer's discretion.
- (10) "Evaporative Family-Model Emission Limit (EMFEL)" means the diurnal emissions level declared by the manufacturer for a model within an evaporative family. The declared level must be based on diurnal emissions test results for a worst case model of engine or equipment within the evaporative family, obtained by following Test Procedure 902.

(11) "Evaporative Family Emission Limit Differential (EFELD)" means the emission level differential between the effective standard level for a specific model and the EMEL declared for

the model and is applicable to the entire evaporative family represented by the model.

- (10)(11)(12) "Executive Order of Certification" means an order signed by the Executive Officer that documents certification evaporative of emission control systems on engines or equipment to the performance standards of this Article.
- (11)(12)(13) "Holder" means the person to whom the Executive Order of Certification is issued.
- (12)(13)(14) "Hot Soak Emissions" means evaporative emissions that occur for the one-hour period following the termination of engine operation.
- (13)(14)(15) "Hydrocarbon" means a molecule composed <u>primarily</u> entirely of carbon and hydrogen atoms.
- (14)(15)(16) "Manufacturer" means either an engine manufacturer or equipment manufacturer.
- (15)(17) "Nominal Capacity" means the volume of fuel indicated by the manufacturer that represents the maximum recommended fill level.
- (16)(17)(18) "Nominal Fuel Tank" means the fuel tank that is used by an engine <u>or equipment</u> manufacturer to certify the evaporative emissions control system on a small off-road engine.
- (17)(18)(19) "Nominal Fuel Line" means the fuel line that is used by an engine <u>or equipment</u> manufacturer to certify the evaporative emissions control system on a small off-road engine.
- (18)(19)(20) "Permeation Emissions" means evaporative emissions that result from reactive organic gas molecules penetrating through the walls of fuel system components and evaporating on outside surfaces, as measured by test procedures incorporated in this <u>Article</u>. Permeation emissions are a component of diurnal emissions, as measured by test procedures incorporated in this <u>Article</u>.
- (19)(20)(21) "Permeation Rate" means the total mass of reactive organic gas molecules passing through the internal surface area of a fuel tank in a 24-hour period, as measured by test procedures incorporated in this Article.

- (20)(21)(22) "Person" means any individual, association, partnership, limited liability company, or corporation.
- (21)(22)(23) "Reactive Organic Gases (ROG)" means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, and excluding the following:

		CAS *
(1)	methane;	[74-82-8]
	methylene chloride (dichloromethane);	[75-09-2]
	1,1,1-trichloroethane (methyl chloroform);	[71-55-6]
	trichlorofluoromethane (CFC-11);	[75-69-4]
	dichlorodifluoromethane (CFC-12);	[75-71-8]
	1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);	[76-13-1]
	1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114);	[76-14-2]
	chloropentafluoroethane (CFC-115);	[76-15-3]
	chlorodifluoromethane (HCFC-22);	[75-45-6]
	1,1,1-trifluoro-2,2-dichloroethane (HCFC-123);	[306-83-2]
	2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);	[2837-89-0]
	1,1-dichloro-1-fluoroethane (HCFC-141b);	[1717-00-6]
	1-chloro-1,1-difluoroethane (HCFC-142b);	[75-68-3]
	trifluoromethane (HFC-23);	[75-46-7]
	pentafluoroethane (HFC-125);	[354-33-6]
	1,1,2,2-tetrafluoroethane (HFC-134);	[359-35-3]
	1,1,1,2-tetrafluoroethane (HFC-134a);	[811-97-2]
	1,1,1-trifluoroethane (HFC-143a);	[420-46-2]
	1,1-difluoroethane (HFC-152a);	[75-37-6]
	cyclic, branched, or linear completely methylated siloxanes;	[various]
	the following classes of perfluorocarbons:	[various]
	(A) cyclic, branched, or linear, completely fluorinated alkanes	;
	(B) cyclic, branched, or linear, completely fluorinated ethers w	vith no unsaturations;
		• • • • •

(C) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

(D) sulfur-containing perfluorocarbons with no unsaturations and with the sulfur bonds only to carbon and fluorine; and

(2) the following low-reactive organic compounds which have been exempted by the U.S. EPA:

acetone;	[67-64-1]
ethane;	[74-84-0]
methyl acetate;	[79-20-9]
perchloroethylene; and	[127-18-4]
parachlorobenzotrifluoride (1-chloro-4-trifluoromethyl benzene).	[98-56-6]

^{*} NOTE: Chemical Abstract Service (CAS) identification numbers have been included in brackets [] for convenience.

(23)(24) "Running Loss Emissions" means evaporative emissions from a small off-road engine that occur while it is being operated.

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- (22)(24)(25) "SHED" (Sealed Housing Evaporative Determination) means the enclosure and associated equipment used to determine evaporative emissions. A SHED must meet the design specifications in 40 Code of Federal Regulations Part 86.107-96.
- (25)(26) "Small Production Volume Tank Exemption Volume Manufacturer" applies to all models with identical tanks produced by an engine or equipment manufacturer with total California sales of 400 or fewer units per year. means any equipment manufacturer that sells 400 or fewer units per year in California of all models of equipment using small off-road engines using an identical fuel tank design.
- (23)(26)(27) "Structurally Integrated Nylon Fuel Tank" means a fuel tank having the following characteristics:
 - (A) The fuel tank is made of a polyamide material which:
 - 1. does not contain more than 50 percent by weight of a reinforcing glass fiber and/or mineral filler; and
 - 2. does not contain more than 10 percent by weight of impact modified polyamides which use rubberized agents such as EPDM rubber
 - (B) The fuel tank must be:
 - 1. used in a chainsaw; or
 - 2. of a pre-existing design that is substantially similar to a current production fuel tank used by the same manufacturer that is integrated into a major structural member where, as a single component, the fuel tank material is a primary structural/stress member for other major components such as the engine, transmission or cutting attachment.
- (24)(27)(28) "TP-901" means "Test Procedure for Determining Permeation Emissions from Small Off-Road Engine Equipment Fuel Tanks,", adopted <u>September 25, 2003</u>.
- (25)(28)(29) "TP-902" means "Test Procedure for Determining Diurnal Evaporative Emissions from Small Off-Road Engines,", adopted <u>September 25, 2003</u>.

- (26)(29)(30) "Total Hydrocarbons" means the total mass of open chain and cyclic hydrocarbon molecules, as measured under the test procedures incorporated in this Article.
- (27)(30)(31) "Walk-Behind Mower" means a grass-cutting product which has:
 - (A) A <u>Class I vertical shaft engine that includes a blade brake</u> <u>mechanism that provides for compliance with ANSI B71.1</u> <u>requirementsgasoline powered vertical or horizontal shaft</u> <u>engine with a blade stop or brake mechanism;</u>
 - (B) an engine displacement greater than 80 cc and less than 225 cc;
 - (C)(B) a horizontally fixed blade and/or string directly attached to the crankshaft of a vertical shaft engine.

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

§2753. Certification Requirements and Procedures.

(a) Certification

Small off-road engines or equipment that use small off-road engines subject to this Article must contain evaporative emission control systems. For engines less than or equal to 80 cc, the evaporative emission control system consists of the fuel tank only. The evaporative emission control systems must be certified annually to the performancebased or system design standards set out in sections 2754 through 2757 by the Air Resources Board. An Executive Order of Certification for such engines or equipment must be obtained prior to the sale or lease, or the offering for sale or lease, for use or operation in California or the delivery or importation for introduction into commerce in California or the use or operation of such engines or equipment in California. Engine manufacturers or equipment manufacturers may apply for an Executive Order of Certification. Applicants must follow the certification procedures outlined in CP-901, adopted September 25, 2003 or CP-902, adopted September 25, 2003, as applicable, which are incorporated by reference herein.

(b) Certification of Complete Systems

Certification of a complete evaporative emission control system is required. An applicant for certification of an evaporative emission control

system <u>that complies with the diurnal standards specified in</u> <u>section 2754, section 2754 1(a)</u>, <u>section 2754.1(b)</u>, <u>or section 2757</u> must submit diurnal evaporative emission data for an engine <u>or</u> <u>equipment</u> that exhibits the highest evaporative emission characteristics for an evaporative family as part of the certification application.

- (1) An applicant for certification of an evaporative emission control system that complies with the fuel hose permeation standard specified in section 2754 1(a) must submit fuel hose permeation data for model year 2006 equipment as part of the certification application. Alternatively, manufacturers can submit the Executive Order number approving the component pursuant to section 2767.1 of this Article.
- (2) An applicant for certification of an evaporative emission control system that complies with the design standards specified in section 2754 1(b) must submit fuel tank permeation data, fuel hose permeation data, and carbon canister butane working capacity data or equivalent for an engine or equipment that exhibits the highest evaporative emission characteristics for an evaporative family as part of the certification application. Alternatively, manufacturers may submit the Executive Order number approving the component pursuant to section 2767.1 of this Article
- (3) An applicant for certification of an evaporative emission control system that complies with the fuel tank permeation standards specified in section 2755 must submit fuel tank permeation data that exhibits the highest evaporative emission characteristics for an evaporative family as part of the certification application. For engines less than or equal to 80 cc used on handheld products, the manufacturer need only test the tank with the most surface area for all evaporative families with the same material/process. These certification test results can then be used in the certification of other tanks/engine families constructed of the same materials/processes.
- (4) TP-901, adopted September 25, 2003, is used to determine fuel <u>tank permeation.</u> TP-902, adopted <u>September 25, 2003</u>, is used to determine the evaporative emissions from engines or equipment with complete evaporative emission control systems.
- (c) Modifications to the Evaporative Emission Control System
 - (1) Manufacturers are allowed to replace the nominal fuel tank and/or nominal fuel line of a certified evaporative emission control system

that complies with the performance-based standards specified in section 2754 or section 2754.1 with an equivalent fuel tank and/or equivalent fuel line. All other evaporative emission control components in a system that complies with the performancebased standards in section 2754 must be identical in design and function similarly and have equivalent or better performance to those components used to certify the control system.

- (2) Modification of <u>any</u> certified evaporative emission control systems in any manner other than replacement of the nominal tanks and/or fuel lines with equivalent fuel tanks and/or fuel lines invalidates the certification of the control system. When <u>an any</u> evaporative emission control system's certification is invalidated due to an unapproved modification, a new certification is required per CP-902, adopted <u>September 25, 2003</u>.
- (3) Manufacturers are required to notify the Executive Officer in writing of any modification of <u>a any</u> certified evaporative emission control system. The notification must include a statement citing the basis for the equivalent fuel tank and/or fuel line determination.

(d) Reduced Certification Requirements

Manufacturers meeting the requirements of section 2766 of this Article must be certified annually by the Air Resources Board by submitting a Letter of Conformance. The Letter of Conformance must include, at a minimum, a statement citing the basis for complying with section 2766. An Executive Order of Certification for such engines or equipment must be obtained prior to the sale or lease, or the offering for sale or lease, or the delivery or importation for introduction into commerce in California of such engines or equipment in California.

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

§2754. Evaporative Emission Performance Standards.

For manufacturers electing to certify to section 2754, Onon or after the model year set out herein, diurnal evaporative emissions from any small off-road engine or equipment that use small off-road engines subject to this section with a displacement greater than 80 cubic centimeters ("cc") or equipment utilizing such an engine must not exceed the following evaporative emission standards:

Diurnal Evaporative Emission Standards (grams per 24-hour diurnal test)

Effective Date Model Year	Applicability	Requirement ¹ -Hydrocarbons
2007 and Later	All Walk-Behind Mowers That Use Small Off-Road Engines With Displacements >80 cc to < 225 cc	Diurnal Emissions Shall Not Exceed 1.0 Grams Hydrocarbons Per Day As Determined By TP-902.
2007 and Later	All Equipment That Use Small Off-Road Engines With Displacements > 80 cc to < 225 cc Except Walk-Behind Mowers	Diurnal Emissions Shall Not Exceed (0.05621*Tank Volume Gallons+0.95) Grams Hydrocarbons Per Day As Determined By TP-902.
2008 and Later	All Equipment That Use Small Off-Road Engines With Displacements > 225 cc	Diurnal Emissions Shall Not Exceed 2.0 Grams Hydrocarbons Per Day As Determined By TP-902.

¹ Diurnal emissions must be measured to two significant digits.

(a)

(b)

The evaporative emission control system must be fully operational when the engine and/equipment is shut down. The mechanism to activate the control system must be tied to the engine kill switch, engine brake, blade stop, or other similar device that does not require a operator to actuate separate levers or switches other than those required to normally turn off the engine.

Data documenting the evaporative emission performance of equipment when operated on certification fuel specified in "California Exhaust Emissions Standards for 1995 and Later Small Off-Road Engines, adopted March 20, 1992, and last amended September 25, 2003, must be included in a certification application.

emission standards from new equipment that use small off-road engines are set forth in "Test Procedure for Determining Diurnal Evaporative Emissions from Small Off-Road Engines, TP-902, " adopted September 25, 2003, which is incorporated by reference herein. NOTE: Authority cited: Sections 39600, 39601, and 43013 Health and Safety Code. Reference: Section Health and Safety Code 43013.

<u>§2754 Evaporative Emission Alternative Performance and Design</u> Standards

This section 2754.1 provides alternatives to certification to the standards set out in section 2754. Manufacturers using engines with a displacement greater than 80 cc and certified under Option A of 13 CCR §2403 may elect to certify using either the standards set out in section 2754 or the alternative standards set out in this section 2754.1. Manufacturers using engines with a displacement greater than 80 cc and certified under Option B of 13 CCR §2403 must certify using the alternative standards set out in this section 2754.1. The table below specifies the evaporative emission performance and design standards for small off-road engines, and equipment that use small off-road engines, with displacements greater than 80 cc. A manufacturer certifying under section 2754.1(a) and/or section 2754.1(b) must notify the Executive Officer in writing that they intend to certify to the alternative standards in section 2754.1(a) or section 2754.1(b) by submitting a certification plan no later than June 1, 2005. Subsequent to notification, manufacturers are allowed to certify under either section 2754.1(a) or section 2754.1(b). The certification plan must list the evaporative families that will be certified under the selected certification election. Once an election is made for an evaporative family. manufacturers are committed to certifying evaporative families under that election for all future certifications. A manufacturer may make a certification election for each new evaporative family. Changing a certification election when substantial changes are made to the evaporative emission control system of existing evaporative families is allowed if approved by the Executive Officer.

	Performance Requirements Section 2754(a)	Design Requirements Section 2754(b)		
<u>Effective</u> <u>Date</u> <u>Model Year</u>	<u>Diurnal</u> <u>Standard</u> <u>Grams HC/day</u>	<u>Fuel Hose</u> <u>Permeation</u> <u>Grams</u> <u>ROG/m²/day</u>	<u>Fuel Tank</u> <u>Permeation² Grams</u> <u>ROG/m²/day</u>	<u>Carbon Canister³ or</u> <u>Equivalent</u> <u>Butane Working</u> <u>Capacity</u> <u>Grams HC</u>
	<u>Displace</u>	ement Category: V _>80 cc - <2	<u>Valk-Behind Mowe</u> 225 cc	<u>rs</u>
<u>2006</u>	None	<u>15</u>	None	None
<u>2007 and</u> 2008	<u>1.3</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
2009	<u>1.0</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
	Displacement Category: Non Walk-Behind Mowers			
0000	News	<u>> 80 cc - < 2</u>		N
2006	None	<u>15</u>	None	None
<u>2007</u> <u>through</u> <u>2011</u>	<u>1.20 +</u> <u>0.056*tank vol.</u> <u>(liters)</u>	<u>15</u>	2.5	Specified in TP-902
<u>2012</u>	<u>0.95 +</u> <u>0.056*tank vol.</u> <u>(liters)</u>	<u>15</u>	<u>1.5</u>	Specified in TP-902
	Displacement Category: >225 cc			
<u>2006 and</u> 2007	<u>None</u>	<u>15</u>	None	None
2008	<u>1.20 +</u> <u>0.056*tank vol.</u> <u>(liters)</u>	<u>15</u>	<u>2.5</u>	Specified in TP-902
<u>2010</u> ⁴	None	<u>15</u>	None	Specified in TP-902
<u>2013</u>	<u>1.20 +</u> <u>0.056*tank vol.</u> <u>(liters)</u>	<u>15</u>	<u>1.5</u>	Specified in TP-902

Table 1 Evaporative Emission Standards

¹ For model year 2006 only, all engines and equipment with displacements > 80 cc - <225 cc must comply with the fuel hose permeation design requirement in section 2754(a)(1)(C). Engines and equipment with displacements greater than or equal to 225 cc must comply with the fuel hose permeation design requirement in section 2754(a)(1)(C) for model years 2006 and 2007 only.

² Permeation emissions as determined by TP-901. Permeation emissions must be measured to two significant figures.

³ Canister design requirements and the procedure for determining butane working capacity are specified in TP-902. The Executive Officer may designate technology equivalent to carbon canisters on a case by case basis as part of the certification process per section 2767.

⁴ Applies to small production volume tanks exempted pursuant to section 2766.

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(a) On or after the model year set out ______, evaporative emissions from any small off-road engine or equipment that use small off-road engines certifying under this section 2754.4 (a) must not exceed the performance requirements specified in Table 1 of section 2754.following evaporative emission standards:

Evaporative Emission Standards for Small Off-Road Engines					
Effective Date Model Year	Applicability Displacement Category	Requirement Fuel Hose Permeation ⁴ Grams ROG/m ² /day	Requirement Diurnal Standard ² Grams HC/day		
2006	> 80 cc - < 225 cc	15	None		
2007 and 2008	Walk-Behind Mowers ->80 cc - <225 cc	None	4.3		
2009	Walk-Behind Mowers ->80 cc - <225 cc	None	1.0		
2007 through 2011	Non Walk-Behind Mowers ≻ 80 cc - < 225 cc	None	1.20 + 0.21*tank vol. (gal)		
2012	Non Walk-Behind Mowers >80 cc - <225 cc	None	0.95 + 0.21*tank vol. (gal)		
2006 and 2007	³ 225 cc	15	None		
2008	³ 225 cc	None	1.20 + 0.21*tank vol. (gal)		

⁴ Must meet permeation requirements following test procedure SAE J1737 (Issued August 1997) tested at 40°C and ambient pressure using Phase II California Reformulated Certification (CERT) fuel.

² Diurnal emissions as determined by TP-902. Diurnal emissions must be measured to two significant digits.

- (1) Manufacturers certifying engines or equipment under this section 2754.1 (a) shallmust do the following:
 - (A) Submit a determination in the certification application that running loss emissions are controlled from being emitted

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into the atmosphere. The Executive Officer must approve the determination for an Executive Order of Certification to be issued. required if actively purged carbon canisters meeting the

- (B) Test all evaporative families in accordance with per TP-902.
- (C) Provide test data in the certification application showing that fuel lines meet the permeation requirement of 15 grams/m²/day using test procedure SAE J1737 (Issued August 1997). The permeation testing must be conducted at 40°C, or higher, and ambient pressure using Phase II California Reformulated Certification (CERT) fuel, CE10, CM15, or Indolene. Alternatively, manufacturers can submit the Executive Order number approving the component pursuant to section 2767.1 of this Article.
- (b) On or after the model year set out herein in Table 1 of section 2754, evaporative emissions from any small off-road engine or equipment that use small off-road engines certifying under this section 2754 (b) must not exceed the design requirements specified in Table 1 of section 2754 following evaporative emission standards:

Diurnal Evaporative Emission Standards for Walk-Behind Mowers with Engine Displacements > 80 cc - < 225 cc

Effective Date Model Year	Requirement Fuel Hose Permeation ¹ Grams ROG/m ² /day	Requirement Diurnal Standard ² Grams HC/day
2006	-15	None
2007 and 2008	None	1.3
2009	None	1.0

⁴-Must meet permeation requirements following test procedure SAE J1737 (Issued August 1997) tested at 40°C and ambient pressure using Phase II California Reformulated

Certification (CERT) fuel. ² Diurnal emissions as determined by TP-902. Diurnal emissions must be measured to two significant figures. System Design Requirements for Equipment Other than Walk-Behind Mowers Using Small Off-Road Engines with Engine Displacements > 80 cc - < 225 cc

Effective Date Model Year	Requirement Fuel Hose Permeation ¹ Grams ROG/m ² /day	Requirement Fuel Tank Permeation ² Grams ROG/m ² /day	Requirement Carbon Canister ³ -or Equivalent Butane Working Capacity Grams HC
2006	-15	None	None
2007 through 2011	-15	2.5	Specified in TP-902
2012	-15	1.5	Specified in TP-902

⁴-Must meet permeation requirements following test procedure SAE J1737 (Issued August 1997) tested at 40°C and ambient pressure using Phase II California Reformulated Certification (CERT) fuel.

² Permeation emissions as determined by TP-901. Permeation emissions must be measured to two significant figures.

³ Canister design requirements and the procedure for determining butane working capacity are specified in TP-902. The Executive Officer may designate technology

equivalent to carbon canisters on a case by case basis as part of the certification process.

System Design Requirements for Small Off-Road Engines and Equipment with Engine Displacements >225 cc

Effective Date Model Year	Requirement Fuel Hose Permeation ¹ Grams ROG/m ² /day	Requirement Fuel Tank Permeation ² Grams ROG/m ² /day	Requirement Carbon Canister ³ -or Equivalent Butane Working Capacity Grams HC
2006	-15	None	None
2008	-15	2.5	Specified in TP-902
2010 4	-15	None	Specified in TP-902
2013	-15	1.5	Specified in TP-902

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⁴-Must meet permeation requirements following test procedure SAE J1737 (Issued August 1997) tested at 40°C and ambient pressure using Phase II California Reformulated Certification (CERT) fuel.

² Permeation emissions as determined by TP-901. Permeation emissions must be measured to two significant figures.

³ Canister design requirements and the procedure for determining butane working capacity are specified in TP-902. The Executive Officer may designate technology equivalent to carbon canisters on a case by case basis as part of the certification process. ⁴ Applies to small volume manufacturers.

- (1) Manufacturers certifying engines or equipment under 2754.1 (b) shallmust also do the following:
 - (A) Submit a determination in the certification application that the running loss emissions are controlled from being emitted into the atmosphere. The Executive Officer must approve the determination before an Executive Order of Certification can be issued. Approval by the Executive Officer is not required if actively purged carbon canisters meeting the requirements of this article are used.

(B) Test walk-behind mowers per TP-902.

- (BC) Provide test data in the certification application showing that the fuel tank, fuel line, and carbon canister meet the applicable design requirements. Provide test data in the certification application showing that fuel lines meet the permeation requirement of 15 grams/m²/day using test procedure SAE J1737 (Issued August 1997). The permeation testing must be conducted at 40°C, or higher, and ambient pressure using Phase II California <u>Reformulated Certification (CERT) fuel, CE10, CM15, or</u> Indolene. Alternatively, manufacturers can submit the <u>Executive Order number approving the component</u> pursuant to section 2767.1 of this Article.
- (2) If the Executive Officer finds that diurnal evaporative emissions from the majority of equipment certified by a manufacturer under section 2754.1 (b) are higher than the modeled diurnal evaporative emission factors set out in the table below for two consecutive model years, the Executive Officer may suspend certification of engines or equipment under this section 2754.1(b) for a period not to exceed two model years.

Modeled Diurnal Evaporative Emission Factors (grams per 24-hour diurnal test)

Effective Date Model Year	Applicability	
		Diurnal Emissions For Complete System Modeled At 1.3 Grams Hydrocarbons Per Day
		Diurnal Emissions For Complete System Modeled At 1.0 Grams Hydrocarbons Per Day
	Non Walk-Behind Mowers >80 cc to < 225 cc	<i>Diurnal Emissions For</i> <i>Complete System Modeled At</i> 1.20 + 0.21*tank vol. (gal) <i>Grams Hydrocarbons Per Day</i>
		Diurnal Emissions For Complete System Modeled At 0.95 + 0.21*tank vol. (gal) Grams Hydrocarbons Per Day
		Diurnal Emissions For Complete System Modeled At 1.20 + 0.21*tank vol. (gal) Grams Hydrocarbons Per Day

§2754.1 Certification Averaging and Banking

- (a) Applicability The averaging requirements specified in this section 2754. – apply only to engines or equipment with complete evaporative emission control systems certified to the diurnal emission performance standards specified in section 2754(a) of this Article. Participation in the certification averaging and banking program is voluntary. The provisions of this section are applicable only for determining compliance with this section.
- (b) General provisions.
 - (1) The certification averaging and banking provisions for diurnal emissions from eligible engines and equipment are described in this section.
 - (2) A manufacturer of an evaporative family subject to this Article may use the averaging and banking provisions of this section 2754.12 for the purpose of creating diurnal emissions credits.

- (3) A manufacturer shallmust not include in its calculation of credit generation and may exclude from its calculation of credit usage, any new engines or equipment not subject to this Article.
- (4) A manufacturer may include its entire inventory of an evaporative family subject to this Article in calculating the diurnal emissions credit for a given model year.
- (5) A manufacturer must certify evaporative families to an Evaporative Family Emission Limit Differential (EFELD). The EFELD is declared by an engine or equipment manufacturer and can be positive or negative subject to the limitation in subsections (b)(6) and (b)(7) of this section, provided the sum of the manufacturer's projected balance of credits from all credit transactions for each engine class in a given model year is greater than or equal to zero, as determined under subsection (e). The EFELD is determined by diurnal testing per TP-902 the worst case model of engine or equipment within an evaporative family. For positive credits, the declared EFELD must be less than or equal to the difference between the applicable standard and the diurnal test result.

A manufacturer shall certify evaporative families to an **Evaporative Family Emission Limit Differential (EFELD). The** EFELD is declared by an engine or equipment manufacturer and can be positive or negative subject to the limitation in subsections (b)(6) and (b)(7) of this section, provided the sum of the manufacturer's projected balance of credits from all credit transactions for each engine class in a given model year is greater than or equal to zero, as determined under subsection (e). The EFELD is determined based on the diurnal test results, in accordance with TP-902, of the worst case model of engine or equipment within an evaporative family. The worst case model of engine or equipment is defined as the engine or equipment expected to produce the highest negative or the smallest positive EFELD within the family on a per unit basis. The EFELD is calculated by setting the EMEL for the model of engine or equipment tested at a level above the diurnal test results and then subtracting the EMEL from the applicable standard level for the model.

(A) A manufacturer of an evaporative family with a negative <u>EFELD shall must</u> obtain positive emission credits <u>sufficient to address the associated credit shortfall within</u> <u>the time period set out in (8) below.</u>

- (B) An evaporative family with a positive EFELD may generate positive emission credits for averaging, or banking, or a combination thereof.
- (6) No walk-behind mowers within an evaporative family may have diurnal emissions greater than 1.5 times the applicable diurnal standard in sections 2754, 2754.1(a), and 2754.1(b).
- (7) No model of Class I or Class II engine or equipment (excluding walk-behind mowers) within an evaporative family may have diurnal emissions greater than 3.0 times the applicable diurnal standard in section 2754, 2754.1(a), and 2754.1(b).
- (8) A manufacturer must demonstrate compliance with this section within 270 days of the end of the model year.
- (9) No new Executive Order of Certifications will be issued to the manufacturer until a plan to make up the emissions deficit plus a penal amount of 25% of the deficit has been approved by the Executive Officer.
- (10) The failure of a manufacturer to comply with the diurnal emissions standards in accordance with this section 2754.12 shall be grounds for revocation or suspension of the Executive Order of Certification in accordance with section 2770. A revocation under this provision shall be deemed to revoke the Executive Order of Certification ab initio.
- (11) The failure of a manufacturer to submit the plan required in subsection (b)(9) above within 270 days of the end of a model year shall be grounds for revocation or suspension of the Executive Order of Certification in accordance with section 2770. A revocation under this provision shall be deemed to revoke the Executive Order of Certification ab initio.
- (c) Averaging.
 - (1) Negative credits from evaporative families with negative <u>EFELDs must be offset by positive credits from evaporative</u> <u>families having positive EFELDs, as allowed under the</u> <u>provisions of this section. Averaging of credits in this manner</u> <u>is used to determine compliance under subsection (e)(2).</u>
 - (2) Subject to the provisions in subsection (b)(9), credits used in averaging for a given model year may be obtained from credits generated in the same model year by another evaporative

family, or credits banked in previous model years, The restrictions of this subsection notwithstanding, credits from a given model year may be used to address credit needs of previous model year engines.

- (d) Banking.
 - (1) Beginning with the 2007 model year, a manufacturer of an evaporative family with a positive EFELD for model year 2007 and subsequent engines and equipment may bank credits in that model year for use in averaging. Positive credits may be banked only according to the requirements of subsection (e)(1) of this section.
 - (2) A manufacturer may bank emission credits only after the end of the model year and after ARB has reviewed the manufacturer's end-of-year reports. During the model year and before submittal of the end-of-year report, credits originally designated in the certification process for banking will be considered reserved and may be redesignated for averaging in the end-of-year report and final report.
 - (3) A manufacturer may use credits claimed from a previous model year that have not been approved by the ARB, in an averaging calculation pending the review of the ARB. In the event such review does not substantiate the amount of credits claimed, an Executive Order will not be issued until a plan to make up the emissions deficit has been approved by the Executive Officer.
- (e) Credit Calculation and Manufacturer Compliance with Emission Standards
 - (1) For evaporative family, diurnal emission credits (positive or negative) are to be calculated according to the following equation and rounded to the nearest tenth of a gram. Consistent units with two significant digits are to be used throughout the equation.

Credits = EFELD x Sa	les
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Where:

EFELD = the declared evaporative family emission limit differential for the evaporative family in grams. EFELD = Applicable standard level – EMEL

Credits = EFELD x Sales

Where:

<u>EMEL = the declared evaporative model emission limit for the</u> model tested within the evaporative family in grams

EFELD = the calculated evaporative family emission limit differential in grams

<u>Sales = the total Sales for all models within a given evaporative</u> family

Sales or Eligible Sales means the actual or calculated sales of an evaporative family in California for the purposes of averaging and banking. Upon Executive Officer approval, an engine or equipment manufacturer may calculate its eligible sales through market analysis. Because of the multiple steps in the product distribution chain and confidential nature of sales information for many retailers and original equipment manufacturers an educated and consistent estimate with the best available documentation will be acceptable as the final report of sales in California. Actual sales are sales calculated at the end of a model year on that model year's production, rather than estimates of production. Actual sales volume is used in determining actual credits for end-of-year compliance determination.

- (2) Manufacturer compliance with this section is determined on a corporate average basis at the end of each model year. A manufacturer is in compliance when the sum of positive and negative emission credits it holds is greater than or equal to zero.
- (f) Certification Using Credits.
 - (1) For certification relying on averaging or banking of credits, a manufacturer shall must:
 - (A) Submit a statement that the engines for which certification is requested will not, to the best of the manufacturer's knowledge, cause the manufacturer to be in noncompliance under subsection (e)(2) when all credits are calculated for all the manufacturer's engine families.

- (B) Declare an EFELD for the evaporative family. The EFELD must be calculated to two significant digits.
- (C) Indicate the projected number of emission credits generated/needed for this family; the projected applicable eligible sales volume and the values required to calculate credits as given in section 2754.12(e).
- (D) Submit calculations in accordance with section 2754.12(e) of projected emission credits (positive or negative) based on production projections for each family.
- (E) (i) If the evaporative family is projected to generate negative emission credits, state specifically the source (manufacturer/evaporative family or reserved) and quantity of the credits necessary to offset the credit deficit according to projected production.
 - (ii) If the evaporative family is projected to generate positive emission credits, state specifically the recipient (manufacturer/evaporative family or reserved) and quantity of the credits used to offset a deficit banked according to where the projected credits will be applied.
- (2) The manufacturer may supply the information required above in section 2754.12 (f)(1)(C), (D), and (E) by use of a spreadsheet detailing the manufacturer's annual production plans and the credits generated or consumed by each evaporative family.
- (3) The manufacturer bears the burden of establishing to the satisfaction of the Executive Officer that the conditions upon which the Executive Order was issued were satisfied.
- (4) Projected credits based on information supplied in the certification application may be used to obtain an Executive Order. However, any such credits may be revoked based on review of end-of-year reports, follow-up audits, and any other verification steps considered appropriate by the Executive Officer.
- (g) Maintenance of records.
 - (1) The manufacturer shall must establish, maintain, and retain the following adequately organized and indexed records for each evaporative family:

- (A) ARB evaporative family identification code,
- (B) Declared EFELD,
- (C) Projected sales volume for the model year, and
- (D) Records appropriate to establish the quantities of engines or equipment that constitute eligible sales for each evaporative family.
- (2) The manufacturer shall-must retain all records required to be maintained under this section for a period of eight years from the due date for the end-of-model year report. Records may be retained as hard copy, CD-ROM, diskettes, and so forth, depending on the manufacturer's record retention procedure; provided, that in every case all information contained in the hard copy is retained.
- (3) Nothing in this section limits the Executive Officer's discretion in requiring the manufacturer to retain additional records or submit information not specifically required by this section.
- (4) A manufacturer shall submit all information requested by the Eexecutive Officer within 30 days of the date of such request.
- (5) The Executive Officer may revoke or suspend the Executive Order for an evaporative family for which the manufacturer fails to retain the records required in this section or to provide such information to the Executive Officer upon request. No new Executive Orders will be issued to the manufacturer until the requested records are made available and/or a plan that describes the records to be retained as required by this section is approved by the Executive Officer.
- (h) End-of-year and final reports.
 - (1) End-of-year and final reports must indicate the evaporative family, the actual sales volume, the values required to calculate credits as given in subsection (e), and the number of credits generated/required. Manufacturers shall also submit how and where credit surpluses were dispersed (or are to be banked) and/or how and through what means credit deficits were met. The report must include a calculation of credit balances to show that the credit summation for each class of engines or equipment is equal to or greater than zero.
 - (2) The calculation of eligible sales as defined in subsection (e)(1) of this section for end-of-year and final reports must be based on the location of the point of first retail sale (for example, retail

customer or dealer) also called the final product purchase location. Upon advance written request, the Executive Officer will consider other methods to track engines for credit calculation purposes, such as shipments to distributors of products intended for sale in California.

(3) (A) End-of-year reports must be submitted within 90 days of the end of the model year to:

> <u>Chief, Mobile Source Operations Division, Air Resources</u> <u>Board, 9528 Telstar, El Monte, CA 91731.</u>

- (B) Unless otherwise approved by the Executive Officer, final reports must be submitted within 270 days of the end of the model year to: Chief, Mobile Source Operations Division, Air Resources Board, 9528 Telstar, El Monte, CA 91731.
- (4) Failure by a manufacturer to submit any end-of-year or final reports in the specified time for any engines or equipment subject to regulation under this section is a violation of this section for each engine or equipment in the evaporative family covered by the report.
- (5) A manufacturer generating credits for banking only who fails to submit end-of-year reports in the applicable specified time period (90 days after the end of the model year) may not use the credits until such reports are received and reviewed by ARB. Use of projected credits pending ARB review is not permitted in these circumstances.
- (6) Errors discovered by ARB or the manufacturer in the end-ofyear report, including errors in credit calculation, may be corrected in the final report.
- (7) If ARB or the manufacturer determines that a reporting error occurred on an end-of-year or final report previously submitted to ARB under this section, the manufacturer's credits and credit calculations must be recalculated. Erroneous positive credits will be void except as provided in subsection (h) of this section. Erroneous negative credit balances may be adjusted by ARB.
- (8) If within 270 days of the end of the model year, ARB review determines a reporting error in the manufacturer's favor (that is, resulting in an increased credit balance) or if the manufacturer discovers such an error within 270 days of the end of the model year, ARB must restore the credits for use by the manufacturer.

§2754.2 Validation Study

- (a) To confirm that the performance-based evaporative certification option in section 2754 1(a) and the design-based evaporative certification option in section 2754 1(b) are achieving ARB's overall emission reduction goals, ARB will conduct an inventory validation study utilizing diurnal test data from such equipment.
- (b) This validation study will be conducted at two time periods: (a) in 2010 for the years 2008, 2009 and 2010 and (b) in 2015 for the years 2013, 2014 and 2015.
- (c) For each year in the study, the Executive Officer will select engine and / or equipment evaporative families and request, from the certificate holder, one production unit from each identified family from production inventory according to a method specified by the Executive Officer. Diurnal testing of each selected unit (including the complete evaporative emission control system) will be conducted pursuant toer TP-902, including pre-conditioning. Unless otherwise directed by the Executive Officer, three data points will be generated and submitted to the Executive Officer for each engine and / or equipment tested.
- (d) The number of data points and equipment to be tested for this validation study is as follows:

<u>Year</u>	<u>Number of Data Points</u> (<u># of Equipment Tested</u>) <u>for Units Certified per the</u> <u>Performance-Based Standards</u> <u>Under Section 2754</u> 4(a)	<u>Number of Data Points</u> (<u># of Equipment Tested</u>) for Units Certified per the <u>Design-Based Standards</u> Under Section 2754 <mark>4(b)</mark>
<u>2008</u>	<u>9 (3)</u>	<u>45 (15)</u>
<u>2009</u>	<u>3 (1)</u>	<u>15 (5)</u>
<u>2010</u>	<u>3 (1)</u>	<u>15 (5)</u>
<u>2013</u>	<u>9 (3)</u>	<u>45 (15)</u>
<u>2014</u>	<u>3 (1)</u>	<u>15 (5)</u>
<u>2015</u>	<u>3 (1)</u>	<u>15 (5)</u>

- (e) The costs for testing engines or equipment certified under the design-based element of the validation study are the responsibility of the certificate holder. The costs for testing engines or equipment certified under the performance-based element of the validation study are the responsibility of ARB. For each of the years 2010 and 2015, the Executive Officer will also review the annual performancebased and design-based certification submissions for that year and two prior years (i.e., 2010, 2009, 2008 for the 2010 validation and 2015, 2014, 2013 for the 2015 validation) to supplement this validation study.
- (f) The Executive Officer will evaluate the data collected and, based on reasonable criteria, make a determination whether the performancebased option in section 2754.1(a) and the design-based option in section 2754.1(b) are achieving ARB's overall emission reduction goals. In making this determination, the Executive Officer will consider, among other things, whether a particular product tested is in full compliance with the underlying standards and whether the product configurations are non-representative (i.e., large tanks).

§2755. Permeation Emissions Performance Standard.

On or after the model year set out herein, fuel tanks used on equipment subject to this section must not exceed the following permeation rates:

Effective Date Model Year	Applicability	Requirement¹ Tank Permeation
2007-and Later	New Equipment That Use Gasoline Powered Small Off- Road Engines With Displacements < 80 cc	Fuel Tank Permeation Emissions Shall Not Exceed 2.0 Grams Per Square Meter Per Day As Determined By TP-901.

Permeation Rate Standard (grams per meter² per day)

¹ Permeation rate must be measured to two significant digits.

- (a) Data documenting the permeation rate of fuel tanks must be included in a certification application. <u>except for models of equipment which use</u> <u>"equivalent fuel tanks."</u> Such data are not required for engines or equipment meeting the requirements of section 2766.
- (b) The test procedure for determining compliance with the standards for permeation rates from **new**-small off-road engine fuel tanks are set forth in

"Test Procedure for Determining Permeation Emissions from Small Off-Road Engine Equipment Fuel Tanks, TP-901,-" adopted <u>September 25,</u> <u>2003</u>, which is incorporated by reference herein.

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

§2756. Fuel Cap Performance Standard.

On or afterFor the model year set out herein, no person shall sell, supply, offer for sale or manufacture for sale fuel caps for fuel tanks for small off-road engines or equipment that use small off-road engines with displacements ≥ 80 cc subject to this Article that do not meet the following performance standards **unless exempted in an Executive Order issued pursuant to section 2767 of the Article**:

Fuel Cap Performance Standards

- (a) Fuel cap must be permanently tethered to the tank, equipment, or engine; and
- (b) fuel cap must be designed to provide physical and/or audible feedback to the user that a fuel tank vapor seal is established.

The following table defines equipment subject to the fuel cap performance standards of this **S**section:

Effective Date Model Year	Applicability
2007	Fuel Caps For ALL SORE Equipment With Small Off- Road Engines >80 cc to < 225 cc
2008	Fuel Caps For ALL SORE Equipment With Small Off- Road Engines ≥ 225 cc

Equipment Subject to the Fuel Cap Performance Standards

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

§2757. Optional Performance Standards.

The Air Resources Board recognizes that evaporative emissions can be further reduced by incorporating advanced fuel system designs that reduce or eliminate carburetor <u>and permeation</u> emissions. These optional performance standards are emission targets that are more stringent than the performance standards set out in sections 2754, 2754.1, and 2755. These optional performance standards will be part of a statewide clean air-labeling program. Upon implementation, a manufacturer certifying to an optional performance standard would be allowed to affix a "California Clean Air Blue Sky Label" on their equipment.

Optional Permeation Rate Standard

Effective Date Model Year	<u>Applicability</u>	<u>Requirement¹</u> Tank Permeation
<u>2007</u>	Equipment That Use Gasoline Powered Small Off-Road Engines With Displacements <u>< 80 cc</u>	Fuel TankPermeationEmissions Shall NotExceed 1.0 GramsPer Square Meter PerDay As DeterminedBy TP-901.

¹ Permeation rate must be measured to two significant digits.

Optional Evaporative Emission Standards (Grams per 24-hour diurnal test)

Effective Date Model Year	Applicability	Requirement¹ Total Hydrocarbons
2007 and Later	All Walk-Behind Mowers With Small Off-Road Engines >80 cc To < 225 cc	Diurnal Emissions Shall Not Exceed 0.5 Grams Hydrocarbons Per Day As Determined By TP-902.
2007 and Later	All Equipment That Use Small Off-Road Engines With Displacements > 80 cc To < 225 cc	Diurnal Emissions Shall Not Exceed 0.5 Grams Total Hydrocarbons Per Day As Determined By TP- 902.
2008 and Later	All Equipment That Use Small Off-Road Engines With Displacements <u>></u> 225 cc	Diurnal Emissions Shall Not Exceed 1.0 Grams Total Hydrocarbons Per Day As Determined By TP-902.

¹ Diurnal emissions must be measured to two significant digits.

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

§2758. Test Procedures.

- (a) Testing to determine compliance with section 2754 of this Article shall be performed using TP-902, adopted <u>September 25, 2003</u>, which is incorporated by reference herein.
- (b) Testing to determine compliance with section 2755 of this Article shall be performed using TP-901, adopted <u>September 25, 2003</u>, which is incorporated by reference herein.
- (c) Testing to determine compliance with section 2757 of this Article shall be performed using <u>TP-901, adopted September 25, 2003 to determine</u> <u>permeation emissions, and</u> TP-902, adopted <u>September 25, 2003, to</u> <u>determine diurnal emissions</u>.

Test procedures referred to in this Article may be obtained from the California Air Resources Board at P.O. Box 2815, Sacramento, California 95812 or over the Internet at http://www.arb.ca.gov.

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

§2759. Equipment and Component Labeling.

- (a) Purpose. The Air Resources Board recognizes that certain emissionscritical and/or emissions-related parts must be properly labeled in order to identify equipment that meets applicable evaporative emission standards. These specifications require equipment and/or engine manufacturers to affix a certification label (or labels) on each production equipment (or engine, as applicable).
- (b) Applicability. These specifications apply to:
 - (1) Engines or equipment that have been certified to the applicable evaporative emission standards in this Article.
 - (2) Equipment manufacturers who use an engine certified under this Article if their equipment obscures the emissions control label of such certified engine.
- (c) Certification Label Content and Location.
 - (1) A plastic or metal label must be welded, riveted or otherwise permanently attached by the equipment or engine manufacturer to an area on the engine or equipment in such a way that it will be readily visible.
 - (2) In selecting an acceptable location, the possibility of accidental damage must be considered (e.g. possibility of tools or sharp instruments coming in contact with the label). Each certification label must be affixed in such a manner that it cannot be removed without destroying or defacing the label, and must not be affixed to any engine (or equipment, as applicable) component that is easily detached from the engine <u>or equipment as applicable</u>.
 - (3) The <u>engine or</u> equipment label information must be written in the English language and use block letters and numerals (i.e., sans serif, upper-case characters) that must be of a color that contrasts with the background of the label.

- (4) The <u>engine or</u> equipment label must contain the following information:
 - (A) The label heading must read: "IMPORTANT EMISSIONS INFORMATION." When combined with an exhaust label, "EMISSIONS" relates to both exhaust and evaporative emissions.
 - (B) The full corporate name or trademark of the engine or equipment manufacturer.
 - 1. A manufacturer may request approval to delete its name and trademark, and substitute the name and trademark of another manufacturer, original equipment manufacturer, or third-party distributor.
 - 2. Such an approval does not relieve the manufacturer of complying with the requirements imposed by this Article.
 - (C) Identification of the evaporative emission control system. Abbreviations <u>per SAE J1930 dated September 1991 April</u> <u>30May 14, 2002, or manufacturers evaporative code as</u> <u>defined in the owners manual</u> are allowed if they are submitted as part of the certification application.
 - (D) The date of engine manufacture (month and year) for evaporative emission control systems certified by the engine manufacturer or the date of equipment manufacture (month and year) for evaporative emission control systems certified by the equipment manufacturer.
 - (E) An unconditional statement of compliance with the appropriate calendar year (for 2007-2008) or model year(s) (for 20067 and later) California regulations; for example, "THIS ENGINE MEETS MY 2006* CALIFORNIA EXHAUST AND EVAPORATIVE EVP EMISSION REGULATIONS REQUIREMENTS FOR SMALL OFF-ROAD ENGINES".
 - (F) Engine displacement in cubic centimeters.
 - (G)(F) Evaporative emissions family. Attachment 1 of the Certification Procedures, CP-902, adopted <u>September 25,</u> <u>2003</u>, contains the classification criteria for determining an evaporative family for engines greater than 80 cc. For equipment less than or equal to 80 cc, the engine <u>exhaust</u>

family **and<u>is the</u> evaporative family are considered equivalent**.

- (d) Conformance with Federal Other Requirements. A label may state that the equipment conforms to any applicable federal Federal, Canadian, or <u>European</u> evaporative emission standards for new equipment; or any other information that the manufacturer deems necessary for, or useful to, the proper operation and satisfactory maintenance of the engine.
- (e) Label Visibility. As used in these specifications, readily visible to the average person means that a label is readable from a distance of 46 centimeters (18 inches) without any obstructions from equipment or engine parts (including all original equipment manufacturer or engine manufacturer (as applicable) available optional equipment) except for flexible parts (e.g., vacuum hoses, ignition wires) that can be moved out of the way without disconnection. Alternatively, information required by these specifications to be printed on the equipment and/or engine (as applicable) must be no smaller than 2 millimeters in height provided that no equipment), except for flexible parts, obstruct the label(s).
- (f) Label Durability. The labels and any adhesives used must be designed to withstand, for the equipment's useful life, typical equipment environmental conditions in the area where the labels required by this section are attached. Typical equipment environmental conditions include, but are not limited to, exposure to engine fuels, lubricants and coolants (e.g., gasoline, motor oil, water, and ethylene glycol). The engine or equipment manufacturer must submit, with its certification application, a statement attesting that its labels comply with these requirements.
- (g) Sample Label Submission. Samples of all actual production labels used within an evaporative family must be submitted to the Executive Officer within thirty days after the start of production. <u>Sample labels are not</u> <u>required for carry over certification unless labels are revised.</u> Engine manufacturers must provide samples of their own applicable production labels, and samples of applicable production labels of the equipment manufacturer that are accessible to the engine manufacturers due to any direct market arrangement between such manufacturers.
- (h) The Executive Officer may approve alternate label locations or may, upon request, waive or modify the label content requirements provided that the intent of these specifications is met. Such approval may be conditioned upon providing such information in the owner's manual as the Executive Officer deems appropriate.
- (i) Labeling Enforcement

Use of labels that are different from those approved will be grounds for revocation or suspension of the Executive Order of Certification.

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

§2760. Defects Warranty Requirements for Small Off-Road Engines.

- (a) Applicability. This section applies to 2007 2006 model year and later small off-road engines or equipment that use small off-road engines subject to the performance standards in this Article. The warranty period begins on the date the engine or equipment is delivered to an ultimate purchaser.
- (b) General Evaporative Emissions Warranty Coverage. The engine or equipment must be warranted to the ultimate purchaser and any subsequent owner that the evaporative emission control system when installed was:
 - (1) Designed, built, and equipped so as to conform with all applicable regulations; and
 - (2) Free from defects in materials and workmanship that causes the failure of a warranted part for a period of two years.
- (c) The warranty on evaporative emissions-related parts will be interpreted as follows:
 - (1) Any warranted part that is not scheduled for replacement as required maintenance in the written instructions required by subsection (d) must be warranted for the warranty period defined in subsection (b)(2). If any such part fails during the period of warranty coverage, it must be repaired or replaced by the manufacturer issuing the warranty according to subsection (4) below. Any such part repaired or replaced under the warranty must be warranted for a time not less than the remaining warranty period.
 - (2) Any warranted part that is scheduled only for regular inspection in the written instructions required by subsection (d) must be warranted for the warranty period defined in subsection (b)(2). A statement in such written instructions to the effect of "repair or replace as necessary" will not reduce the period of warranty coverage. Any such part repaired or replaced under warranty must be warranted for a time not less than the remaining warranty period.

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- (3) Any warranted part that is scheduled for replacement as required maintenance in the written instructions required by subsection (d) must be warranted for the period of time prior to the first scheduled replacement point for that part. If the part fails prior to the first scheduled replacement, the part must be repaired or replaced by the manufacturer according to subsection (4) below. Any such part repaired or replaced under warranty must be warranted for a time not less than the remainder of the period prior to the first scheduled replacement point for the part.
- (4) Repair or replacement of any warranted part under the warranty provisions of this article must be performed at no charge to the owner at a warranty station.
- (5) Notwithstanding the provisions of subsection (4) above, warranty services or repairs must be provided at distribution centers that are franchised to service the subject engines or equipment.
- (6) The owner must not be charged for diagnostic labor that leads to the determination that a warranted part is in fact defective, provided that such diagnostic work is performed at a warranty station.
- (7) Throughout the evaporative emission control system's warranty period set out in subsection (b)(2), the manufacturer issuing the warranty must maintain a supply of warranted parts sufficient to meet the expected demand for such parts.
- (8) Any<u>Manufacturer approved</u> replacement parts may must be used in the performance of any warranty maintenance or repairs and must be provided without charge to the owner. Such use will not reduce the warranty obligations of the manufacturer issuing the warranty.
- (9) The use of any add-on or modified parts will be grounds for disallowing a warranty claim made in accordance with this article. The manufacturer issuing the warranty will not be liable under this Article to warrant failures of warranted parts caused by the use of an add-on or modified part.
- (10) The manufacturer issuing the warranty shall provide any documents that describe that manufacturer's warranty procedures or policies within five working days of request by the Executive Officer.
- (d) A copy of the following evaporative emission warranty parts list must be included with each new engine or equipment subject to this Article, using those portions of the list applicable to the engine or equipment.

- (1) Fuel Tank*
- (2) Fuel Cap
- (3) Fuel Line
- (4) Fuel Line Fittings
- (5) Clamps<u>**</u>
- (6) Pressure Relief Valves**
- (7) Control Valves**
- (8) Control Solenoids**
- (9) Electronic Controls **
- (10) Vacuum Control Diaphragms**
- (11) Control Cables**
- (12) Control Linkages**
- (13) Purge Valves
- (14) Vapor Hoses
- (15) Liquid/Vapor Separator
- (16) Carbon Canister
- (17) Canister Mounting Brackets
- (18) Carburetor Purge Port Connector

*Note: The parts list for equipment less than or equal to 80 cc only includes the fuel tank.

**Note: As they relate to the evaporative emission control system.

- (e) Written instructions for the maintenance and use of the evaporative emissions control system by the owner shall be furnished with each new engine or equipment subject to this Article. The instructions must be consistent with this article and applicable regulations contained herein.
- (f) The documents required by subsection (d) must be submitted with the application for evaporative emission control system certification for approval by the Executive Officer. Approval by the Executive Officer of the documents required by subsection (d) is a condition of certification. The Executive Officer will approve or disapprove the documents required by subsection (d) within 90 days of the date such documents are received.
- (g) The application for evaporative emission control system certification must also include a statement regarding the maintenance of the evaporative emission control system. The statement must include, but not be limited to, information on evaporative emission control system maintenance, and a maintenance schedule.

§2761. Emission-<u>R</u>related Defect Reporting Requirements.

(a) Applicability. This **S**<u>s</u>ection applies to 2007 model year and later small offroad engines and equipment that use small off-road engines. The

requirement to report evaporative emission-related defects affecting a given class or category of engines or equipment will remain applicable for five years from the end of the calendar year in which such engines or equipment were manufactured.

- (b) A manufacturer must file a defect information report whenever, on the basis of data obtained subsequent to the effective date of these regulations:
 - The manufacturer determines, in accordance with procedures established by the manufacturer to identify either safety-related or performance defects, that a specific evaporative emission-related defect exists; and
 - (2) A specific evaporative emission-related defect exists in 25 or more tanks, engines or equipment of a given evaporative family manufactured in the same Executive Order or model year.
- (c) No report must be filed under this Ssection for any evaporative emissionrelated defect corrected prior to the sale of the affected engines or equipment to ultimate purchasers.
- (d) The manufacturer must submit defect information reports to Chief, Mobile Source Operations Division, Air Resources Board, 9528 Telstar, El Monte, CA 91731, not more than 15 working days after an emission-related defect is found to affect 25 or more engines <u>or equipment certified under</u> <u>manufactured in</u> the same Executive Order or model year. Information required by <u>paragraph subsection</u> (d) of this section that is either not available within 15 working days or is significantly revised must be submitted <u>to</u> the Executive Officer as it becomes available.
- (e) Each defect report must contain the following information:
 - (1) The manufacturer's corporate name.
 - (2) A description of the defect.
 - (3) A description of each class or category of engines <u>or equipment</u> potentially affected by the defect including make, model, model year, calendar year produced, and any other information required to identify the engines affected.
 - (4) For each class or category of engine<u>s</u> <u>or equipment</u> described in response to <u>paragraph subsection</u> (d) of this section, the following must also be provided:
- (A) The number of engines or equipment known or estimated to have the defect and an explanation of the means by which this number was determined.
- (B) The address of the plant(s) at which the potentially defective engines or equipment were produced.
- (5) An evaluation of the evaporative emissions impact of the defect and a description of any operational problems that a defective engine or equipment might exhibit.
- (6) Available evaporative emission data that relate to the defect.
- (7) An indication of any anticipated manufacturer follow-up.

§2762. Voluntary Emission Recall Program.

- (a) When any manufacturer initiates a voluntary emissions recall <u>program</u> campaign involving 25 or more tanks, engines, or equipment, the manufacturer must submit a report describing the manufacturer's voluntary emissions recall plan as prescribed by this section within 15 working days of the date owner notification began. The report must contain the following:
 - A description of each class or category of engines or equipment recalled including the number of tanks, engines or equipment to be recalled, the model year, the make, the model, and such other information as may be required to identify the engines recalled;
 - (2) A description of the specific modifications, alterations, repairs, corrections, adjustments, or other changes to be made to correct the tanks, engines, or equipment affected by the emission-related defect;
 - (3) A description of the method by which the manufacturer will notify engine or equipment owners and, if applicable, the method by which the manufacturer will determine the names and addresses of engine or equipment owners;
 - (4) A description of the proper maintenance or use, if any, upon which the manufacturer conditions eligibility for repair under the recall plan, an explanation of the manufacturer's reasons for imposing any such conditions, and a description of the proof to be required of an engine

or equipment owner to demonstrate compliance with any such conditions;

- (5) A description of the procedure to be followed by engine or equipment owners to obtain correction of the nonconformity. This may include designation of the date on or after which the owner can have the nonconformity remedied, the time reasonably necessary to perform the labor to remedy the defect, and the designation of facilities at which the defect can be remedied;
- A description of the class of persons other than dealers and authorized warranty agents of the manufacturer who will remedy the defect;
- (7) When applicable, three copies of any letters of notification to be sent engine owners;
- (8) A description of the system by which the manufacturer will assure that an adequate supply of parts is available to perform the repair under the plan, and that the supply remains both adequate and responsive to owner demand;
- (9) Three copies of all necessary instructions to be sent to those persons who are to perform the repair under the recall plan;
- (10) A description of the impact of the proposed changes on fuel consumption, performance, and safety of each class or category of engines or equipment to be recalled;
- (11) A sample of any label to be applied to engines or equipment that participated in the voluntary recall campaign.
- (b) The manufacturer must submit at least one report on the progress of the recall campaign. Such report must be submitted no later than 18 months from the date notification was begun and include the following information:
 - (1) The methods used to notify both engine or equipment owners, dealers and other individuals involved in the recall campaign;
 - (2) The number of engines or equipment to be affected by the emissionrelated defect and an explanation of the means by which this number was determined;
 - (3) The number of engines or equipment actually receiving repair under the plan; and

- (4) The number of engines or equipment determined to be ineligible for remedial action due to a failure to properly maintain or use such engines.
- (c) Send the defect report, voluntary recall plan, and the voluntary recall progress report to: Chief, Mobile Source Operations Division, Air Resources Board, 9528 Telstar Avenue, El Monte, CA, 91731.
- (d) Retain the information gathered by the manufacturer to compile the reports for not less than five years from the date of the <u>end manufacture</u> of the <u>enginesmodel year</u>. The manufacturer must make this information available to duly authorized officials of the ARB upon request.
- (e) The filing of any report under the provisions of this section does not affect a manufacturer's responsibility to file reports or applications, obtain approval, or give notice under any provision of law.
- (f) The act of filing an Emission Defect Information Report is inconclusive as to the existence of a defect subject to the warranty provided by section 2764 of this Article.
- (g) A manufacturer may include on each page of its Emission Defect Information Report a disclaimer stating that the filing of a Defect Information Report pursuant to these regulations is not conclusive as to the applicability of the warranty provided by section 2764 of this Article.

§2763. Ordered Recalls.

(a) (1) If the Executive Officer determines that a substantial number of any class or category of engines or equipment, <u>or components used on such engines or equipment certified pursuant to section</u>
 <u>2754</u>.1(b), although properly maintained and used, do not meet the performance <u>or design</u> standards prescribed under this Article, when in actual use throughout their useful life, the Executive Officer shall immediately notify the responsible manufacturer of such nonconformity and require the manufacturer to submit a plan for remedying the nonconformity.

The manufacturer's plan shall provide that the nonconformity of any such engines or equipment that are properly used and maintained will be remedied at the expense of the manufacturer. If the manufacturer disagrees with such determination of nonconformity, the manufacturer may appeal such determination pursuant to section 2770.

- (2) Any notification required to be given by the manufacturer under paragraph-<u>subsection</u> (a)(1) of this section with respect to any class or category of engines or equipment shall be given to dealers, ultimate purchasers, and subsequent purchasers (if known) in such manner and containing such information as required in section 2761 of this Article.
- (3) (A) Prior to an ARB ordered recall, the manufacturer may perform a voluntary emissions recall pursuant to section 2762 of this Article. Such manufacturer is subject to the reporting and record keeping requirements of section 2762 paragraphs<u>subsections</u>(c) and (d) of this Article.
 - (B) Once ARB determines that a substantial number of engines or equipment fail to conform to the requirements of this Article, the manufacturer will not have the option of a voluntary recall.
- (b) The manufacturer bears all cost obligation a dealer incurs as a result of a requirement imposed by paragraph <u>subsection</u> (a) of this section. The transfer of any such cost obligation from a manufacturer to a dealer through franchise or other agreement is prohibited.
- (c) Any inspection of an engine or equipment for purposes of paragraph<u>subsection</u> (a)(1) of this section, after its sale to the ultimate purchaser, is to be made only if the owner of such engine or equipment voluntarily permits such inspection to be made, except as may be provided by any state or local inspection program.

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

§2764. Evaporative Emission Control Warranty Statement.

(a) Any application for an evaporative emission control system certification must include a copy of the following statement:

CALIFORNIA EVAPORATIVE EMISSION CONTROL WARRANTY STATEMENT YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board (and manufacturer's name, optional) is pleased to explain the evaporative emission control system's warranty on your (year(s)) (equipment type). In California, new equipment that use

February 9, 2004<u>May 14, 2004</u>

small off-engines must be designed, built, and equipped to meet the State's stringent anti-smog standards. (Manufacturer's name) must warrant the evaporative emission control system on your (equipment type) for the period listed below provided there has been no abuse, neglect or improper maintenance of your equipment.

Your evaporative emission control system may include parts such as: carburetors, fuel tanks, fuel lines, fuel caps, valves, canisters, filters, vapor hoses, clamps, connectors, and other associated components. <u>For</u> <u>engines less than or equal to 80 cc, only the fuel tank is subject to</u> <u>the evaporative emission control warranty requirements of this</u> <u>section.</u>

A combined exhaust and evaporative warranty statement is acceptable. For combined warranty statements, "evaporative emission" can be replaced with "emissions" where "emissions" is understood to mean both exhaust and evaporative emissions.

MANUFACTURER'S WARRANTY COVERAGE:

This evaporative emission control system is warranted for two years. If any evaporative emission-related part on your equipment is defective, the part will be repaired or replaced by (manufacturer's name).

OWNER'S WARRANTY RESPONSIBILITIES:

- As the (equipment type) owner, you are responsible for performance of the required maintenance listed in your owner's manual. (Manufacturer's name) recommends that you retain all receipts covering maintenance on your (equipment type), but (manufacturer's name) cannot deny warranty solely for the lack of receipts.
- As the (equipment type) owner, you should however be aware that the (manufacturer's name) may deny you warranty coverage if your (equipment type) or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications.
- You are responsible for presenting your (equipment type) to a (manufacturer's name) distribution center or service center as soon as the problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. If you have a question regarding your warranty coverage, you should contact (Insert chosen manufacturer's contact) at 1-XXX-XXX-XXXX.

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

§2765. New Equipment Compliance Testing.

(a) Compliance Test Procedures.

- The Executive Officer may order an engine or equipment (1) manufacturer to make available for compliance testing and/or inspection five *fuel lines, carbon canisters, tanks, engines, or* equipment units. Unless otherwise directed by the Executive Officer. the **fuel lines, carbon canisters,** tanks, engines, or equipment units shall be delivered to the Haagen-Smit Laboratory, 9528 Telstar Avenue, El Monte, California. Fuel lines, carbon canisters, tTanks, engines or equipment units must be selected at random from sources specified by the Executive Officer according to a method approved by the Executive Officer, that, insofar as practical, must exclude engines or equipment that would result in an unreasonable disruption of the manufacturer's distribution system. Such an order may include a requirement to demonstrate that the measured rate or volume of purge from a representative sample of production canisters and engines certified under section 2754.4 (b) meets any design specification required by the Executive Officer in the applicable Executive Order of Certification or included by the manufacturer in the application for such an Order.
- (2) The method for selection and testing of the <u>fuel lines, carbon</u> <u>canisters,</u> tanks, engines or equipment and the evaluation of test data must be made in accordance with the procedures set forth herein.
- (3) Air Resources Board personnel shall have access to the <u>fuel line</u>, <u>carbon canister</u>, tank, engine, or equipment assembly plants, or distribution facilities for the purposes of tank, engine, or equipment selection and testing. Scheduling of access shall be arranged with the representative designated in the application for certification.
- (4) All testing must be conducted in accordance with the applicable model year evaporative emission test procedures. Any evaporative emission control system parameters must be set to values or positions that are within the range available to the ultimate purchaser as determined by ARB. No break-in or modifications, adjustments, or special preparation or maintenance will be allowed on engines or equipment units chosen for compliance testing without the written consent of the Executive Officer.
- (5) Correction of damage or maladjustment that may reasonably be found to have resulted from shipment of the engine or equipment is permitted only after an initial test of the engine or equipment, except where 100 percent of the manufacturer's production is given that inspection or maintenance by the manufacturer's own personnel. The manufacturer may request that the engine or equipment be

repaired from shipping damage, and be retested. If the Executive Officer concurs, the engine or equipment may be retested, and the original test results may be replaced by the after-repair test results.

- (6) Engines or equipment must be randomly chosen from the selected evaporative family or subgroup.
- (7) Five <u>fuel lines, carbon canisters,</u> tanks, engines or equipment of the same model within an evaporative family or subgroup will be selected for testing per the applicable test procedure. An evaporative family or subgroup will be deemed to have <u>passed the compliance</u> <u>testing if all five test results are below the applicable standard.</u> <u>If one or more of the test results are above the applicable standard, an evaporative family or subgroup will be deemed to <u>have</u> failed the compliance testing if the upper 95% confidence limit of the five samples is greater than 150%, 130%, or 110% of the applicable performance standards specified in sections 2754 through 2757 of this Article per the following table:</u>

Test Category	"Pass" If <i>"U</i> " is less than or equal to	"Fail" If <i>"U</i> " is greater than
I st Year of Production of Evaporative Families	1.5*Applicable Standard	1.5*Applicable Standard
2 nd Year of Production of Evaporative Families	1.3*Applicable Standard	1.3*Applicable Standard
3 rd and Subsequent Years of Production of Evaporative Families	1.1*Applicable Standard	1.1*Applicable Standard

Where:

$$U = \overline{x} + 2.776 * \frac{s}{\sqrt{n}}$$
$$\overline{x} = \frac{\sum_{i=1}^{n} sample_i}{n}$$
$$s = \sqrt{\frac{\sum_{i=1}^{n} (x_i - \overline{x})^2}{n-1}}$$
$$n = 5$$

(8) If any group of <u>fuel lines, carbon canisters,</u> tanks, engines, or equipment units selected for inspection fails an evaporative emission test as determined by subsection (a)(7), or fails to conform to the

labeling requirements of section 2759, the Executive Officer shall notify the manufacturer in accordance with subsection (b).

(b) Notification of Failure

If compliance testing identifies engines or equipment units that do not meet the standards set out in (a)(7) above, <u>or that do not conform with</u> <u>the permeation control design or permeation specifications of</u> <u>section 2754</u>, the Executive Officer will notify the Holder of the Executive Order of Certification covering the engines or equipment. The Executive Officer shall also notify such Holder that the Executive Order of Certification may be suspended or revoked. The Holder of the Executive Order of Certification shall have <u>30</u>fourteen calendar days in which to notify the Executive Officer of their intent to provide additional information and/or independent test results for five tanks, engines, or equipment that document compliance of the evaporative family. <u>The Executive Officer</u> <u>will consider all relevant information provided by the manufacturer,</u> <u>and other interested parties, including, but not limited to corrective</u> <u>actions applied to the noncompliant evaporative family and emission</u> <u>credits to remedy the failure</u>.

- (c) Suspension and Revocation of Executive Orders.
 - (1) The Executive Officer shall not revoke or suspend the Executive Order of Certification, without considering any information provided by the holder of such certification pursuant to (b) above.
 - (2) If the results of the compliance testing indicate that the failed tanks, engines, or equipment units of a particular evaporative family or subgroup are produced at one plant, the Executive Officer may elect to suspend the Executive Order of Certification with respect to that evaporative family for engines or equipment manufactured at that plant.
 - (3) Notwithstanding the foregoing, the Executive Officer may suspend an Executive Order of Certification, in whole or in part, effective upon written notice to the Holder if the Executive Officer finds that:
 - (A) The Holder of the Executive Order of Certification has refused to comply with any of the requirements of this section; or
 - (B) The Holder has submitted false or incomplete information in any report or information provided to the Executive Officer under this section;

- (C) The Holder has rendered inaccurate any test data submitted under this section;
- (D) That ARB personnel have been denied the opportunity to conduct activities authorized under this <u>Ss</u>ection after a warrant or court order is presented to the Holder;
- (E) That ARB personnel were unable to conduct activities authorized in this Article because the facility is located in a foreign jurisdiction where local law prohibits those activities.
- (4) The Executive Officer may revoke an Executive Order of Certification for an evaporative family after the Executive Order of Certification has been suspended pursuant to **paragraph**<u>subsection</u> (1) or (2) of this **S**<u>s</u>ection if the proposed remedy for the nonconformity, as reported by the Holder to the Executive Officer, is one requiring a design change or changes to the evaporative emission control system as described in the application for certification of the affected evaporative family or subgroup.
- (5) Once an Executive Order of Certification has been suspended for a failed tank, engine, or equipment, as provided for in paragraph<u>subsection</u> (1) of this section, the Holder must take the following actions before the Executive Order of Certification can be reinstated:
 - (A) Remedy the nonconformity;
 - (B) Demonstrate that the tank, engine, or equipment conforms to the evaporative emission standards by retesting the tank, engine, or equipment in accordance with these regulations; and
 - (C) Submit a written report to the Executive Officer, after successful completion of testing on the failed tank, engine, or equipment that contains a description of the remedy and test results for each tank, engine, or equipment in addition to other information that may be required by this part.
- (6) Once an Executive Order of Certification for a failed evaporative family or subgroup has been suspended pursuant to paragraph<u>subsection</u> (1), (2) or (3) of this section, the Holder must take the following actions before the Executive Officer will consider reinstating the Executive Order of Certification:
 - (A) Submit a written report to the Executive Officer that identifies the reason for the noncompliance of the tanks, engines, or

equipment, describes the proposed remedy, including a description of any proposed quality control and/or quality assurance measures to be taken by the Holder to prevent future occurrences of the problem, and states the date on which the remedies will be implemented; and

- (B) Demonstrate that the evaporative family or subgroup for which the Executive Order of Certification has been suspended does in fact comply with the regulations of this part by testing no fewer than five tanks, engines, or equipment. The results must meet the "Pass" criteria in subsection (a)(7). Such testing must comply with the provisions of this Ssection.
- (7) Once the Executive Order of Certification has been revoked for an evaporative family or subgroup, if the Holder desires to continue introduction into commerce of a modified version of that evaporative family or subgroup, the Holder must :

After implementing the change or changes intended to remedy the nonconformity, demonstrate that the modified evaporative family does in fact conform to the applicable standards of this Article by testing five engines or equipment from the modified evaporative family unless such testing is waived by the Executive Officer.

(8) To permit a Holder to avoid storing non-test engines or equipment while conducting subsequent testing of the noncomplying evaporative family, a Holder may request that the Executive Officer conditionally reinstate the Executive Order of Certification for that evaporative family.

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

§2766. Exemptions.

(a) Low Permeation Structurally Integrated Tanks - Metal tanks, coextruded multilayer tanks, and Structurally structurally integrated nylon fuel tanks on SORE equipment with engine displacements ≤ 80 cc are specifically exempt from all Ssections 2755 of in this Article. Tank permeation data is not required to be submitted in the certification application.

(b) Small Volume Equipment Production Volume Tank <u>Exemption</u> Manufacturer - Any equipment manufacturer that sells 400 or fewer units per year of equipment that use an identical fuel tank design can is exempt equipment containing the identical tanks

These engines or equipment qualifying under section 2752(a)(26) are exempt from all-the diurnal standards in Ssections 2754 and the fuel tank permeation standard in 2754.1(b) of this Article if the equipment contains the following:

- (1) An evaporative emission control system certified by an engine manufacturer that uses an actively purged carbon canister, an equivalent fuel line, and a sealed tethered fuel cap; or
- (2) An evaporative emission control system that passively vents fuel tank vapors to a carbon canister with a minimum butane working <u>capacity</u> <u>as specified in TP-902</u>capacity of 2 grams per liter of tank volume, an equivalent fuel line, and a sealed tethered fuel cap.

Tank permeation data is not required to be submitted in the
certification application for SmallVolumeManufacturers.

(c) Equipment Fueled by a Vehicle Fuel Tank – Generators that are fueled from the fuel tank of an on-road motor vehicle or marine vessel are exempt from the diurnal performance requirements in section 2754 and the fuel tank permeation and carbon canister design requirements in section 2754(b). However, these generators must use fuel hose that meets the design requirements specified in section 2754(b).

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

§2767. Innovative Products.

(a) The Executive Officer may make a determination that tank vent emission control achieved by an innovative technology may be approved per section 2767.1 if an evaluation of the innovative technology reveals that the technology can meet the diurnal evaporative emission standards in section 2754.

(b) The Executive Officer may make a determination to exempt engines and equipment from section 2756(b) of this Article if an evaluation of the innovative technology reveals that the technology can meet the diurnal evaporative emission standards in section 2754.

(ca) The Executive Officer maycan make a determination that fuel tanks that have undergone special treatment or that have been manufactured from a unique material are "equivalent fuel tanks" if it can be demonstrated that they meet the permeation standard in section 2755 of this Article when

using TP-901, <u>September 25, 2003</u>. Tanks deemed equivalent augment "equivalent fuel tanks" already defined in section 2752 of this Article.

(db) A manufacturer must apply in writing to the Executive Officer for an innovative product equivalency claimed under subsection (a. <u>b</u>, or c). The application must include the supporting documentation that quantifies the emissions from at least **305** samples of the innovative product, including the test methods used to generate the data. The test methods shall include criteria for reproducibility, accuracy, and sampling and laboratory procedures. In addition, the applicant must provide any information to enable the Executive Officer to establish conditions for making a determination of "equivalency". All information, including proprietary data submitted by a manufacturer pursuant to this section, shall be handled in accordance with the procedures specified in title 17, California Code of Regulations, sections 91000-91022.

(ee) Within 30 days of receipt of the application, the Executive Officer shall determine whether an application is complete.

- (fd) Within 90 days after an application has been deemed complete, the Executive Officer will determine whether, under what conditions, and to what extent, a determination of "equivalency" will be permitted. The applicant and the Executive Officer may mutually agree to a longer time period for reaching a decision. An applicant may submit additional supporting documentation before a decision has been reached. The Executive Officer will notify the applicant of the decision in writing and specify such terms and conditions that are necessary to ensure that emissions from use of the product will meet the emissions reductions specified in subsection (a. b, or c).
- (ge) In granting an "equivalency" determination for a fuel tank, the Executive Officer shall specify the test method(s) for determining conformance to the conditions established.
- (hf) For any fuel tank for which an innovative product "equivalency" has been granted pursuant to this section, the manufacturer shall notify the Executive Officer in writing at least 30 days before the manufacturer changes a product's design, connections, or other factors that may effect the ROG emissions during recommended usage. The manufacturer must also notify the Executive Officer within 30 days after the manufacturer learns of any information that would alter the emissions estimates submitted to the Executive Officer in support of the "equivalency" application.
- (ig) If the permeation standards are amended for a product category, all innovative "equivalency" determinations granted for products in the

product category, except as provided in subsection (**j**h), have no force and effect as of the effective date of the amended permeation standards.

(jh) If the Executive Officer believes that a fuel tank for which an "equivalency" determination has been granted no longer meets the criteria for an innovative product specified in subsections (a, b, or c), the Executive Officer may hold a public hearing in accordance with the procedures specified in title 17, California Code of Regulations, subchapter 1.25, to determine if the "equivalency" determination should be modified or revoked.

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

<u>§276</u>	7.1 Approved Evaporative Emission Control System Components
<u>(a)</u>	The Executive Officer may make a determination to approve
	components (fuel tanks, fuel hoses, and carbon canisters) for use on
	evaporative emission control systems that have been shown to meet
	the Design Requirements in Table 1 of section 2754 of this Article.
<u>(b)</u>	A component manufacturer must apply in writing to the Executive
	Officer for a component claimed under subsection (a). The
	application shall include the supporting documentation that
	quantifies the emissions or performance from at least five samples
	of the component, including the test methods used to generate the
	data. If the test methods are not as prescribed in this article the test
	methods shall include criteria for reproducibility, accuracy, and
	sampling and laboratory procedures. All information, including
	proprietary data submitted by a manufacturer pursuant to this
	section, shall be handled in accordance with the procedures
	specified in title 17, California Code of Regulations, sections 91000-
	<u>91022</u> .
(\mathbf{a})	Within 30 days of receipt of the application, the Executive Officer
<u>(c)</u>	shall determine whether an application is complete.
	snan determine whether an application is complete.
<u>(d)</u>	Within 90 days after an application has been deemed complete, the
	Executive Officer will approve/disapprove the component. If
	approved, an Executive Order will be issued for the component. The
	applicant and the Executive Officer may mutually agree to a longer
	time for reaching a decision. An applicant may submit additional
	supporting documentation before a decision has been reached. The
	Executive Officer will notify the applicant of the decision in writing
	and specify such terms and conditions that are necessary to ensure

that the component will meet the performance standards in subsection (a).

- (e)
 If the Evaporative Emission Performance and Design Standards

 (reference section 2754) are amended for a product category, all

 "approvals" granted for components in the product category, except

 as provided in subsection (f), have no force and effect as of the

 effective date of the amended standards unless the applicable

 component requirements are not amended.
- (f)
 If the Executive Officer determines that a component for which an

 "approval" has been granted no longer meets the performance

 standards specified in subsection (a), the Executive Officer may

 deny, suspend or revoke the Executive Order following provisions of

 Section 2770 of this Article.

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

§2768. Variances.

- (a) Any manufacturer of small off-road engines or equipment that use small off-road engines or fuel tanks subject to this Article that cannot meet the requirements set forth in sections 2754 through 2757 of this Article, due to extraordinary reasons beyond the manufacturer's reasonable control, may apply in writing for a variance. The variance application must set forth:
 - (1) The provisions of the regulations for which a variance is sought;
 - (2) the specific grounds upon which the variance is sought;
 - (3) the proposed date(s) by which compliance will be achieved; and
 - (4) a compliance plan detailing the method(s) that will achieve compliance.
- (b) Within 75 calendar days of receipt of a variance application containing the information required in subsection (a), the Executive Officer or his nominee shall hold a public hearing to determine whether, under what conditions, and to what extent, a variance is necessary and should be allowed. Notice of the time and place of the hearing must be sent to the applicant by certified mail not less than 30 days before to the hearing. Notice of the hearing must also be submitted for publication in the California Regulatory Notice Register and sent to every person who requests such a notice, not less than 30 days before the hearing. The notice must state that the parties may, but not need to be, represented by

counsel at the hearing. At least 30 days before the hearing, the variance application must be made available to the public for inspection. Interested members of the public must be allowed a reasonable opportunity to testify at the hearing and their testimony must be considered.

- (c) No variance may be granted unless all of the following findings are made:
 - (1) that, due to reasons beyond the reasonable control of the applicant, compliance would result in extraordinary economic hardship;
 - (2) that the public interest in mitigating the extraordinary hardship to the applicant by issuing the variance outweighs the public interest in avoiding any increased emissions of air contaminants that would result from issuing the variance;
 - (3) that the compliance plan proposed by the applicant can reasonably be implemented, and will achieve compliance as expeditiously as possible; and
 - (4) that the applicant has mitigated the noncompliance to the maximum extent feasible.
- (d) Any variance order shall specify a final date by which compliance will be achieved. Any variance order shall contain a condition that specifies increments of progress necessary to assure timely compliance, and such other conditions that the Executive Officer, in consideration of the testimony received at the hearing, finds necessary to carry out the purposes of Division 26 of the Health and Safety Code.
- (e) A variance shall cease to be effective upon failure of the party to whom the variance was granted to comply with any term or condition of the variance.
- (f) Upon the application of any person, the Executive Officer may review, and for good cause, modify or revoke a variance from requirements of sections 2753 through 2756 or section 2759 after holding a public hearing in accordance with the provisions of subsection (b).

(g) In no event shall a <u>A</u> variance <u>shall not</u> be granted for more than one <u>full</u> model year <u>after the year such variance is granted</u>initiated.

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

§2769. Inspection.

The Executive Officer, or an authorized representative of the Executive Officer, may periodically inspect **any facility of a** manufacturers of equipment, manufacturers of engines, or manufacturers of evaporative emission control components, technology, or systems subject to this Article as deemed necessary to ensure compliance with these regulations. Failure of a manufacturer, distributor, or retailer or other person subject to this Article to allow access for inspection purposes shall be grounds for suspension or revocation of an Executive Order of Certification.

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

§2770. Denial, Suspension or Revocation of Certification.

The Executive Officer for just cause may deny, suspend or revoke an Executive Order of Certification in any of the following circumstances:

(a) An applicant or Holder has materially misrepresented the meaning, findings, effect or any other material aspect of the certification application, including submitting false or incomplete information in its application for certification regardless of the applicant's personal knowledge of the falsity or incompleteness of the information;

An applicant or Holder that uses a label other than the approved label on any engine or equipment, or the label used otherwise fails to comply with the requirements of this Article.

- (a) An applicant or Holder may be denied certification or be subject to a suspension or revocation action pursuant to this section based upon the actions of an agent, employee, licensee, or other authorized representative.
- (b) The Executive Officer shall notify the applicant or Holder by certified mail of any action taken by the Executive Officer to deny, suspend or revoke any certification granted under this Article. The notice shall set forth the reasons for and evidence supporting the action(s) taken. A suspension or revocation is effective upon receipt of the notification.
- (c) A Holder may request that the suspension or revocation be stayed pending a hearing under section 2771. In determining whether to grant the stay, the Executive Officer shall consider the harm the Holder will likely suffer if the stay is not granted. The Executive Officer shall deny the stay if the adverse effects of the stay on the public health, safety, and welfare outweigh the harm to the Holder if the stay is not granted.

- (d) Once an Executive Order of Certification has been suspended pursuant to (a) above, the Holder must satisfy and correct all noted reasons for the suspension and submit a written report to the Executive Officer advising him or her of all such steps taken by the Holder before the Executive Officer will consider reinstating the Executive Order of Certification.
- (e) Nothing in this **S**<u>s</u>ection shall prohibit the Executive Officer from taking any other action provided for by law for violations of the Health and Safety Code.

§2771. Appeals.

Any person whose application for Executive Order of Certification has been denied, <u>or whose certification has been</u> suspended, or revoked may request a hearing to review the action as provided herein. Any such request shall be made within fifteen working days of the date the action for which review is sought became final.

(a) Hearing Procedure.

Except as provided for in subsection (b) below, any appeal pursuant to this section shall be conducted in accordance with the Administrative Hearing Procedures for Petitions for Review of Executive Officer Decisions, title 17, California Code of Regulations, Division 3. Chapter 1 Article 2, commencing with section 60055.1.

- (b) Review by written submission.
 - (1) In lieu of the hearing procedure set forth in (a) above, a manufacturer may request that a review of the Executive Officer's decision be conducted by a hearing officer solely by written submission.
 - (2) A manufacturer may request a review of the Executive Officer's decision to deny, suspend or revoke a certification no later than 20 days from the date of issuance of the notice of the denial, suspension, or revocation. Such request shall include, at a minimum, the following:
 - (A) name of the manufacturer, the name, address and telephone number of the person representing the manufacturer and a statement signed by a senior officer of the manufacturer warranting that the representative has full authority to bind the manufacturer as to all matters regarding the appeal;

- (B) copy of the Executive Order granting certification and the written notification of denial;
- (C) a statement of facts and explanation of the issues to be raised setting forth the basis for challenging the denial, suspension, or revocation (conclusory allegations will not suffice) together with all documents relevant to those issues; and
- (D) the signature of the representative named in (A) above.
- (3) Upon receipt of a request for review, the request shall be referred to the administrative hearing office of the state board for assignment of a hearing officer.
- (4) Within 15 days of appointment of a hearing officer ARB staff shall submit a written response to the manufacturer's submission and documents in support of the Executive Officer's action no later than 10 days after receipt of the manufacturer's submission;
- (5) within 7 days of receipt of the ARB response, the manufacturer may submit one rebuttal statement which shall be limited to the issues raised in the ARB rebuttal;
- (6) if the manufacturer submits a rebuttal, ARB staff may, within 7 days of receipt of the manufacturer's rebuttal, submit one rebuttal statement which shall be limited to the issues raised in the manufacturer's rebuttal; and
- (7) the hearing officer shall receive all statements and documents and render a written decision. The hearing officer's decision shall be mailed to the manufacturer no later than 60 working days after the final deadline for submission of papers.

§2772. Penalties.

In addition to suspension or revocation of an Executive Order of Certification as provided in this Article, the Executive Officer may seek civil or criminal penalties as provided for by law and/or such equitable relief deemed appropriate <u>by the</u> <u>Executive Officer</u> for any violation of these regulations. <u>Such penalties shall</u> <u>apply on a per engine or equipment unit basis. Each day in which there is a violation shall be a separate violation.</u>

§2773. Severability.

Each part of this article is severable, and in the event that any part of this article is held to be invalid, the remainder of this article remains in full force and effect.

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