

Attachment 2

Proposed Modifications to the Proposed Airborne Toxic Control Measure For Diesel-Fueled Portable Engines

This document provides ARB staff's proposed modifications to the proposed Airborne Toxic Control Measure for Diesel-Fueled Portable Engines, which is set forth in Appendix A of the Initial Statement of Reasons (ISOR) released on January 9, 2004.

Modifications that were made since the originally proposed language was made public on January 9, 2004, are shown with deleted text in ~~strikethrough~~ format and added text in underline format.

These changes were approved by the Board at the February 26, 2004 Board hearing. This 15-Day Change version of the ATCM is available for public review and comment for a period of 15 days.

Formal regulatory comments should be sent directly to porteng@listserv.arb.ca.gov.

5/13/04
PROPOSED REGULATION ORDER

**AIRBORNE TOXIC CONTROL MEASURE
FOR DIESEL PARTICULATE MATTER FROM
PORTABLE ENGINES RATED AT GREATER THAN 50 HORSEPOWER AND
GREATER**

Adopt new Sections 93116, 93116.1, 93116.2, 93116.3, 93116.4, and 93116.5, Title 17, California Code of Regulations, to read as follows:

Airborne Toxic Control Measure For Diesel Particulate Matter From Portable Engines Rated At Greater than 50 Horsepower and Greater

93116 PURPOSE

The purpose of this airborne toxic control measure (ATCM) is to reduce diesel particulate matter (PM) emissions from portable diesel-fueled engines having a rated brake horsepower of 50 and greater ~~than 50~~ (≥ 50 bhp).

Authority cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, 41752, 43013 and 43018 Health and Safety Code. Reference: Sections 39650, 39666, 41752 Health and Safety Code.

93116.1 APPLICABILITY

- (a) Except as provided below, all portable engines having a maximum rated capacity ~~greater than~~ of 50 bhp and greater and fueled with diesel are subject to this regulation.

- (b) The following portable engines are not subject to this regulation:
 - (1) Any engine used to propel mobile equipment or a motor vehicle of any kind;
 - (2) Any portable engine using an alternative fuel;
 - (3) Dual-fuel diesel pilot engines that use an alternative fuel or an alternative diesel fuel;
 - (4) Tactical support equipment;

- (5) Portable diesel-fueled engines operated on either San Clemente or San Nicolas Island; ~~and~~
- (6) Engines preempted from State regulation under 42 USC §7543(e)(1); and
- (7) ~~Ground support equipment~~ Portable diesel-fueled engines operated at airports that satisfies the following requirements:
 - (A) the equipment is subject to ~~an enforceable the South Coast Ground Service Equipment Memorandum of Understanding (MOU) with the local air district or Air Resources Board that regulates diesel PM emissions~~; and
 - (B) the ~~Responsible Official participating airlines~~ has ~~have~~ demonstrated to the satisfaction of the Executive Officer that the diesel PM reductions achieved by satisfying the requirements of the MOU ~~is~~ are equivalent to the reductions achieved by ~~satisfying 2020 fleet emission standards, section 93116.3(c)(1).this control measure.~~

Authority cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, 41752, 43013 and 43018 Health and Safety Code. Reference: Sections 39650, 39666, 41752 Health and Safety Code.

93116.2 DEFINITIONS

- (a) **Air Pollution Control Officer or APCO** means the air pollution control officer of a district, or his/her ~~delegate~~ designee.
- (b) **Alternative fuel** means gasoline, natural gas, propane, liquid petroleum gas (LPG), hydrogen, ethanol, or methanol.
- (c) **Alternative Diesel Fuel** means any fuel used in a compression ignition (CI) engine that is not ~~a reformulated CARB diesel fuel as defined in Title 13 CCR Sections 2281, 2282, and 2284 or an alternative fuel, commonly or commercially known, sold or represented by the supplier as diesel fuel No. 1-D or No. 2-D, pursuant to the specifications in ASTM Standard Specification for Diesel Fuel Oils D975-81, or an alternative fuel~~, and does not require engine or fuel system modifications for the engine to operate, although minor modifications (e.g., recalibration of the engine fuel control) may enhance performance. An emission control strategy using a fuel additive will be treated as an alternative diesel fuel based strategy unless:

- (1) the additive is supplied to the engine fuel by an on-board dosing mechanism, or
 - (2) the additive is directly mixed into the base fuel inside the fuel tank of the engine, or
 - (3) the additive and base fuel are not mixed until engine fueling commences, and no more additive plus base fuel combination is mixed than required for a single fueling of a single engine.
- (d) **CARB Diesel Fuel** means any diesel fuel that is commonly or commercially known, sold, or represented by the supplier as diesel fuel No. 1-D or No. 2-D, pursuant to the specification for Diesel Fuel Oils D975-81, that meets the specifications defined in *Title 13 CCR, sections 2281, 2282, and 2284*.
- (e) **Certified Nonroad Engine** refers to an engines meeting an applicable nonroad engine emission standard as set forth in Title 13 of the California Code of Regulations or CFR 40 Part 89.
- (f) **Diesel Fuel** means any fuel that is commonly or commercially known, sold, or represented by the supplier as diesel fuel, including any mixture of primarily liquid hydrocarbons—organic compounds consisting exclusively of the elements carbon and hydrogen—that is sold or represented as suitable for use in an engine.
- (g) **Diesel-Fueled** means fueled by diesel fuel, or CARB diesel fuel, in whole or part.
- (h) **Diesel Particulate Matter (PM)** means the particles found in the exhaust of diesel-fueled ~~C~~I engines which may agglomerate and adsorb other species to form structures of complex physical and chemical properties.
- (i) **District** means a District as defined in Health and Safety Code section 39025.
- (j) **Dual-fuel Diesel Pilot Engine** means a dual-fueled engine that uses diesel fuel as a pilot ignition source at an annual average ratio of less than 5 parts diesel fuel to 100 parts total fuel on an energy equivalent basis.
- (k) ~~**Emergency** refers to the use of a portable engine after the failure or loss of all or part of normal electrical power, normal natural gas supply, or mechanical work during any of the following events:~~
- ~~(1) the pumping of water or sewage to prevent or mitigate a flood or sewage overflow; or~~

- (2) ~~the pumping of water for fire suppression or protection.~~

~~where the failure of loss of electrical power or mechanical use is demonstrated to the satisfaction of the Executive Officer or the APCO, as appropriate, was beyond the reasonable control of the owner or operator of the portable engine.~~

Emergency means providing electrical power or mechanical work during any of the following events and subject to the following conditions:

- (1) the failure or loss of all or part of normal electrical power service or normal natural gas supply to the facility:
 - (A) which is caused by any reason other than the enforcement of a contractual obligation the owner or operator has with a third party or any other party; and
 - (B) which is demonstrated by the owner or operator to the district APCO's satisfaction to have been beyond the reasonable control of the owner or operator;
- (2) the failure of a facility's internal power distribution system:
 - (A) which is caused by any reason other than the enforcement of a contractual obligation the owner or operator has with a third party or any other party; and
 - (B) which is demonstrated by the owner or operator to the district APCO's satisfaction to have been beyond the reasonable control of the owner or operator;
- (3) the pumping of water or sewage to prevent or mitigate a flood or sewage overflow;
- (4) the pumping of water for fire suppression or protection;
- (5) the pumping of water to maintain pressure in the water distribution system for the following reasons:
 - (A) pipe break; or
 - (B) high demand on water supply system due to high use of water for fire suppression;

- (6) the breakdown of electric-powered pumping equipment at sewage treatment facilities or water delivery facilities;
- (7) the training of personnel in the use of portable equipment for emergency purposes.
- (l) Emergency Event refers to a situation arising from sudden and reasonably unforeseen natural disaster such as earthquake, flood, fire, or other acts of God, or other unforeseen event that requires the use of portable engines to help alleviate the threat to public health and safety.
- (m) **Engine** means any piston-driven internal combustion engine.
- (n) **Engines Exclusively Used in Emergency Applications** refer to engines that are used only during an emergency or emergency event, and includes appropriate maintenance and testing.
- (o) **Executive Officer** means the Executive Officer of the California Air Resources Board or his/her designee.
- (p) **Fleet** refers to a portable engine or group of portable engines that are owned and managed by an individual operational entity, such as a business, business unit within a corporation, or individual city or state department under the control of a Responsible Official. Engines that are owned by different business entities that are under the common control of only one Responsible Official shall be treated as a single fleet.
- (q) **Fuel Additive** means any substance designed to be added to fuel or fuel systems or other engine-related systems such that it is present in-cylinder during combustion and has any of the following effects: decreased emissions, improved fuel economy, increased performance of the engine ~~entire vehicle or one of its component parts, or any combination thereof,~~ or assists diesel emission control strategies in decreasing emissions, or improving fuel economy or increasing performance of the engine ~~a vehicle or component part, or any combination thereof.~~ Fuel additives used in conjunction with diesel fuel may be treated as an alternative diesel fuel.
- (r) **In-Use Engines** refers to portable diesel-fueled engines operating under valid permits or registrations as of December 31, 2005.
- (s) **Level-3 Verified Technology** means a technology that has satisfied the requirements of the "Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines" in Title 13, California Code of Regulations, commencing with section 2700, and has demonstrated an reduction in diesel particulate matter of 85% or greater.

- (t) **Location** means any single site at a building, structure, facility, or installation.
- (u) **Low-Use Engines** refers to portable diesel-fueled engines that operate 80 hours or less in a calendar year.
- (v) **Maximum Rated Horsepower (brake horsepower (bhp))** is the maximum brake horsepower rating specified by the portable engine manufacturer ~~for continuous duty~~ and listed on the nameplate of the portable engine.
- (w) **Nonroad Engine** means:
 - (1) Except as discussed in paragraph (2) of this definition, a nonroad engine is any engine:
 - (A) in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or
 - (B) in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or
 - (C) that, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.
 - (2) An engine is not a nonroad engine if:
 - (A) the engine is used to propel a motor vehicle or a vehicle used solely for competition, or is subject to standards promulgated under section 202 of the federal Clean Air Act; or
 - (B) the engine is regulated by a federal New Source Performance Standard promulgated under section 111 of the federal Clean Air Act; or
 - (C) the engine otherwise included in paragraph (1)(C) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. Any engine(s) that replace(s) an engine at a location and that is intended to perform the same or

similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (at least two years) and that operates at that single location approximately three (or more) months each year.

- (x) **Off-Road Engine** means the same as nonroad engine.
- (y) **Outer Continental Shelf (OCS)** shall have the meaning provided by section 2 of the Outer Continental Shelf Lands Act (43 USC Section 1331 et seq.).
- (z) **Participating Airlines** means the collective group of Individual Participating Airlines under the MOU, which currently is as follows: ABX Air, Inc. (formerly Airborne Express), Alaska Airlines, America West Airlines, American Airlines, ATA Airlines (formerly American Trans Air), Continental Airlines, Delta Air Lines, Astar Air Cargo (formerly DHL Airways), Federal Express, Hawaiian Airlines, Jet Blue Airways Corp., Midwest Airlines (formerly Midwest Express Airlines), Northwest Airlines, Southwest Airlines, United Airlines, United Parcel Service, US Airways. Participating Airlines does not mean the Air Transportation Association of America, Inc.
- (aa) **Permit** refers to a certificate issued by the Air Pollution Control Officer acknowledging expected compliance with the applicable requirements of the district's rules and regulations.
- (bb) **Portable** means designed and capable of being carried or moved from one location to another. Indicia of portability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. For the purposes of this regulation, dredge engines on a boat or barge are considered portable. The engine is not portable if:
 - (1) the engine or its replacement is attached to a foundation, or if not so attached, will reside at the same location for more than 12 consecutive months. The period during which the engine is maintained at a storage facility shall be excluded from the residency time determination. Any engine, such as a back-up or stand-by engine, that replace engine(s) at a location, and is intended to perform the same or similar function as the engine(s) being replaced, will be included in calculating the consecutive time period. In that case, the cumulative time of all engine(s) ~~or~~, including the time between the removal of the original engine(s) and installation of the

replacement engine(s), will be counted toward the consecutive time period; or

- (2) the engine remains or will reside at a location for less than 12 consecutive months if the engine is located at a seasonal source and operates during the full annual operating period of the seasonal source, where a seasonal source is a stationary source that remains in a single location on a permanent basis (at least two years) and that operates at that single location at least three months each year; or
- (3) the engine is moved from one location to another in an attempt to circumvent the portable residence time requirements.

~~[Note: The period during which the engine is maintained at a storage facility shall be excluded from the residency time determination.]~~

(cc) Project means the use of one or more registered or permitted portable engines or equipment units operated ~~at one location~~ under the same or common ownership or control to perform a single activity.

(dd) Registration refers to either:

- (1) a certificate issued by the Executive Officer acknowledging expected compliance with the applicable requirements of the Statewide Portable Equipment Registration Program; or
- (2) a certificate issued by the Air Pollution Control Officer acknowledging expected compliance with the applicable requirements of the district's Portable Equipment Registration Program.

(ee) Responsible Official refers to an individual employed by the company or public agency with the authority to certify that the portable engines under his/her jurisdiction complies with applicable requirements of this regulation. A company or public agency may have more than one Responsible Official. A contracted designee cannot certify compliance in lieu of the Responsible Official.

~~**(dd) School** means any public or private school used for purposes of the education of more than 12 children in kindergarten or any grade 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in private homes. The term includes any building or structure, playground, athletic field, or other area of school property. The term excludes unimproved school property.~~

(ff) Selective Catalytic Reduction (SCR) System refers to an air pollution emissions control system that utilizes a proprietary base metal catalyst

~~designed to reduce emissions of oxides of nitrogen (NOx) emissions through the catalytic reduction of NOx by injecting nitrogen-containing compounds into the exhaust stream, such as ammonia or urea.~~

(gg) Stationary Source means any building, structure, facility or installation that emits any ~~affected pollutant~~ air contaminant directly or as a fugitive emission. Building, structure, facility, or installation includes all pollutant emitting activities which:

- (1) are under the same ownership or operation, or which are owned or operated by entities which are under common control; and
- (2) belong to the same industrial grouping either by virtue of falling within the same two-digit standard industrial classification code or by virtue of being part of a common industrial process, manufacturing process, or connected process involving a common raw material; and
- (3) are located on one or more contiguous or adjacent properties.

[Note: For the purposes of this regulation a stationary source and nonroad engine are mutually exclusive.]

(hh) Storage means a warehouse, enclosed yard, or other area established for the primary purpose of maintaining portable engines when not in operation.

(ii) Tactical Support Equipment (TSE) means equipment using a portable engine, including turbines, that meets military specifications, owned by the U.S. Department of Defense and/or the U.S. military services or its allies, and used in combat, combat support, combat service support, tactical or relief operations, or training for such operations. Examples include, but are not limited to, engines associated with portable generators, aircraft start carts, heaters and lighting carts.

(jj) Tier 4 Emission Standards refers to the final emission standards adopted by the U.S. EPA ~~and CARB~~ for newly manufactured nonroad engines ~~designed to achieve the lowest diesel PM emissions.~~

(kk) Transportable means the same as portable.

(ll) Verified Emission Control Strategy refers to a n diesel emission control strategy, designed primarily for the reduction of diesel PM emissions, or system that has received approval from the Executive Officer according to the which has been verified pursuant to the "Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines" in Title 13,

California Code of Regulations, commencing with section 2700, and incorporated by reference.

(mm) U.S. EPA refers to the United States Environmental Protection Agency.

Authority cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, 41752, 43013 and 43018 Health and Safety Code. Reference: Sections 39650, 39666, 41752 Health and Safety Code.

93116.3 REQUIREMENTS

- (a) Diesel-fueled portable engines shall only use one of the following fuels:
 - (1) CARB diesel fuel; or
 - (2) alternative diesel fuel that has been verified through the Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines; or
 - (3) CARB diesel fuel utilizing fuel additives that have been verified through the Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines.

[Note that credit for diesel PM reductions for diesel fuel or CARB diesel fuel blends that use an alternative diesel fuel such as biodiesel, Fischer-Tropsch fuels, or emulsions of water in diesel fuel is available only for fuel blends that have satisfied the requirements of been verified through the Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines. The credit granted is based upon the verified level approved by the Executive Officer within the Executive Order for the fuel blend.]

- (b) Diesel PM Standards
 - (1) Requirements for in-use portable diesel-fueled engines
 - (A) Except as provided in sections 93116.3(b)(1)(B) and 93116.3 (b)(4), starting January 1, 2010, all portable diesel-fueled engines shall be certified to meet a federal or California standard for newly manufactured nonroad engines pursuant to

40 CFR Part 89 or Title 13 of the California Code of Regulations (that is, certified to Tier 1, 2 or 3 nonroad engine standards).¹

- (B) In lieu of complying with ~~the 2010 requirement(b)(1)(A)~~, owners of portable diesel-fueled engines used exclusively in emergency applications or portable diesel-fueled engines that qualify as a low-use engines may commit to replacing these engines with Tier 4 engines, subject to the requirements ~~in section 93116.3(b)~~ below:-

1. the Responsible Official shall submit written notification identifying the specific portable diesel-fueled engines to be replaced with portable diesel-fueled engines certified to the Tier 4 emission standards; and
2. for each class and category of nonroad engine, replace each portable diesel-fueled engine so identified within two years of the first engine being offered for sale that satisfies the Tier 4 emission standards.

- (C) ~~Starting January 1, 2013, all portable diesel-fueled engines are subject to section 93116.3(c).~~

- (2) Portable diesel-fueled engines that have not been permitted or registered prior to January 1, 2006, are subject to the following requirements:

- (A) Except as allowed under flexibility provisions for equipment and vehicle manufacturers and post-manufacture marinizers pursuant to 40 CFR Part 89 or Title 13 of the California Code of Regulations, the portable diesel-fueled engine shall meet the most stringent of the federal or California emission standard for nonroad engines ~~pursuant to 40 CFR Part 89 or Title 13 of the California Code of Regulations (that is, certified to Tier 3 nonroad engine standards or Tier 4 nonroad engine standards, once these engines are available)~~; and

¹ Tier 1, 2, 3, and 4 refer to nonroad engine emission standards promulgated by ARB and U.S. EPA for newly manufactured engines pursuant to 40 CFR Part 89 or Title 13 of the California Code of Regulation. Each successive Tier represents more stringent emission standards and the requirements are phased-in over time with the Tier 1 engine standards becoming effective for some engines manufactured in 1996 and becoming effective for all engines by 2000. Tier 2 engine standards are phased in for engines manufactured beginning in 2001 and becomes effective for all engines by 2006. Similarly, Tier 3 engines are phased in for engines manufactured beginning in 2006, and Tier 4 engines are phased in for engines manufactured beginning in 2011.

(B) a diesel-fueled portable engine used exclusively for emergency applications or qualifying as a low-use engine designation is subject to the requirements of section 93116.3(b)(3); ~~and,~~

~~(C) for new applications to permit or register engines after January 1, 2013, the portable engine is subject to section 93116.3(c).~~

(3) Except as provided in section 93116.3(b)(1)(B), portable diesel-fueled engines used exclusively in emergency applications or qualifying as low-use engines shall satisfy one of the following requirements by January 1, 2020:

(A) the portable diesel-fueled engine is certified to Tier 4 emission standards for newly manufactured nonroad engines; or

(B) the portable diesel-fueled engine is equipped with a properly functioning level-3 verified technology; or

(C) the portable diesel-fueled engine is equipped with a combination of emission control systems or devices verified emission control strategies that have been verified together to achieve at least 85% reduction in diesel PM emissions.

~~(4) Owners that commit to replacing in-use engines with engines certified to the Tier 4 nonroad engine standards in lieu of satisfying the 2010 requirement shall:~~

~~(A) submit written notification identifying the specific engines to be replaced with engines certified to the Tier 4 emission standards; and~~

~~(B) for each class and category of nonroad engine, replace each engine so identified within two years of the first engine being offered for sale that satisfies the Tier 4 emission standards.~~

(4) Lattice boom cranes

(A) A portable diesel-fueled engine used in a lattice boom crane shall be exempt from the requirements of section 93116.3(b)(1)(A) if the Responsible Official has demonstrated to the satisfaction of the Executive Officer or the APCO that the portable diesel-fueled engine in the lattice boom crane cannot be replaced with a portable diesel-fueled engine that is certified to meet a federal or California standard for newly manufactured nonroad engines pursuant to 40 CFR Part 89 or Title 13 of the

[California Code of Regulations \(that is, certified to Tier 1, 2 or 3 nonroad engine standards\).](#)

(B) [Portable diesel-fueled engines exempt from the requirements of section 93116.3\(b\)\(1\)\(A\) pursuant to section 93116.3\(b\)\(4\)\(A\) shall satisfy one of the following requirements by January 1, 2020:](#)

1. [the portable diesel-fueled engine is certified to Tier 4 emission standards for newly manufactured nonroad engines; or](#)
2. [the portable diesel-fueled engine is equipped with a properly functioning level-3 verified technology; or](#)
3. [the portable diesel-fueled engine is equipped with a combination of verified emission control strategies that have been verified together to achieve at least 85% reduction in diesel PM emissions.](#)

(c) Fleet Requirements

(1) Each fleet is subject to and shall comply with the following weighted PM emission fleet averages expressed as grams per brake horsepower-hour (g/bhp-hr) by the listed compliance dates:

Fleet Standard Compliance Date	Engines <175 hp (g/bhp-hr)	Engines ≥175 to 749 hp (g/bhp-hr)	Engines ≥750 hp (g/bhp-hr)
1/1/13	0.3	0.15	0.25
1/1/17	0.18	0.08	0.08
1/1/20	0.04	0.02	0.02

(2) For the purposes of this regulation, the portable diesel-fueled engines affected by the fleet provisions of this regulation include all portable diesel-fueled engines operated in California, including portable [diesel-fueled](#) engines registered with the Statewide Portable Equipment Registration Program or permitted [by](#) or registered with [a](#) local districts. ~~The California fleet will be further divided into engines rated at less than 175 horsepower, engines rated at 175 horsepower up to 749 horsepower, and engines that are 750 horsepower and larger. Each portion of the fleet would be subject to the above fleet emission standards.~~

- (3) The following portable diesel-fueled engines shall be excluded from ~~a~~ the fleet requirements:
- (A) portable diesel-fueled engines operated exclusively outside of California or operated only within the OCS.
 - (B) portable diesel-fueled engines used exclusively in emergency applications.
 - (C) portable diesel-fueled engines that qualify as ~~a~~ low-use engines.
 - (D) portable diesel-fueled engines used in a lattice boom crane.
- (4) Portable diesel-fueled engines that qualify as ~~a~~ low-use engine and subsequently exceed the allowed hours of operation in a calendar year, or portable diesel-fueled engines that are identified to be used exclusively in emergency applications but subsequently are used in non-emergency applications, become immediately subject to the requirements of section 93116.3(c) in the year such exceedence or use occurs. For low-use engines, the hours of operation used for an emergency event shall not be counted toward the allowed hours of operation.
- (5) Portable alternative-fueled engines may be included in a fleet if the engine satisfies the requirements in section 93116.3(d)(2)(B).
- (6) Portable diesel-fueled portable engines equipped with SCR systems.
- (A) The diesel PM fleet emission standards in section 93116.3(c)(1) do not apply to:
 - 1. portable diesel-fueled engines equipped with properly operating SCR systems as of January 1, 2004; and
 - 2. with the approval of the Executive Officer, portable diesel-fueled engines equipped with properly operating SCR systems after January 1, 2004.
 - (B) At the request of the Responsible Official, portable diesel-fueled engine(s) equipped with a SCR system(s) may be included in the company's fleet for the purpose of complying with an applicable fleet emission standard. Once the engine(s) ~~are is~~ included in a ~~company's~~ fleet, ~~the company's~~ compliance with applicable fleet emission standards shall always include these diesel-fueled portable engine(s) ~~equipped with SCR system(s).~~

(C) For all diesel-fueled portable engines equipped with SCR systems, the following information shall be submitted to the Executive Officer to demonstrate that the SCR system is operating properly:

1. tests results for NOx, PM, and ammonia slip

a. ~~the measurements shall be conducted with ARB or district approved test methods~~following tests methods shall be used to demonstrate compliance; and

i. NOx shall be measured with ARB test method 100 dated July 1997, or equivalent district-approved test method; and

ii. diesel PM shall be measured with ARB test method 5 dated July 1997, or equivalent district-approved test method. For the purposes of this requirement, only the probe catch and filter catch ("front half") is used to determine the emission rate, g/bhp-hr, and shall not include PM captured in the impinger catch or solvent extract; and

iii. ammonia slip shall be measured with Bay Area Air Quality Management District Source Test Procedure ST-1B, Ammonia Integrated Sampling, dated January 1982, or other equivalent district approved test method.

b. ~~diesel PM shall be measured with ARB test method 5 or equivalent district approved test method. For the purposes of this requirement, only the probe catch and filter catch ("front half") is used to determine the emission rate, g/bhp-hr, and shall not include PM captured in the impinger catch or solvent extract; and~~

~~b.c.~~the duration of the emission test shall be sufficient to document the typical operation of the portable diesel-fueled engine(s); and

~~c.d.~~ testing shall be performed at the frequency required by the permit or registration. In no event shall the time between emission tests exceed three years.

- (7) Beginning on January 1, 2013, the weighted average PM emission rate for the fleet cannot exceed the fleet standard that is in effect. Changes in the fleet, including portable engine additions and deletions, shall not result in noncompliance with this standard.

(d) Fleet Average Calculations

(1) General Provisions

(A) The average PM emission factor for the fleet is determined by the following formula:

$$\frac{\sum \text{Summation for each } \text{portable} \text{ engine in the fleet (bhp x emission factor)}}{\sum \text{Summation for each } \text{portable} \text{ engine in the fleet (bhp)}}$$

where:

bhp = horsepower at maximum rated horsepower capacity.

emission factor = diesel PM emission rate, as determined below:

(B) The following diesel PM emission rates shall be used with the above formula to determine the weighted average fleet emission rate:

1. for portable diesel-fueled portable engines certified to a nonroad engine standard, the results of emission measurements submitted to either the U.S. EPA or CARB for the purposes of satisfying the appropriate emission standard; or
2. results from emission measurements from a verified emission control strategy ~~verification approved by the Executive Officer for an emission control system or strategy~~ may be used in conjunction with engine emission information; or
3. for portable diesel-fueled portable engine(s) equipped with SCR system(s), results from valid emission tests.

(2) The following incentives may be used to revise the fleet average, as outlined below:

(A) where equipment uses grid power for more than 200 hours in lieu of operating a portable diesel-fueled engine for a given project, the time period grid power is used may be used to reduce each affected engine's emission factor. The emission

factor for each affected portable engine will be reduced proportionally by the percentage of time the equipment uses grid power. To receive credit for grid power in the fleet calculation, the recordkeeping and reporting requirements in section 93116.4(c)(3) shall be satisfied.

(B) alternative-fueled portable engines

1. Alternative-fueled portable engines operating 100 or more hours may be included toward determining compliance with the applicable fleet emission standards. A diesel PM emission rate of zero shall be used in the fleet calculations for these engines.

2. Alternative-fueled portable engines operating 100 or more hours per calendar year and added to a fleet prior to January 1, 2009, may be counted twice in the company's fleet average determination toward compliance with the 2013 and 2017 fleet emission standards. The alternative-fueled engine shall be certified to meet a federal or California standard for newly manufactured nonroad engines pursuant to 40 CFR Part 89 or Title 13 of the California Code of Regulations.

(C) portable diesel-fueled engines certified to Tier 4 nonroad engine standards that are engines added to a fleet prior to January 1st, 2015, may be counted twice in the company's fleet average determination toward compliance with the 2013 and 2017 fleet emission standards.

Authority cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, 41752, 43013 and 43018 Health and Safety Code. Reference: Sections 39650, 39666, 41752 Health and Safety Code.

93116.4 FLEET RECORDKEEPING AND REPORTING REQUIREMENTS

(a) The owner or operator of a fleet is not subject to the requirements of this section if all each portable diesel-fueled engines in the fleet satisfy satisfies any one of the following requirements:

(1) the portable diesel-fueled engine is certified to Tier 4 emission standards for newly manufactured nonroad engines; or

- (2) the portable diesel-fueled engine is equipped with a properly functioning level-3 verified technology emission control system; or
 - (3) the portable diesel-fueled engine is equipped with a combination of ~~emission control systems or devices~~ verified emission control strategies that have been verified together to achieve at least 85% reduction in diesel PM emissions.
- (b) Portable Diesel diesel-fueled portable engine(s) equipped with properly operating SCR system(s) shall be excluded from the requirements of section 93116.4(a) if the engine(s) is not subject to section 93116.3(c)(1).
- (c) Effective January 1, 2012, the Responsible Official of a fleet shall:
- (1) Keep and maintain records for:
 - (A) alternative-fueled portable engines used as part of a company's fleet average, except as provided in section 93116.4(d); and
 - (B) portable diesel-fueled engines affected by the use of electrification; and
 - (C) portable diesel-fueled engines qualifying as low-use engines; and
 - (D) portable diesel-fueled engines used exclusively in emergency applications.
 - (2) The Responsible Official, for all portable engines subject to section 93116.4(c)(1), shall:
 - (A) install or ~~cause~~ to be installed and properly maintained on each portable engine subject to recordkeeping a non-resettable hour-meter; and
 - (B) maintain on a calendar year basis a record of the total hours of operation for each portable engine. If the portable engine is used out-of-state, then the records may account for operation within California only, excluding operation within the OCS; and
 - (C) maintain all required records at a central place of business for five years. The records shall clearly identify each portable engine subject to the recordkeeping requirement as well as the annual hours of operation. These records are to be made available, upon request for inspection, to local air pollution control district or CARB personnel. The requested records shall

be provided to the appropriate personnel within ~~three~~-ten business days of the request.

- (3) The Responsible Official of a fleet electing to use electrification in determining the fleet average shall:
- (A) notify the Executive Officer identifying the dates, location, duration of the project, and a description of the project that will rely on electrification instead of using portable diesel-fueled engines. The notification shall be provided prior to the start of the project; and
 - (B) identify each affected portable diesel-fueled engine, including: make, model, serial number, year of manufacture for each engine, emission factor (g/bhp-hr) and district permit or State registration number; and
 - (C) shall clearly identify the electrification activity, including indicating the amount of electricity used and the time period for the project; and
 - (D) shall retain copies of contracts or other documentation, with the project proponent and/or applicable utility, supporting the use of grid power.
- (4) Test results for SCR compliance shall be maintained at a central place of business for five years. At the request of ARB or district personnel, the Responsible Official shall have ~~3~~-three business days to provide a copy of the most recent test results.

(d) Effective January 1, 2008, for alternative-fueled engines added to a fleet prior to January 1, 2009, the Responsible Official shall:

- (1) install or cause to be installed and properly maintained on each portable engine subject to recordkeeping a non-resettable hour-meter; and
- (2) maintain on a calendar year basis a record of the total hours of operation for each portable engine. If the portable engine is used out-of-state, then the records may account for operation within California only, excluding operation within the OCS; and
- (3) maintain all required records at a central place of business for five years. The records shall clearly identify each portable engine subject to the recordkeeping requirement as well as the annual hours of operation. These records are to be made available, upon request for

inspection, to local air pollution control district or CARB personnel. The requested records shall be provided to the appropriate personnel within ten business days of the request.

- (e) The Responsible Official of the fleet shall provide the following reports **as identified below** to the Executive Officer:
- (1) A status report, due to the Executive Officer by March 1, 2011, that includes the following items:
 - (A) the fleet's weighted average PM emission rate for the 2010 calendar year, including a summary for each portable engine that is part of the fleet and each engine's emission rate (g/bhp-hr); and
 - (B) inventory of portable engines in the fleet identifying whether the engine is state-registered or permitted with the district. Alternative-fueled engines should be identified by fuel type. The inventory shall identify the make, model, serial number, year of manufacture, ~~and primary fuel type for each engine~~, emission factor (g/bhp-hr), and district permit or State registration number for each engine to be used in the fleet average determination; and
 - (C) identify, if applicable, each portable diesel-fueled engine that the owner commits to replacing with a Tier 4 engine, including: make, model, serial number, year of manufacture for each engine, and district permit or State registration number; and
 - (D) listing of portable diesel-fueled engines, if applicable, used exclusively in emergency applications. The listing shall identify each engine claiming use only in emergency applications, including: make, model, serial number, year of manufacture for each engine, emission factor (g/bhp-hr), and district permit or State registration number; and
 - (E) listing of portable diesel-fueled engines, if applicable, satisfying the low-use engine requirements. The listing shall identify each engine, including: make, model, serial number, year of manufacture for each engine, emission factor (g/bhp-hr), and district permit or State registration number; and
 - (F) listing of portable alternative-fueled engines, if applicable, added to the fleet prior to January 1, 2009, pursuant to section 93116.3(d)(2)(B)(2). The listing shall identify each engine, including: make, model, serial number, year of manufacture for

each engine, U.S. EPA engine family name, emission factor (g/bhp-hr), and district permit or State registration number; and

- (G) for [portable diesel-fueled](#) engine(s) equipped with SCR~~(s)~~ [system\(s\)](#), documentation demonstrating that the SCR system is operating properly.
- (2) A statement of compliance signed by the Responsible Official that the fleet standards are being achieved and a summary that identifies each portable engine in the fleet and the associated emission rate (g/bhp-hr). [Portable Engines engines](#) included in the fleet are those that are part of the fleet at the time the fleet standard became effective. The engine identification shall include, at a minimum, the make, model, serial number, and year of manufacture for each engine. Alternative-fueled engines should be identified by fuel type. The statements of compliance are due to the Executive Officer by the following dates:
- (A) March 1, 2013, for the fleet standards that become effective January 1, 2013; and
 - (B) March 1, 2017, for the fleet standards that become effective January 1, 2017; and
 - (C) March 1, 2020 for the fleet standards that become effective January 1, 2020.
- (3) The Responsible Official shall identify to the Executive Officer, as part of each compliance report, the specific [portable diesel-fueled](#) engines, if any, used exclusively in emergency applications and the specific [portable diesel-fueled](#) engines, if any, claimed to be low-use engines. The list shall include for each [portable diesel-fueled](#) engine: the make, model, serial number, year of manufacture for each engine, emission factor (g/bhp-hr), and district permit or State registration number.
- (4) The Responsible Official shall identify to the Executive Officer, as part of each compliance report, the specific [portable diesel-fueled](#) engines, if any, excluded from the fleet because the [portable diesel-fueled](#) engine operated exclusively outside of California or operated only within the OCS. The list shall include for each [portable diesel-fueled](#) engine: the make, model, serial number, year of manufacture, and, district permit or State registration number for each engine.

- (5) If compliance with the fleet average includes the use of electrification, ~~then~~ the Responsible Official shall provide documentation supporting the credit claimed for electrification.
- (6) As part of each compliance report, the Responsible Official shall, if applicable, certify the following:
 - (A) All portable alternative-fueled engines included in the fleet average operated at least 100 hours during the previous 12 months prior to the fleet emission standard becoming effective.
 - (B) For all portable diesel-fueled engines ~~using the exclusively used in emergency applications designation~~, the engines were used only for emergency applications.
 - (C) For all portable diesel-fueled engines using the low-use designation, the engines operated no more than 80 hours for the reporting period.
 - (D) For all portable diesel-fueled engines equipped with SCR, the engine complies with applicable district or Statewide Portable Equipment Registration Program requirements.
- (7) After March 1, 2013, the APCO or the Executive Officer ~~can~~ may require the submittal of information demonstrating compliance with the applicable fleet standard. Upon receiving the request, the Responsible Official shall provide the requested information within 30 days.
- (f) For fleets that are exempted from the requirements of section 93116.4 pursuant to section 93116.4 (a), the Responsible Official shall certify that all portable diesel-fueled engines in the fleet satisfy the requirements of section 93116.4(a). The Responsible Official shall provide the certification statement and a list of the portable diesel-fueled engines in the fleet to the Executive Officer when the fleet initially satisfies the requirements of section 93116.4(a). The list of engines shall identify the make, model, serial number, and district permit or State registration number for each engine.

Authority cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, 41752, 43013 and 43018 Health and Safety Code. Reference: Sections 39650, 39666, 41752 Health and Safety Code.

93116.5 ENFORCEMENT OF FLEET REQUIREMENTS

- (a) Both the Executive Officer and the APCO have the authority to review or seek enforcement action for violation of the fleet emission standard.
- (b) The ARB will make available to the districts the information the Responsible Official has provided to ARB to demonstrate compliance with the fleet standard.

Authority cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, 41752, 43013 and 43018 Health and Safety Code. Reference: Sections 39650, 39666, 41752 Health and Safety Code.