AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN DIEGO

NOTICE OF WORKSHOP

FOR DISCUSSION OF IMPLEMENTATION OF A NEW AIRBORNE TOXIC CONTROL MEASURE FOR PORTABLE DIESEL-FUELED ENGINES

The San Diego County Air Pollution Control District (District) will hold a public meeting to discuss the implementation of a new California Air Resources Board (CARB) statewide regulation entitled "Airborne Toxic Control Measure (ATCM) for Portable Diesel-Fueled Engines." Under the California Health and Safety Code, the District is required to implement and enforce state airborne toxic control measures. Comments concerning local implementation or requirements of the control measure may be submitted in writing before or made at the meeting, which is scheduled as follows:

DATE: **Tuesday, June 28, 2005**

TIME: **9:00 a.m. to 11:00 a.m.**

PLACE: **Al Bahr Shrine**
5440 Kearny Mesa Road
San Diego, CA
(See Map Below)

On February 26, 2004, the California Air Resources Board adopted a new regulation (Section 93116, Title 17, California Code of Regulations) designed to reduce public exposure to diesel particulate matter and other toxic air contaminants statewide. This regulation became effective on March 11, 2005. Exposure to diesel particulate matter may cause cancer, heart and lung damage, and other health problems.

Except for engines propelling vehicles or mobile equipment, military tactical support equipment, dual-fueled diesel pilot engines, and new agricultural or construction engines less than 175 brake horsepower, this regulation applies to all portable diesel-fueled engines that are 50 brake horsepower or larger operating in California. The District will provide an overview of the new regulation at the workshop and answer questions regarding its requirements. The District will also discuss how the regulation will be implemented and enforced in San Diego County.

By 2010, this ATCM will require many existing portable diesel-fueled engines to be replaced with an engine certified to meet Tier 1, Tier 2, or Tier 3 federal or California diesel nonroad engine emission standards. In addition, the ATCM includes fleet average diesel particulate matter standards that will, in effect, require replacement of many existing portable engines—even engines certified to Tier 1, Tier 2, or Tier 3 standards—with engines meeting a Tier 4 particulate matter emission standard by 2020. CARB and the U.S. Environmental Protection

Agency (EPA) promulgated these Tier standards for newly manufactured nonroad engines (called off-road engines in California), starting with model year 1996 engines for larger engine sizes. Each successive Tier represents more stringent emission standards for particulate matter, oxides of nitrogen (NOx), and hydrocarbons. The Tier standards are applicable to many nonroad engines manufactured since 1996 (see Attachment A).

Specifically, the new toxic control measure requires that:

- All portable diesel-fueled engines use CARB diesel fuel, a verified alternative diesel fuel, or CARB diesel with verified fuel additives.

- An existing portable diesel-fueled engine that is not currently permitted or registered with CARB or a local district must do so by January 1, 2006. After that date, any portable engine (new or preexisting) being permitted or registered must meet the most stringent Tier emission standards in effect at the time of registration or permitting (Tier 2, Tier 3, or Tier 4).

- By January 1, 2010, a portable diesel-fueled engine that was permitted or registered before January 1, 2006, be certified to meet Tier 1, Tier 2, or Tier 3 diesel nonroad engine emission standards. This does not apply to emergency engines, low-use engines (operating less than 80 hours per year), or, with State or District approval, lattice boom crane engines.

- By January 1, 2010, an emergency or low-use portable diesel-fueled engine that was permitted or registered before January 1, 2006, be certified to meet Tier 1, Tier 2, or Tier 3 diesel nonroad engine emission standards. Alternatively, the engine may be replaced by a certified Tier 4 engine within two years of the availability of such engines in the marketplace.

- Beginning March 1, 2011, requires specified compliance reports be submitted.

- Specified records be kept, for certain types of engines that adjust the fleet average emission standard and certain engines excluded from the fleet average emission standard. The recordkeeping begins January 1, 2012, for most engines. However, engines using alternative fuels that are added to a fleet prior to January 1, 2009, must begin keeping records by January 1, 2008.

- Installation of non-resettable hour meters on all engines subject to recordkeeping by the ATCM. The hour meter must be installed by January 1, 2012, for most engines and by January 1, 2008, for engines using alternative fuel that are added to a fleet before January 1, 2009.

- Beginning January 1, 2013, one or more portable diesel-fueled engines under common ownership, excluding emergency and other specified engines, meet fleet average diesel particulate matter emission standards. Successively more stringent fleet average emission standards become effective in 2017 and 2020.

- Beginning January 1, 2020, all portable diesel-fueled emergency engines, low-use engines, and previously exempt lattice boom crane engines be certified to meet Tier 4 emission standards or have a verified emission control strategy that achieves 85% or more reduction in diesel particulate matter.

- Installation of non-resettable hour meters on all engines subject to recordkeeping by the ATCM, primarily for engines claiming specific exemptions in the regulation.

Copies of the airborne toxic control measure may be obtained from the Air Resources Board web site, http://www.arb.ca.gov/regact/porteng/fro.pdf, or you may call Luann Serbesku at (858) 650-4544. If you have any questions concerning the control measure, please contact Cara Bandera at (858) 650-4592 or Steve Moore at (858) 650-4598.

MICHAEL R. LAKE, Assistant Director
Air Pollution Control District

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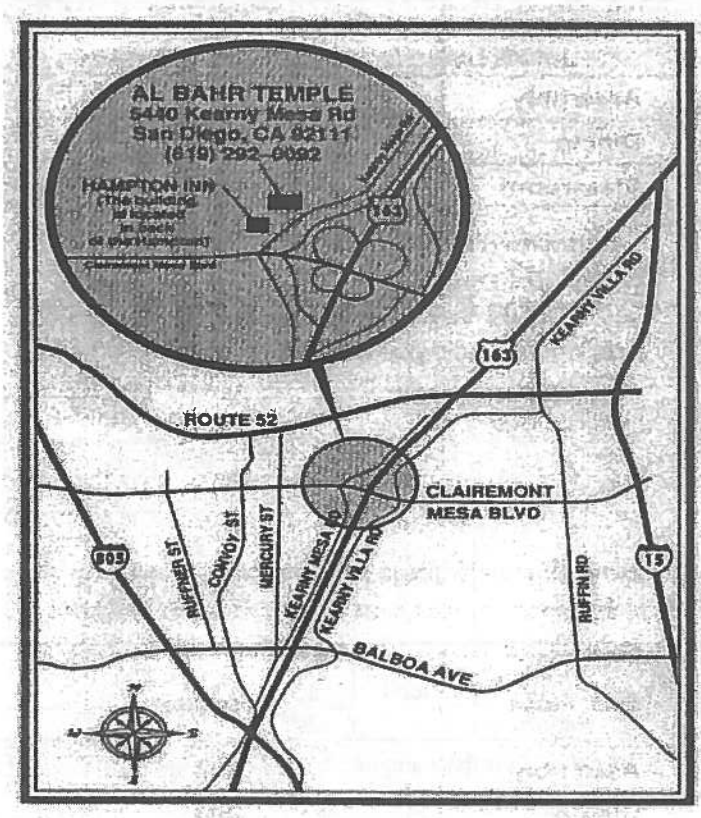

ATTACHMENT A

ENVIRONMENTAL PROTECTION AGENCY (EPA) AND CALIFORNIA AIR RESOURCES BOARD (CARB)

NONROAD COMPRESSION IGNITION ENGINE STANDARDS

Grams per brake horsepower per hour: g/bhp-hr (Grams per kilowatt hour: g/kwh)

Engine Power	Tier	Year	CO[1]	HC[2]	NMHC[3] + NOx	NOx[4]	PM[5]
hp < 11 (kW < 8)	Tier 1	2000	6.0 (8.0)	-	7.8 (10.5)	-	0.75 (1.0)
	Tier 2	2005	6.0 (8.0)	-	5.6 (7.5)	-	0.6 (0.8)
	Tier 4	2008	6.0 (8.0)	-	5.6 (7.5)	-	0.3 (0.4)
11 ≤ hp < 25 (8 ≤ kW < 19)	Tier 1	2000	4.9 (6.6)	-	7.1 (9.5)	-	0.6 (0.8)
	Tier 2	2005	4.9 (6.6)	-	5.6 (7.5)	-	0.6 (0.8)
	Tier 4	2008	4.9 (6.6)	-	5.6 (7.5)	-	0.3 (0.4)
25 ≤ hp < 50 (19 ≤ kW 37)	Tier 1	1999*	4.1 (5.5)	-	7.1 (9.5)	-	0.6 (0.8)
	Tier 2	2004	4.1 (5.5)	-	5.6 (7.5)	-	0.45 (0.6)
	Tier 4	2008	4.1 (5.5)	-	5.6 (7.5)	-	0.22 (0.3)
		2013	4.1 (5.5)	-	3.5 (4.7)	-	0.022 (0.03)
50 ≤ hp < 100 (37 ≤ kW < 75)	Tier 1	1998*	-	-	-	6.9 (9.2)	-
	Tier 2	2004	3.7 (5.0)	-	5.6 (7.5)	-	0.3 (0.4)
	Tier 3	2008	3.7 (5.0)	-	3.5 (4.7)	-	0.3 (0.4)
50 ≤ hp < 75 (37 ≤ kW < 56)	Tier 4	2008	3.7 (5.0)	-	3.5 (4.7)	-	0.22 (0.3)
		2013	3.7 (5.0)	-	3.5 (4.7)	-	0.022 (0.03)
100 ≤ hp < 175 (75 ≤ kW < 130)	Tier 1	1997*	-	-	-	6.9 (9.2)	-
	Tier 2	2003	3.7 (5.0)	-	4.9 (6.6)	-	0.22 (0.3)
	Tier 3	2007	3.7 (5.0)	-	3.0 (4.0)	-	0.22 (0.3)
75 ≤ hp < 175 (56 ≤ kW < 130)	Tier 4	2012	3.7 (5.0)	0.14 (0.19)	-	0.3 (0.4)	0.015 (0.02)
175 ≤ hp < 300 (130 ≤ kW < 225)	Tier 1	1996	8.5 (11.4)	1.0 (1.3)	-	6.9 (9.2)	0.4 (0.54)
	Tier 2	2003	2.6 (3.5)	-	4.9 (6.6)	-	0.15 (0.2)
	Tier 3	2006	2.6 (3.5)	-	3.0 (4.0)	-	0.15 (0.2)
300 ≤ hp < 600 (225 ≤ kW < 450)	Tier 1	1996	8.5 (11.4)	1.0 (1.3)	-	6.9 (9.2)	0.4 (0.54)
	Tier 2	2001	2.6 (3.5)	-	4.8 (6.4)	-	0.15 (0.2)
	Tier 3	2006	2.6 (3.5)	-	3.0 (4.0)	-	0.15 (0.2)
600 ≤ hp < 750 (450 ≤ kW < 560)	Tier 1	1996	8.5 (11.4)	1.0 (1.3)	-	6.9 (9.2)	0.4 (0.54)
	Tier 2	2002	2.6 (3.5)	-	4.8 (6.4)	-	0.15 (0.2)
	Tier 3	2006	2.6 (3.5)	-	3.0 (4.0)	-	0.15 (0.2)
175 ≤ hp < 750 (130 ≤ kW < 560)	Tier 4	2011-2014	2.6 (3.5)	0.14 (0.19)	-	0.3 (0.4)	0.015 (0.02)
hp ≥ 750 (kW ≥ 560)	Tier 1	2000	8.5 (11.4)	1.0 (1.3)	-	6.9 (9.2)	0.4 (0.54)
	Tier 2	2006	2.6 (3.5)	-	4.8 (6.4)	-	0.15 (0.2)
hp ≥ 750 (kW ≥ 560) generator sets	Tier 4	2011-2014	2.6 (3.5)	-	0.3 (0.4)	0.5 (0.67)	0.07 (0.1)
		2015	2.6 (3.5)	-	0.14(0.19)	0.5 (0.67)	0.022 (0.03)
hp ≥ 750 (kW ≥ 560) all other engines	Tier 4	2011-2014	2.6 (3.5)	-	0.3 (0.4)	2.6 (3.5)	0.07 (0.1)
		2015	2.6 (3.5)	-	0.14(0.19)	2.6 (3.5)	0.03 (0.04)

* The phase-in year for these engines in CARB's regulation is 2000 instead of the year listed in the table, which is the federal EPA phase-in year.

Tier 4 – all standards for Tier 4 are federal standards. CARB is in the process of adopting Tier 4 standards.

[1]carbon monoxide [2]hydrocarbons [3]non-methane hydrocarbons [4]oxides of nitrogen [5]particulate matter

Final Regulation Order

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

Amend sections 93116.1, 93116.2, and 93116.3 Title 17, California Code of Regulations.

(Note: The amendments identified below are shown in underline is used to indicate additions and ~~strikeout~~ is used to indicate deletions from the regulation text.)

§ 93116.1 Applicability.

(a) Except as provided below, all portable engines having a maximum rated horsepower 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;

(6) Engines preempted from State regulation under 42 USC §7543(e)(1); and

(7) Portable diesel-fueled engines operated at airports that satisf~~ies~~y the following requirements:

(A) the equipment is subject to the South Coast Ground Service Equipment Memorandum of Understanding (MOU); and

(B) the participating airlines have demonstrated to the satisfaction of the Executive Officer that the diesel PM reductions achieved by satisfying the requirements of the MOU are equivalent to the reductions achieved by 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) For the purposes of these regulations, the following definitions apply:

(1) "*Air Pollution Control Officer or APCO*" ~~Air Pollution Control Officer or APCO~~ means the air pollution control officer of a district, or his/her designee.

~~(b)~~(2) "*Alternative Fuel*" ~~Alternative Fuel~~ means gasoline, natural gas, propane, liquid petroleum gas (LPG), hydrogen, ethanol, or methanol.

~~(c)~~(3) "*Alternative Diesel Fuel*" ~~Alternative Diesel Fuel~~ means any fuel used in a compression ignition (CI) engine that is not, 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)~~(A) the additive is supplied to the engine fuel by an on-board dosing mechanism, or

~~(2)~~(B) the additive is directly mixed into the base fuel inside the fuel tank of the engine, or

~~(3)~~(C) 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)~~(4) "*CARB Diesel Fuel*" ~~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, and that meets the specifications defined in Title 13 CCR, sections 2281, 2282, and 2284.

~~(e)~~(5) "*Certified Nonroad Engine*" ~~Certified Nonroad Engine~~ refers to an engine 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)~~(6) "*Diesel Fuel*" ~~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)~~(7) "*Diesel-Fueled*" ~~Diesel-Fueled~~ means fueled by diesel fuel, or CARB diesel fuel, in whole or part.

~~(h)~~(8) "*Diesel Particulate Matter (PM)*" ~~Diesel Particulate Matter (PM)~~ means the particles found in the exhaust of diesel-fueled engines which may agglomerate and adsorb other species to form structures of complex physical and chemical properties.

~~(i)~~(9) "*District*" ~~District~~ means a District as defined in Health and Safety Code section 39025.

~~(j)~~(10) "*Dual-fuel Diesel Pilot Engine*" ~~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)~~(11) "*Emergency*" ~~Emergency~~ means providing electrical power or mechanical work during any of the following events and subject to the following conditions:

~~(1)~~ (A) the failure or loss of all or part of normal electrical power service or normal natural gas supply to the facility:

~~(1)~~1. 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

~~(2)~~2. 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)~~ (B) the failure of a facility's internal power distribution system:

~~(A)~~1. 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)~~2. 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)~~ (C) the pumping of water or sewage to prevent or mitigate a flood or sewage overflow;

~~(4)~~ (D) the pumping of water for fire suppression or protection;

~~(5)~~ (E) the pumping of water to maintain pressure in the water distribution system for the following reasons:

~~(A)~~1. pipe break; or

~~(B)~~2. high demand on water supply system due to high use of water for fire suppression;

~~(6)~~ (F) the breakdown of electric-powered pumping equipment at sewage treatment facilities or water delivery facilities;

~~(7)~~ (G) the training of personnel in the use of portable equipment for emergency purposes.

~~(l)~~(12) "*Emergency Event*" ~~Emergency Event~~ refers to a situation arising from a sudden and reasonably unforeseen natural disaster such as an 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)~~(13) ("*Engine*" ~~Engine~~ means any piston-driven internal combustion engine.

~~(n)~~(14) "*Engines Used Exclusively in Emergency Applications*" ~~Engines Used Exclusively in Emergency Applications~~ refer to engines that are used only during an emergency or emergency event, and includes appropriate maintenance and testing.

~~(o)~~(15) "*Executive Officer*" ~~Executive Officer~~ means the Executive Officer of the California Air Resources Board (CARB) or his/her designee.

~~(p)~~(16) "*Fleet*" ~~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)~~(17) "*Fuel Additive*" ~~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; or assists diesel emission control strategies in decreasing emissions, or improving fuel economy or increasing performance of the engine. Fuel additives used in conjunction with diesel fuel may be treated as an alternative diesel fuel.

~~(r)~~(18) "*In-Use Engines*" ~~In-Use Engines~~ refers to portable diesel-fueled engines operating under valid permits or registrations as of December 31, 2005.

~~(s)~~(19) "*Level-3 Verified Technology*" ~~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)~~(20) "*Location*" ~~Location~~ means any single site at a building, structure, facility, or installation.

~~(u)~~(21) "*Low-Use Engines*" ~~Low-Use Engines~~ refers to portable diesel-fueled engines that operate 80 hours or less in a calendar year.

~~(v)~~(22) "*Maximum Rated Horsepower (brake horsepower (bhp))*" ~~Maximum Rated Horsepower (brake horsepower (bhp))~~ is the maximum brake horsepower rating specified by the portable engine manufacturer and listed on the nameplate of the portable engine.

~~(w)~~(23) "*Nonroad Engine*" ~~Nonroad Engine~~ means:

~~(1)~~(A) Except as discussed in paragraph (2) of this definition, a nonroad engine is any engine:

~~(A)~~1. 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)~~2. 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)~~3. 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)~~(B) An engine is not a nonroad engine if:

~~(A)~~1. 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)~~2. the engine is regulated by a federal New Source Performance Standard promulgated under section 111 of the federal Clean Air Act; or

~~(C)~~3. 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)~~(24) "*Off-Road Engine*" ~~Off-Road Engine~~ means the same as nonroad engine.

~~(y)~~(25) "*Outer Continental Shelf (OCS)*" ~~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)~~(26) "*Participating Airlines*" ~~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, and US Airways. Participating Airlines does not mean the Air Transportation Association of America, Inc.

~~(aa)~~(27) "*Permit*" ~~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)~~(28) "*Portable*" ~~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)~~(A) 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), 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)~~(B) 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)~~(C) the engine is moved from one location to another in an attempt to circumvent the portable residence time requirements.

~~(cc)~~(29) "*Project*" ~~Project~~ means the use of one or more registered or permitted portable engines or equipment units operated under the same or common ownership or control to perform a single activity.

~~(dd)~~(30) "*Registration*" ~~Registration~~ refers to either:

~~(1)~~(A) a certificate issued by the Executive Officer acknowledging expected compliance with the applicable requirements of the Statewide Portable Equipment Registration Program; or

~~(2)~~(B) 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)~~(31) "*Responsible Official*" ~~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 compl~~ies~~y 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.~~

~~(ff)~~(32) "*Selective Catalytic Reduction (SCR) System*" ~~Selective Catalytic Reduction (SCR) System~~ refers to an air pollution emissions control system that reduces 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)~~(33) "*Stationary Source*" ~~Stationary Source~~ means any building, structure, facility or installation that emits any air contaminant directly or as a fugitive emission. Building, structure, facility, or installation includes all pollutant emitting activities which:

~~(1)~~(A) are under the same ownership or operation, or which are owned or operated by entities which are under common control; and

~~(2)~~(B) 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)~~(C) 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.]

(34) "*Stock Engine*" means a certified diesel-fueled engine that has never been placed in service and is part of a supply of engines offered for sale, rent, or lease by a person or company who offers for sale, rent, or lease engines and related equipment for profit.

(~~hh~~35) "*Storage*" ~~Storage~~ means a warehouse, enclosed yard, or other area established for the primary purpose of maintaining portable engines when not in operation.

(~~ii~~36) "*Tactical Support Equipment (TSE)*" ~~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~~37) "*Tier 4 Emission Standards*" ~~Tier 4 Emission Standa~~**rds** refers to the final emission standards adopted by the U.S. EPA for newly manufactured nonroad engines.

(~~kk~~38) "*Transportable*" ~~Transportable~~ means the same as portable.

(~~ll~~39) "*Verified Emission Control Strategy*" ~~Verified Emission Control Strategy~~ refers to an emission control strategy, designed primarily for the reduction of diesel PM emissions 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~~40) "*U.S. EPA*" ~~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 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 (b)(1)(A), owners of portable diesel-fueled engines used exclusively in emergency applications or portable diesel-fueled engines that qualify as low-use engines may commit to replacing these engines with Tier 4 engines, subject to the requirements 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.

(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 ~~provided~~ specified in 93116.3(b)(5), 93116.3(b)(6), and 93116.3(b)(7), and ~~93116.3(b)(8) and~~ 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

[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.

engine shall meet the most stringent of the federal or California emission standard for nonroad engines; or

(B) upon approval by the air pollution control officer, a diesel-fueled portable engine not certified to an emission standard pursuant to 40 CFR Part 89 or Title 13 of the California Code of Regulations used exclusively in emergency applications or qualifying as a low-use engine designation may only be permitted or registered by a district. Any engine used exclusively in emergency applications or qualifying as a low-use engine designation is subject to the requirements of section 93116.3(b)(3).

(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 verified emission control strategies that have been verified together to achieve at least 85% reduction in diesel PM emissions.

(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.

(5) Engines operated in California between March ~~4~~1, 2004 and October 1, 2006 may be permitted or registered by a district or registered in the Statewide Portable Equipment Registration Program until 12/31/09 if they meet an emission standard pursuant to 40 CFR Part 89 or Title 13 of the California Code of Regulations.

(6) Upon approval by the air pollution control officer, a district may permit or register engines operated in California between March 1, 2004 and October 1, 2006 that are not certified to an emission standard pursuant to 40 CFR Part 89 or Title 13 of the California Code of Regulations.

(7) An engine owner, operator, dealer, or distributor may permit or register an ~~stock~~ engine not meeting the most stringent emission standard providing the following are met:

(A) ~~Verifiable information is provided to the satisfaction of the Executive Officer or District at the time of taking possession,~~ the engine met the most stringent emission standard in effect prior to the change for that horsepower range; and

(B) The application for permit or registration of the engine is submitted within six months of the effective date of the change in emission standards.

~~(8) If the Executive Officer or District finds, based on verifiable information, that an owner had ordered or purchased, within six months prior to the date of an emissions standard changes for that horsepower range, but has not taken possession of, an engine meeting the most stringent emissions standard in effect at the time of order or purchase, the owner or operator will have up to six months after the date the new emissions standard for that engine became effective to submit an application to permit or register the engine.~~

(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 district.

(3) The following portable diesel-fueled engines shall be excluded from 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 low-use engines.

(D) portable diesel-fueled engines used in a lattice boom crane.

(4) Portable diesel-fueled engines that qualify as low-use engines 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) is included in a fleet, compliance with applicable fleet emission standards shall always include these diesel-fueled portable engine(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 following tests methods shall be used to demonstrate compliance:

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

ii. diesel PM shall be measured with CARB 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. the duration of the emission test shall be sufficient to document the typical operation of the portable diesel-fueled engine(s); and

c. 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:

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

where:

bhp = maximum rated horsepower.

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 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 may be used in conjunction with engine emission information; or

3. for portable diesel-fueled 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.

(B) Portable diesel-fueled engines certified to Tier 4 nonroad engine standards that are added to a fleet prior to January 1, 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.

§ 93116.3.1 Compliance Flexibility for Diesel PM Standards.

If the Executive Officer ~~or District~~ finds, based on verifiable information from the engine manufacturer, distributor, or dealer, that current model year engines meeting the current emission standards are not available or not available in sufficient numbers or in a sufficient range of makes, models, and horsepower ratings, then the Executive Officer ~~or the District~~ may allow the sale, purchase, or installation of a new stock engine meeting the emission standards from the previous model year to meet the emission standards in section~~s~~ 93116.3(b).

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.