Final Regulation Order

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

(Note: Proposed amendments to the ATCM are identified below. The originally proposed language is shown in underline is used to indicate proposed additions. Strikeout is used to show proposed deletions from the text.)

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 (≥ 50 bhp).


§ 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 ATCM.

(b) The following portable engines are not subject to this regulation ATCM:

(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);

(7) Portable diesel-fueled engines operated at airports that satisfy the following requirements: used exclusively in agricultural operations, unless owned by a rental business as defined in 13 Cal. Code Regs., section 2452(kk).
(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.

(8) Engines used exclusively on two-engine cranes as defined in title 13, Cal. Code Regs., section 2449(c) shall which must meet all applicable requirements in title 13, Cal. Code Regs., commencing with section 2449;

(9) Engines used exclusively on street sweepers that are not subject to title 13, Cal. Code Regs., section 2022, shall which must meet all applicable requirements in title 13, Cal. Code Regs., commencing with section 2025;

(10) Engines used exclusively on two-engine water well drilling rigs as defined in title 13, Cal. Code Regs., section 2449(c), shall which must meet all applicable requirements in title 13, Cal. Code Regs., commencing with section 2449; and

(11) Engines used exclusively on dedicated snow removal vehicles as defined in title 13, Cal. Code Regs., section 2449(c);

(12) Engines used exclusively on two-engine vehicles as defined in title 13 Cal. Code Regs., section 2449(c) and the vehicle meets the criteria listed in title 13 Cal. Code Regs., section 2449(b)(2)(C);

(13) Engines used exclusively on harbor craft as defined in title 17 Cal. Code Regs., section 93118.5(d) which must meet all applicable requirements in title 17 Cal. Code Regs., commencing with section 93118.5; and

(14) Engines used exclusively to alleviate the threat to public health and safety during an emergency event.


§ 93116.2 Definitions.

(a) For the purposes of these regulations this ATCM, the following definitions apply. In addition, all definitions listed in title 13 Cal. Code Regs. section 2452 are incorporated herein.

(1) “Air Pollution Control Officer or APCO” means the air pollution control officer of a district, or his/her designee.
(2) “Agricultural Operations” means the growing and harvesting of crops or the raising of fowl or animals for the primary purpose of making a profit, providing a livelihood, or conducting agricultural research or instruction by an educational institution. Agricultural operations do not include forest operations or activities involving the processing or distribution of crops or fowl.

(23) “Alternative Fuel” means gasoline, natural gas, propane, liquid petroleum gas (LPG), hydrogen, ethanol, or methanol.

(34) “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:

(A) the additive is supplied to the engine fuel by an on-board dosing mechanism, or
(B) the additive is directly mixed into the base fuel inside the fuel tank of the engine, or
(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.

(45) “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 Cal. Code Regs., sections 2281, 2282, and 2284.


(6) “Crane” means the same as “Two-Engine Crane” defined in title 13, Cal. Code Regs., section 2449(c).

(7) “Common ownership or control” means being owned or managed day to day by the same person, corporation, partnership, or association. Equipment managed by the same directors, officers, or managers, or by corporations controlled by the same majority stockholders are considered to be under common ownership or control even if their title is held by different business entities.
“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.

“Diesel-Fueled” means fueled by diesel fuel, or CARB diesel fuel, in whole or part.

“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.

“District” means a District as defined in Health and Safety Code section 39025.

“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.

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

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

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. 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;

(B) the failure of a facility’s internal power distribution system:

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. 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;

(C) the pumping of water or sewage to prevent or mitigate a flood or sewage overflow;

(D) the pumping of water for fire suppression or protection;
(E) the pumping of water to maintain pressure in the water distribution system for the following reasons:

1. pipe break; or
2. high demand on water supply system due to high use of water for fire suppression;

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

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

(13) “Emergency Event” refers to a situation arising from a sudden and reasonably unforeseen natural disaster such as an earthquake, flood, fire, or other unforeseen event that requires the use of portable engines to help alleviate the threat to public health and safety.

(14) “Engine” means any piston-driven internal combustion engine.

(15) “Emergency-use Engines Used Exclusively in Emergency Applications” refer to engines that have been designated by the responsible official on the permit or registration to be are used only during an emergency or emergency event, and includes appropriate maintenance and testing.

(16) “Executive Officer” means the Executive Officer of the California Air Resources Board (CARB) or his/her designee.

(17) “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 owned by a person, business, or government agency that are operated within California and meet the applicability listed in 17 Cal. Code Regs., section 93116.1. For engines owned by the U.S. Department of Defense or the U.S. military services, the portable engines at each facility or installation constitute separate fleets.

(A) For the purposes of this ATCM, a large fleet has a total maximum horsepower over 750 bhp for all portable engines under common ownership and control of a fleet on June 30, 2019.

(B) For the purposes of this ATCM, a small fleet has a total maximum horsepower of 750 bhp or less for all portable engines under common ownership and control of a fleet on June 30, 2019.
(18) “Flexibility engine” means an engine certified to an emission standard according to the Transition Program for Equipment Manufacturers listed in 40 CFR part 89.102, 40 CFR part 1039.625, or Title 13 Cal. Code Regs., section 2423(d).

(19) “Forest Operations” means either of the following:

(A) Forest fire prevention activities performed by public agencies, including but not limited to construction and maintenance of roads, fuel breaks, firebreaks, and fire hazard abatement; or

(B) Cutting or removal or both of timber, other solid wood products, including Christmas trees, and biomass from forestlands for commercial purposes, together with all the work incidental thereto, including but not limited to, construction and maintenance of roads, fuel breaks, firebreaks, stream crossings, landings, skid trails, beds for falling trees, fire hazard abatement, and site preparation that involves disturbance of soil or burning of vegetation following forest removal activities. Forest operations include the cutting or removal of trees, tops, limbs and or brush which is processed into lumber and other wood products, and or for landscaping materials, or biomass for electrical power generation. Forest operations do not include conversion of forestlands to other land uses such as residential or commercial developments.

(1820) “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.

(19) “In-Use Engines” refers to portable diesel-fueled engines operating under valid permits or registrations as of December 31, 2009.

(201) “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, Cal. Code Regs., commencing with section 2700, and has demonstrated a reduction in diesel particulate matter of 85 percent or greater.

(242) “Location” means any single site at a building, structure, facility, or installation.

(223) “Low-Use Engines” refers to portable diesel-fueled engines that have been designated by the responsible official on the permit or registration to operate 80200 hours or less in a calendar year.
“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.

“Nonroad Engine” means:

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

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

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

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.

(B) An engine is not a nonroad engine if:

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

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

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.
“Off-Road Engine” means the same as nonroad engine.

“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.).

“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.

“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.

“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 ATCM, dredge engines on a boat or barge are considered portable. The engine is not portable if:

(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

(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

(C) the engine is moved from one location to another in an attempt to circumvent the portable residence time requirements.
(30) “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.

(31) “Registration” refers to either:

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

(32) “Replacement engine” means an engine built according to the requirements of 40 CFR part 1068.240 or Title 13 Cal. Code Regs., section 2423(j), and the engine is equipped with a label containing information that indicates the Tier level of the engine.

(323) “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 in the fleet comply with applicable requirements of this regulation ATCM. A company or public agency may have more than one Responsible Official.

(33) “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.

(34) “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:

(A) are under the same ownership or operation, or which are owned or operated by entities which are under common control; and
(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
(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.]
(35) “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.

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

(37) “Street Sweeper” means the same as “Dual-engine Street Sweeper” defined in title 13, Cal. Code Regs., section 2022(b)(2).

(38) “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.

(39) “Tier 1 engine” means an engine subject to the Tier 1 new engine emission standards in title 13, Cal. Code Regs., section 2423(b)(1)(A) and/or Title 40, CFR, Part 89.112(a). This also includes engines certified under the averaging, banking, and trading program with respect to the Tier 1 Family Emission Limits (FEL) listed in title 13, Cal. Code Regs., section 2423(b)(2)(A) and/or Title 40, CFR, Part 89.112(d).

(40) “Tier 2 engine” means an engine subject to the Tier 2 new engine emission standards in title 13, Cal. Code Regs., section 2423(b)(1)(A) and/or Title 40, CFR, Part 89.112(a). This also includes engines certified under the averaging, banking, and trading program with respect to the Tier 1 Family Emission Limits (FEL) listed in title 13, Cal. Code Regs., section 2423(b)(2)(A) and/or Title 40, CFR, Part 89.112(d).

(41) “Tier 3 engine” means an engine subject to the Tier 3 new engine emission standards in title 13, Cal. Code Regs., section 2423(b)(1)(A) and/or Title 40, CFR, Part 89.112(a). This also includes engines certified under the averaging, banking, and trading program with respect to the Tier 1 Family Emission Limits (FEL) listed in title 13, Cal. Code Regs., section 2423(b)(2)(A) and/or Title 40, CFR, Part 89.112(d).

(42) “Tier 4 Interim engine” means an engine subject to the interim Tier 4 emission standards (also known as transitional) in title 13, Cal. Code Regs., section 2423(b)(1)(B) and/or Title 40, CFR, Part 1039.101. This also includes engines certified under the averaging, banking, and trading program with respect to the Tier 4 FEL listed in title 13, Cal. Code Regs., section 2423(b)(2)(B) and/or Title 40, CFR, Parts 1039.102 and 1039.104(g).
"Tier 4 Emission Standards" refers to the final emission standards adopted by the U.S. EPA for newly manufactured nonroad engines, means an engine subject to the final after-treatment based Tier 4 emission standards in title 13, Cal. Code Regs., section 2423(b)(1)(B) and/or Title 40, CFR, Part 1039.101. This also includes engines certified under the averaging, banking, and trading program with respect to the Tier 4 FEL listed in title 13, Cal. Code Regs., section 2423(b)(2)(B) and/or Title 40, CFR, Part 1039.101.

"Transportable" means the same as portable.

"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, Cal. Code Regs., commencing with section 2700, and incorporated by reference.

"U.S. EPA" refers to the United States Environmental Protection Agency.


§ 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 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 operating under valid permits or registrations as of December 31, 2009:

(A) Except as provided in sections 93116.3(b)(1)(B) and 93116.3(b)(1)(C), starting January 1, 2010, all portable diesel-fueled engines shall be certified to meet a federal or California standard for newly manufactured engines pursuant to 40 CFR Part 89, Part 86, or the equivalent categories in Title 13 of the California Code of Regulations.

(B) In lieu of complying with section 93116.3(b)(1)(A), owners of portable diesel-fueled engines that are not certified and are used exclusively in emergency applications or portable diesel-fueled engines that qualify as low-use engines shall commit by December 31, 2011 to removing these engines from service or replacing these engines no later than January 1, 2017. The replacement engines shall be certified to the most stringent of either the federal or California emission standards for the appropriate class and category of nonroad engine in effect at the time of replacement.

(C) Notwithstanding the requirements of section 93116.3(b)(1)(A), any company, public agency, or military base may select specific engines to continue to operate until December 31, 2010. The selections shall be submitted to the appropriate regulatory agency no later than 30 days after the effective date of these amendments, and are subject to the requirements below:

1. The engine(s) selected shall have current, valid permits or registrations as of December 31, 2009; and
2. one engine with no restriction for maximum rated horsepower; or
3. no more than five engines not to exceed 500 cumulative brake horsepower for the selected engines.
4. If an owner has selected one spark-ignition engine per title 13 Cal. Code Regs. subsection 2456(f)(11)(A), then section 93116.3(b)(1)(C)(2) shall not be used.
5. If an owner has selected less than five spark-ignition engines per title 13 Cal. Code Regs. subsection 2456(f)(11)(B) then the combined total of selected spark-ignition engines and compression-ignition engines shall not exceed five engines with a cumulative size of 500 brake horsepower.

(2) Portable diesel-fueled engines that have not been permitted or registered prior to January 1, 2010—[the effective date of this regulation], shall not be permitted or registered unless they are certified to the most stringent standard contained in the federal or California emission standards for nonroad engines, with the following exceptions:
(A) Engines meeting the definition of portable that have never been permitted or registered may be permitted or registered by a district or registered in the Statewide Portable Equipment Registration Program if they are certified to the on-road emission standards pursuant to 40 CFR Part 86, or the equivalent category in title 13, Cal. Code Regs.;

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

1. The engine met the most stringent emission standard in effect prior to the change for that horsepower range; and
2. The application for permit or registration of the engine is submitted within six months of the effective date of the change in emission standards.

(CB) Flexibility Engines rated between 50 and 750 bhp built under flexibility provisions for equipment and vehicle manufacturers and post-manufacture marinizers pursuant to 40 CFR Part 89 or title 13, Cal. Code Regs that are manufactured to meet Tier 3 or Tier 4 interim emission standards;

(C) Flexibility engines rated over 750 bhp that are manufactured to meet Tier 2 or Tier 4 interim emission standards;

(D) Certified engines that lost permit exemption due to a change in district rules; or

(E) Until January 1, 2017, a district may issue a permit or registration for an engine not meeting the most stringent of the federal or California emission standard for nonroad engines if:

1. The engine is certified to meet an emission standard set pursuant to 40 CFR Part 89, Part 1039 or set forth in the equivalent categories of title 13, Cal. Code Regs.; and
2. For Tier 1, Tier 2, and Tier 23 engines only, the engine shall have operated in California at any time during the period from January 1, 2008 to December 31, 2010 prior to January 1, 2017. The responsible official shall provide documentation to prove the engine’s operation to the satisfaction of the Air Pollution Control Officer. Engines certified to a more stringent emission standard than Tier 2 are not subject to subsection (E)2.

(3) Certified 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 percent reduction in diesel PM emissions.

(3) A fleet shall not newly designate an engine to be low-use or emergency-use after the dates listed in the schedule below. The schedule applies to flexibility engines according to the tier level to which the engine was built.

<table>
<thead>
<tr>
<th>Engine Certification</th>
<th>Engines rated 50 to 750 bhp</th>
<th>Engines rated &gt;750 bhp</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Large Fleet</td>
<td>Small Fleet</td>
</tr>
<tr>
<td>Tier 1</td>
<td>7/1/2019</td>
<td>7/1/2019</td>
</tr>
<tr>
<td>Tier 2</td>
<td>7/1/2022</td>
<td>7/1/2024</td>
</tr>
</tbody>
</table>

(c) Fleet Requirements

(1) Except as provided in section 93116.3(c)(2), engines may not operate in California after the dates listed in the following schedule:

<table>
<thead>
<tr>
<th>Engine Certification</th>
<th>Engines rated 50 to 750 bhp</th>
<th>Engines rated &gt;750 bhp</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Large Fleet</td>
<td>Small Fleet</td>
</tr>
<tr>
<td>Tier 1</td>
<td>1/1/2020</td>
<td>1/1/2020</td>
</tr>
<tr>
<td>Tier 2</td>
<td>1/1/2023</td>
<td>1/1/2025</td>
</tr>
<tr>
<td>Tier 3 built prior to 1/1/2009</td>
<td>1/1/2026</td>
<td>1/1/2028</td>
</tr>
<tr>
<td>Tier 3 built on or after 1/1/2009</td>
<td>1/1/2028</td>
<td>1/1/2030</td>
</tr>
<tr>
<td>Tier 1, 2, and 3 flexibility engines</td>
<td>December 31 of the year 18 years after the date of manufacture</td>
<td></td>
</tr>
</tbody>
</table>

(B) Fleets complying with the schedule listed above must include all portable diesel-fueled engines operated in California, including engines registered with the Statewide Portable Equipment Registration Program or permitted by or registered with a district.

(C) For portable engines that are certified to the emission standards in 40 CFR part 86 or the equivalent categories in title 13, Cal. Code Regs., engines built to model year 2006 standards or older must comply with the schedule listed above for Tier 3 engines.
Each fleet is subject to and for large fleets that elect not to comply with section 93116.3(c)(1), then the fleet shall must comply with the following weighted PM emission fleet averages expressed as grams per brake horsepower-hour (g/bhp-hr) by the listed compliance dates:

<table>
<thead>
<tr>
<th>Fleet Standard Compliance Date</th>
<th>Engines &lt;175 hp (g/bhp-hr)</th>
<th>Engines 175 to 750 hp (g/bhp-hr)</th>
<th>Engines &gt;750 hp Fleet PM Standard (g/bhp-hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/2020</td>
<td>0.3</td>
<td>0.15</td>
<td>0.25</td>
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<tr>
<td>1/1/2023</td>
<td>0.18</td>
<td>0.08</td>
<td>0.08</td>
</tr>
<tr>
<td>1/1/2027</td>
<td>0.04</td>
<td>0.02</td>
<td>0.023</td>
</tr>
</tbody>
</table>

(A) Large fleets shall only have the option to comply with the PM emission fleet average requirements of section 93116.3(c)(2) if the following conditions are met:

1. All portable engines in the fleet, including low-use engines and emergency-use engines, must be registered in the Statewide Portable Equipment Registration Program prior to January 1, 2019;
2. All portable engines added to the fleet on or after January 1, 2019 must be registered with the Statewide Portable Equipment Registration Program; and
3. After January 1, 2019, if any large fleet is found to have unpermitted or unregistered engines rated at 50 bhp or greater, then the fleet must comply with the requirements of section 93116.3(c)(1) immediately upon discovery of such engines.

(B) In order to comply with fleet average option in section 93116.3(c)(2), the responsible official for a large fleet must submit a written request to the Executive Officer no later than June 30, 2019. At a minimum, the written request will include a listing of each engine in the fleet including registration number, engine serial number, maximum rated bhp, and engine family name.

(C) Portable alternative-fueled engines may be included in a fleet for the purposes of complying with the PM emission fleet average if the engine satisfies the requirements in section 93116.3(d)(2)(B).

(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 in sections 93116.3(c)(1) and (c)(2):

(A) portable diesel-fueled engines operated exclusively outside of California or operated only within the OCS.
(B) portable diesel-fueled emergency-use engines used exclusively in emergency applications.
(C) portable diesel-fueled engines that qualify as low-use engines.

(4) Portable diesel-fueled engines equipped with a properly functioning level-3 verified technology are excluded from the requirements in section 93116.3(c)(1).

(45) Portable diesel-fueled engines that qualify as low-use engines and that subsequently exceed the allowed hours of operation in a calendar year, or portable diesel-fueled emergency-use engines that are identified to be used exclusively in emergency applications but that subsequently are used in non-emergency applications, become immediately subject to the requirements of section 93116.3(c)(1) or (c)(2) in the year such exceedence or use occurs. The responsible official must submit a request to convert the engine to regular use, subject to the limitations of section 93116.3(c)(6). For low-use engines, the hours of operation used for an emergency event shall not be counted toward the allowed hours of operation.

(6) The responsible official of a fleet may not submit a request to convert a low-use engine or an emergency-use engine to regular use, except for the following:

(A) Tier 1 and Tier 2 engines that become subject to the requirements of section 93116.3(c)(5); and
(B) Tier 3 engines.

(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 test 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) Except for low-use engines, emergency-use engines, and engines equipped with a properly functioning level-3 verified technology, engines shall not be operated in a district designated as serious non-attainment for PM$_{2.5}$, after the dates listed in the schedule listed below. Flexibility engines must comply according to the tier level to which the engine was built.
Beginning on January 1, 2013, the weighted average PM emission rate for a large fleet electing to comply with section 93116.3(c)(2) must not exceed the fleet standard that is in effect, even during the years between and after the fleet standard effective dates. Changes in the fleet, including portable engine additions and deletions, shall not result in noncompliance with the standard.

Any fleet that demonstrates compliance with the applicable weighted PM emission fleet averages listed below on January 1, 2017 shall receive benefits upon approval from the Executive Officer. The responsible official must submit a statement of compliance per section 93116.4(d)(2) to the Executive Officer no later than 60 days after the effective date of this regulation in order to request the benefits listed below:

(A) Upon approval from the Executive Officer, a fleet that demonstrates compliance with any of the applicable fleet averages listed in 93116.3(c)(9)(A) is excluded from the requirements of section 93116.3(c)(7) for the size category of engines for which the fleet average was met.

(B) Upon approval from the Executive Officer, one of the following methods may be used to modify compliance with the fleet requirements as specified below:

1. a fleet may delay the requirements in section 93116.3(c)(1) by two years for the size category of engines for which the fleet average was met; or
2. a fleet may double count Tier 4 interim engines and Tier 4 final engines when demonstrating compliance with the first two weighted PM emission fleet averages in section 93116.3(c)(2).

(10) Upon approval from the Executive Officer, a fleet may delay the requirements in section 93116.3(c)(1) by 2 years for Tier 3 engines, including flexibility engines, if the following conditions are met:

<table>
<thead>
<tr>
<th>Engine Certification</th>
<th>Date Prohibited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>1/1/2020</td>
</tr>
<tr>
<td>Tier 2</td>
<td>1/1/2023</td>
</tr>
<tr>
<td>Tier 3</td>
<td>1/1/2028</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Engines &lt;175 hp (g/bhp-hr)</th>
<th>Engines 175 to 750 hp (g/bhp-hr)</th>
<th>Engines &gt;750 hp (g/bhp-hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.18</td>
<td>0.08</td>
<td>0.08</td>
</tr>
</tbody>
</table>
(A) All Tier 1 engines in the fleet, including flexibility engines, are removed from service in California by January 1, 2019; and

(B) All Tier 2 engines in the fleet rated at 750 bhp or less, including flexibility engines, are removed from service in California by January 1, 2020.

(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:

\[
\begin{align*}
\text{bhp} & = \text{maximum rated horsepower.} \\
\text{emission factor} & = \text{diesel PM emission rate, as determined below:}
\end{align*}
\]

(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. for Tier 1 engines less than 175 bhp for which no particulate matter emission standard exists, an emission rate of 0.87 g/bhp-hr shall be used for engines less than 120 bhp and 0.46 shall be used for engines 120 to 174 bhp; or

3. for replacement engines and flexibility engines built under the flexibility provisions for equipment and vehicle manufacturers and post-manufacture marinizers pursuant to 40 CFR Part 89 or title 13, Cal. Code Regs., that do not have a family name indicated on the engine, the emission standard of the tier level to which the engine was built shall be used; or

4. results from emission measurements from a verified emission control strategy may be used in conjunction with engine emission information; or

5. for portable diesel-fueled engine(s) equipped with SCR system(s), results from valid emission tests.
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(cb)(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, Cal. Code Regs.

(C) 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.

(e) Prohibition of Sale

As of [the effective date of this regulation], no person shall sell or offer for sale to an end user in California a portable diesel-fueled engine under the circumstances listed below. The sale of engines for resale outside of California is not prohibited.

1. any engine that is not a certified engine; or
2. certified engines shall not be sold after the dates listed in the following schedule:
<table>
<thead>
<tr>
<th>Engine Certification</th>
<th>Engines rated 50 to 750 bhp</th>
<th>Engines rated &gt;750 bhp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>1/1/2020</td>
<td>1/1/2022</td>
</tr>
<tr>
<td>Tier 2</td>
<td>1/1/2025</td>
<td>1/1/2027</td>
</tr>
<tr>
<td>Tier 3 built prior to 1/1/2009</td>
<td>1/1/2028</td>
<td>NA</td>
</tr>
<tr>
<td>Tier 3 built on or after 1/1/2009</td>
<td>1/1/2030</td>
<td>NA</td>
</tr>
<tr>
<td>Tier 1, 2, and 3 flexibility engines</td>
<td>December 31 of the year 18 years after the date of manufacture</td>
<td></td>
</tr>
</tbody>
</table>

(f) Disclosure of Applicability

Any person selling a certified engine subject to this regulation in California must provide the following disclosure in writing to the buyer as part of the sales transaction: “When operated in California, any portable diesel engine may be subject to the California Air Resources Board Airborne Toxic Control Measure For Diesel Particulate Matter From Portable Engines Rated At 50 Horsepower And Greater. It therefore could be subject to retrofit or accelerated turnover requirements to reduce emissions of air pollutants. For more information, please visit the California Air Resources Board website at http://www.arb.ca.gov/portable/portable.htm.”


§ 93116.3.1 Compliance Flexibility for Diesel PM Standards.

If the Executive Officer 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 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 93116.3(b).

§ 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 each portable diesel-fueled engine in the fleet satisfies any one of the following requirements:

(1) the portable diesel-fueled engine is certified to Tier 4 interim or Tier 4 final 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 percent reduction in diesel PM emissions.

(b) Portable diesel-fueled 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).

(cb) 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(dc); 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 emergency-use engines used exclusively in emergency applications.

(2) The Responsible Official, for all portable engines subject to section 93116.4(cb)(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 on a calendar year basis a record of the types of operations for emergency-use engines. The records must include the specific nature of the emergency or emergency event and the dates the emergency or emergency event occurred; and

(CD) 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.

(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/district 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 CARB or district personnel, the Responsible Official shall have three business days to provide a copy of the most recent test results.

(dC) 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.

(ed) The Responsible Official of the fleet shall provide the following reports to the Executive Officer:

(1) A status report, due to the Executive Officer by March 1, 2011, that includes the following items: For low-use engines in the fleet, the responsible official must submit a report by March 1 of each calendar year indicating the following:

(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 the registration number of each low-use engine; and

(B) inventory of portable engines in the fleet identifying whether the engine is state-registered or permitted/registered with the district. Alternative-fueled engines should be identified by fuel type. The inventory shall identify the make, model, serial number, year of manufacture, primary fuel type, emission factor (g/bhp-hr), and district permit or State/district registration number for each engine to be used in the fleet average determination; and the hour meter readings taken at the beginning and end of the previous calendar year for each low-use engine.

(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/district 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.
applications, including: make, model, serial number, year of manufacture for each engine, emission factor (g/bhp-hr), and district permit or State/district 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/district 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/district registration number; and

(G) for portable diesel-fueled engine(s) equipped with SCR system(s), documentation demonstrating that the SCR system is operating properly.

(2) For large fleets subject to the requirements of section 93116.3(c)(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 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, registration number, bhp rating, engine family name, 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) Upon application to add an engine to the fleet for any Tier 1 engine, Tier 2 engine, Tier 3 engine, or flexibility engine.

(B) Upon a request to remove a Tier 4 interim engine or a Tier 4 final engine from a fleet.

(AC) March 1, 2013, for the fleet standards that become effective January 1, 2013; and

(BD) March 1, 2017, for the fleet standards that become effective January 1, 2017; and

(CE) 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 required by section 93116.4(d)(2), 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 engine. The list shall include the registration number 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/district registration number.

(4) The Responsible Official shall identify to the Executive Officer, as part of each compliance report required by section 93116.4(d)(2), 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/district registration number for each engine.

(5) If compliance with the fleet average includes the use of electrification, the Responsible Official shall provide documentation supporting the credit claimed for electrification.

(6) As part of each compliance report required by section 93116.4(d)(2), 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 emergency-use engines used exclusively in emergency applications, 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 80200 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 may require the submittal of additional information demonstrating compliance with the applicable fleet standard. Upon receiving the request, the Responsible Official shall provide the requested information within 30 days.
(fe) For fleets that are exempted from the requirements of section 93116.4 pursuant to section 93116.4 (a), the Responsible Official shall must certify that all portable diesel-fueled engines in the fleet satisfy the requirements of section 93116.4(a). The Responsible Official shall must 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 must identify the make, model, serial number, and district permit or State/district registration number for each engine.


§ 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 CARB will make available to the districts the information the Responsible Official has provided to CARB to demonstrate compliance with the fleet standard.