

## UPDATED INFORMATIVE DIGEST

### AMENDMENTS TO THE REGULATIONS APPLICABLE TO PORTABLE DIESEL ENGINES AND DIESEL ENGINES USED IN OFF-ROAD AND ON-ROAD VEHICLES

#### Sections Affected

Amendments to title 13, California Code of Regulations (CCR), article 5, sections 2451, 2452, 2453, 2455, 2456, 2458, 2459, 2460, 2461 and 2462 which is the Statewide Portable Equipment Registration Program Regulation (PERP Regulation).

Amendments to title 17, CCR, sections 93116, 93116.1, 93116.2 and 93116.3 which is the Airborne Toxic Control Measure for Diesel-Fueled Portable Engines (Portable Engine ATCM). Amendments to title 13, CCR, section 2449 which is the Regulation for In-Use Off-Road Diesel-Fueled Vehicles (Off-Road Vehicle Regulation). Amendments to title 13, CCR, section 2025 which is the regulation for In-Use On-Road Diesel-Fueled Vehicles (On-Road Vehicle Regulation).

#### Background:

There are four regulations affected by this rulemaking as discussed below.

- The Statewide PERP Regulation: The Air Resources Board (ARB or Board) was mandated by California Health and Safety Code (HSC) sections 41750 through 41755 to adopt a regulation to establish a uniform statewide program for the voluntary registration and regulation of portable engines and equipment units in California. Once registered in this voluntary program, portable engines and equipment units may operate throughout the State without having to obtain permits from the local air pollution control and air quality management districts (districts or local air districts). Thus, the program provides industry with the flexibility to operate portable engines and equipment units under a uniform statewide registration program. The Board originally approved the Statewide PERP Regulation on March 27, 1997, and subsequently amended it on December 10, 1998, February 26, 2004, June 22, 2006, March 22, 2007, and December 11, 2008. The Statewide PERP Regulation has a requirement for registered, noncertified, spark-ignition engines to be put out of service by January 1, 2010 unless they can meet certain emission levels. The owners of these spark-ignition engines have the option of seeking permits with the districts in lieu of complying with the January 1, 2010 deadline in PERP.
- The Portable Engine ATCM: The Board approved the Portable Engine ATCM on February 26, 2004 to reduce the emissions of diesel particulate matter (PM) from diesel-fueled portable engines. The Board subsequently amended the regulation on March 22, 2007 and December 11, 2008. The Portable Engine ATCM is one element in the implementation of ARB's "Risk Reduction Plan to Reduce PM

Emissions from Diesel-Fueled Engines and Vehicles” (Diesel Risk Reduction Plan). It establishes requirements for diesel-fueled engines that are registered with ARB or permitted by, or registered with, the districts. The Portable Engine ATCM contains a requirement that all diesel engines operating with a permit or registration in California must be certified to an off-road emission standard contained in 40 CFR Part 89 or stop operating by January 1, 2010, except for engines designated as emergency use or low use.

Currently, there are over 4,300 companies and public agencies with about 29,000 engines registered in PERP. Of these, about 75 percent hold registrations for certified engines only, so they are already in full compliance with the January 1, 2010 requirement from either the PERP Regulation or the Portable Engine ATCM.

- Off-Road Vehicle Regulation: The Board approved the Off-Road Vehicle Regulation on July 26, 2007 to reduce emissions of diesel particulate matter (PM) and nitrogen oxides (NOx) from diesel-fueled engines that drive off-road vehicles. The Board subsequently amended the regulation on December 11, 2008, January 22, 2009, and July 23, 2009. The Off-Road Vehicle Regulation is part of ARB’s Diesel Risk Reduction Plan. It establishes requirements for the reporting of diesel vehicles to ARB, as well as the accelerated turnover of engines in these vehicles to cleaner engines and the installation of verified diesel emission control systems. The December 11, 2008 amendments also made both engines on all two-engine cranes subject to the requirements of the Off-Road Vehicle Regulation.
- On-Road Vehicle Regulation: The Board approved the On-Road Vehicle Regulation on December 11, 2008 to reduce emissions of PM from diesel-fueled engines that drive on-road trucks and buses. The On-Road Vehicle Regulation is another part of ARB’s Diesel Risk Reduction Plan. It establishes requirements for the registration of on-road vehicle engines with the ARB and reduction of both NOx and PM from the engines on these vehicles.

Numerous owners of portable engines and some local air districts expressed concerns about their ability to comply with the requirement to replace all uncertified portable engines by January 1, 2010. Many of these owners have indicated that, in large part due to the slower economy, they lack the ongoing revenues to replace older engines with new, less polluting models. In response, ARB staff proposed to allow smaller fleet owners the ability to phase-in compliance by deferring a limited number of uncertified engines until January 1, 2011.

In addition, members of the California Groundwater Association (CGA) expressed concern that the replacement of older deck engines on existing two-engine water well drilling rigs is either technologically infeasible or severely cost prohibitive, which would force these rigs out of service without replacement. Because engine replacement on these drilling rigs is often not possible, the only other option would be to purchase a new drilling rig, which can cost several hundred thousand dollars. This could significantly impact the water well drilling industry. The technical issues are similar to the issues with two-engine cranes, which were addressed in previous amendments.

To address the issues identified above, ARB staff, in consultation with affected industry and the local air districts, developed proposed amendments to the Statewide PERP Regulation, the Portable Engine ATCM, the Off-Road Vehicle Regulation and the On-Road Vehicle Regulation.

On January 28, 2010, the Board adopted resolution 10-2 which included amendments to the four regulations. As part of this action, the Board directed staff to address certain issues and make appropriate changes consistent with the changes proposed in the original 45-day notice package. Staff did address these issues and on March 15, 2010, sent out a notice proposing additional amendments to the PERP Regulation and Portable Engine ATCM consistent with the Board's direction for public comment for a period of 15 days. These additional amendments provide the same extension for uncertified engines to all owners of portable engines, regardless of fleet size.

The Executive Officer determined it was necessary to bifurcate approval of the regulations so that the final regulations with the most critical elements will become legally effective as expeditiously as possible. The first submittal for approval contains critical elements including the operating extension for non-certified engines, the changes to the regulations regarding water well drilling rigs, allowing for the continued operation of certified on-highway engines in portable applications, allowing certified marine engines used on vessels to register in PERP, and other changes necessary to result in stand-alone regulations when approved.

The second submittal will include amendments listed in the first 45-day public notice which consist mainly of changes intended to improve clarity of the PERP Regulation and Portable Engine ATCM, and also three additional amendments that will be made available for public comment by a second 15-day notice, consistent with the Board direction mentioned previously. These three additional changes include allowing the local air districts to issue permits for certified diesel engines that do not meet the current tier level, revising the recordkeeping and reporting requirements of engines owned by rental businesses to only include essential information, and changing the applicability of the regulations to portable engines on snow removal equipment. ARB plans to submit the second submittal with additional amendments, as part of the current rulemaking, on or before December 9, 2010.

## **Description of the Regulatory Action**

### Overview

The amendments provide temporary economic relief by allowing businesses and government agencies to operate certain engines for an additional year beyond the existing deadline. The changes to the applicability and eligibility sections of the regulations will allow for increased participation in a regulatory structure which will reduce emissions overall. The amendments to the recordkeeping and reporting requirements will reduce the administrative burden on operators of portable equipment while also improving enforceability of the regulations. These amendments also include other changes that are designed to improve clarity and facilitate implementation of the Statewide PERP Regulation.

### Non-Certified Engine Extension

The amendments allow owners of portable engines to designate certain engines to operate for one additional year beyond the current January 1, 2010 cessation of operations date. Under this proposal, owners of portable engines would be able to choose either one engine of any size or up to five engines that collectively do not exceed 500 bhp to operate until December 31, 2010. These engines must have been previously registered in PERP or permitted by a district. Qualifying fleet owners will have to submit a written request to designate which engines they want to continue operating.

### On-Highway and Marine Engines

The amendments allow engines used in portable applications that are certified to the on-highway emission standards contained in 40 CFR Part 86 and used in portable applications to operate beyond January 1, 2010. These on-highway engines will become part of the portable fleet and will be subject to the fleet emission standards contained in the Portable Engine ATCM. The amendments also allow on-highway engines and engines certified to marine emission standards in 40 CFR Part 94 or 40 CFR Part 1042 to be eligible for PERP.

### Recordkeeping and Reporting

The amendments reduce the amount of recordkeeping for certified engines registered in PERP which are not subject to any emission limitations. Staff believes that the Statewide PERP Regulation may be effectively implemented with reduced recordkeeping and reporting requirements. The amendments also remove the annual reporting requirement for these certified engines. Engines and equipment units with emission limitations will continue to have daily recordkeeping and annual reporting requirements of the applicable operational data. The amendments require that the specific location and date is recorded on a regular basis for certified engines and each time it is moved for non-certified engines and equipment units which will improve enforceability of the requirements of the PERP Regulation and Portable Engine ATCM.

### Water Well Drilling Rigs

A definition was added for two-engine water well drilling rigs. Both of the engines on these rigs will be subject to the Off-Road Vehicle Regulation, and exempted from the On-Road Vehicle Regulation and Portable Engine ATCM. Because the auxiliary deck engine still meets the definition of portable, it may be subject to district permitting requirements and therefore has the option of being registered in PERP. If registered in PERP, the engines are then subject only to the inspection requirements and fees as prescribed by the Statewide PERP Regulation. The reporting date for water well drilling rigs in the Off-Road Vehicle Regulation will also be extended to allow time for the owners of drilling rigs that were previously not subject to this regulation to enter their rigs into ARB's reporting system.

## Vendor Sales Report

The amendments will remove the vendor sales report from the Statewide PERP Regulation.

## Miscellaneous changes to the PERP Regulation

The amendments include the following changes to the PERP Regulation:

- Clarify that a change in home district designation shall be based on the most recent annual report prior to the year the arranged inspection is due, instead of an average of all three annual reports since the last inspection. The most recent annual report will provide a better indication of where the registered engine or equipment unit has been operating most of the time prior to the inspection.
- Modify the definition of “Resident Engine” to remove the older engines that were operated in California between March 1 2004 and October 1, 2006. These engines were only intended to be eligible for PERP until the end of 2009, so this modification serves to remove obsolete language. The definition will also be modified to clarify that only certified engines that have a current district permit or lost their permit exemption due to a change in district rules will be considered resident, and therefore eligible for PERP.
- Modify the definition of “Providers of Essential Public Service (PEPS)” to clarify that the final determination whether a company or government agency is a PEPS provider shall be made by the Executive Officer. This modification will allow the Executive Officer to make a final determination when necessary.
- Modify, add, and delete terms in the definitions section, delete outdated provisions, and make minor clarifications where needed. These changes are considered to be non-substantive and are intended to provide additional clarity and expediency to the Statewide PERP Regulation, and ensure consistency between regulatory requirements and registration practices.

## Miscellaneous changes to the Portable Engine ATCM

The amendments include the following changes to the Portable Engine ATCM:

- Modify the brake horsepower (bhp) range for the applicable fleet standards in the table in section 93116.3.1 to correctly match the certification categories for certified off-road engines. The fleet standard categories should be as follows: less than 175 bhp, 175 to 750 bhp, and greater than 750 bhp.
- Modify the definition of “in-use” from January 1, 2006 to January 1, 2010. This amendment will make the definition consistent with the eligibility requirements.

- Add an emission factor for Tier 1 engines less 175 bhp to be used to calculate compliance with the fleet emission standard. The current version states that an emission factor must be taken from the certification Executive Order. There is no PM emission factor on the Executive Orders for this engine category. Therefore, this amendment will provide for an emission factor to be used for these engines.
- Specify the emission factor to be used for certified engines built under “flexibility” provisions that do not have a family name indicated on the engine label. In such cases, the PM emission standard for the tier level to which the engine was built shall be used.
- Specify that if the engines will be unable to continue operation until Tier 4 standards become effective due to mechanical breakdown or the function that the engine powers will be discontinued, then the owner shall notify the regulatory agency. These engines will either have to be retired without replacement, or replaced with an engine that meets the most stringent standard at that time.
- Allow for the eligibility of certified engines that lost their permit exemption due a change in district rules. It has been ARB policy to allow these engines to register in PERP, and the eligibility was added to the PERP Regulation in previous amendments, although it was never addressed in the Portable Engine ATCM. This modification will establish this ARB policy in both the PERP Regulation and the Portable Engine ATCM.
- Remove the eligibility of non-certified engines for initial permits or registration by a district. When this provision was added in previous amendments, it was intended for this eligibility to only last until December 31, 2009.
- Modify, add, and delete terms in the definitions section, delete outdated provisions, and make minor clarifications where needed. These changes are considered to be non-substantive and are intended to provide additional clarity and expediency to the Portable Engine ATCM, and ensure consistency between regulatory requirements and permit and/or registration practices.