

FREQUENTLY ASKED QUESTIONS

AIRBORNE TOXIC CONTROL MEASURE FOR STATIONARY COMPRESSION IGNITION ENGINES

REQUIREMENTS FOR STATIONARY ENGINES USED IN NON-AGRICULTURAL APPLICATIONS



**Stationary Source Division
Emissions Assessment Branch**

December 2008

For the latest Frequently Asked Questions (FAQs) version for Agricultural Engine Requirements please go to <http://www.arb.ca.gov/diesel/ag/documents/faq020708.pdf>.

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General Questions

1. Q: Why develop ATCMs for diesel-fueled engines?

A: In 1998, the Board identified diesel particulate matter (PM) as a toxic air contaminant (TAC). To reduce public exposure to diesel PM, in 2000, the Board approved the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (Risk Reduction Plan). Integral to this plan is the implementation of control measures to reduce diesel PM such as the ATCM for stationary diesel-fueled engines.

2. Q: What airborne toxic control measures (ATCMs) are being or have been promulgated for diesel engines and diesel fuel?

A: As of July 2008, the following ATCMs have been adopted to reduce emissions of diesel PM:

Transit Buses	Auxiliary Diesel Engines and Diesel-Electric Engines Operated on Ocean-Going Vessels Within California Waters and 24 Nautical Miles of the California Baseline
Stationary Compression Ignition Engines	Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards
Trash Trucks	Idling School Buses
Transportation Refrigeration Units	Idling Limits on On-Road Trucks
Portable Engines	On-Road Heavy-Duty Diesel Vehicles Operated by Public Agencies and Utilities
California Low-Sulfur Diesel Fuel Regulation	Portable and Stationary Agricultural Engines
In-Use Off-Road Diesel Vehicles	Auxiliary Engines Operated on Ocean-Going Vessels at Berth In a California Port
Regulation for Commercial Harbor Craft	Port Drayage Trucks

For more information on a specific adopted or planned measure, please visit the Diesel Risk Reduction Program webpage at <http://www.arb.ca.gov/diesel/dieselrrp.htm>, and the Diesel Fuel Program webpage at <http://www.arb.ca.gov/fuels/diesel/diesel.htm>.

3. Q: When was the ATCM for stationary engines promulgated and what does it regulate?

A: The ATCM for stationary diesel engines was adopted by the Air Resources Board (ARB or Board) at the February 26, 2004, Board Hearing. On November 8, 2004, the Final Regulation Order for the ATCM was approved by the Office of Administrative Law (OAL) and filed with the Secretary of State. The rulemaking became effective December 8, 2004. Among other provisions, the ATCM established emission standards and fuel use requirements for new and in-use stationary engines used in prime and emergency back-up applications (non-agricultural) and for new stationary engines used in agricultural applications.

A modification of the 2004 action was necessary to address the required PM emission standard for new agricultural engines. Therefore, an Emergency Regulatory Amendment was heard at the March 17, 2005 Board Hearing. On April 4, 2005, the Office of Administrative Law approved the amendments to the ATCM which removed the requirement that new stationary agriculture pump engines meet the 0.15g/bhp-hr PM standard. Instead, such engines must meet the appropriate Tier 2 emissions standard. The Board approved a temporary emergency action (Resolution 05-29) to replace the 0.15 g/bhp-hr PM standard for these engines with the appropriate ARB and federal new off-road/nonroad engine certification standards. Following this emergency rulemaking proceeding, ARB conducted another rulemaking in accordance with all procedural requirements of the California Administrative Procedure Act to make a modified version of the emergency amendments permanent at the May 26, 2005 Board Hearing. The final rulemaking package was approved by OAL and filed with the Secretary of the State on September 9, 2005. The regulation became effective that same day.

In November 2006, the Board approved amendments to the ATCM to include requirements for stationary in-use agricultural engines. Additional amendments addressed implementation and compliance issues primarily involving non-agricultural emergency standby and prime engines. These issues included streamlining certain fuel reporting requirements, updating electricity tariff schedules, modifying the definitions of California (CARB) diesel fuel and alternative diesel fuel, an alternative compliance demonstration option to the 0.01 g/bhp-hr diesel PM standard, and a “sell-through” provision to allow stationary diesel-fueled engine wholesalers and retailers to sell (and owners or operators to use) stock engines that do not meet new, more stringent emissions standards when they become effective. The amendments also authorized the Executive Officer or local air district to allow the sale, purchase, or installation of a new stock engine from the previous model year to meet new stationary diesel-fueled engine emission standards, if verifiable information is provided documenting that current model year engines meeting the new emission standards are not available in sufficient numbers or in a sufficient range of makes, models, and horsepower ratings. The OAL approved the amendments on September 18, 2007, which became effective October 18, 2007.

4. Q: What are the health effects of exposure to diesel particulate matter?

A: Diesel engines emit a complex mixture of air pollutants, composed of gaseous and solid material. The visible emissions in diesel exhaust are known as particulate matter or PM, which includes carbon particles or “soot.” In 1998, following a 10-year scientific assessment process, ARB identified diesel PM as a toxic air contaminant based on its potential to cause cancer and other health problems, including respiratory illnesses, and increased risk of heart disease. Subsequent to this action, research has shown that diesel PM also contributes to premature deaths. Health risks from diesel PM are highest in areas of concentrated emissions, such as near ports, railyards, freeways, or warehouse distribution centers. Exposure to diesel PM is a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems.

5. Q: Who is affected by the ATCM?

A: Both private businesses and public agencies operating stationary prime and emergency standby diesel engines in California are subject to the ATCM. Emergency standby engines are those that are used only when normal power or natural gas service fails or when needed for fire suppression or flood control. Prime engines are those that are not used for emergency standby purposes. Examples of businesses that are affected include private schools and universities, private water treatment facilities, hospitals, power generation, communications, broadcasting, building owners, agricultural production, banks, hotels, refiners, resorts, recycling centers, quarries, wineries, dairies, food processing, and manufacturing entities. A variety of public agencies are also affected including military installations, prisons and jails, public schools and universities, and public water and wastewater treatment facilities.

6. Q: What are the operating requirements and diesel PM emission standards of the ATCM?

A:

➤ **New Stationary Diesel Engines > 50 HP (Installed and permitted on or after January 1, 2005)**



Emergency Standby	Prime
<p>The more stringent of</p> <ul style="list-style-type: none"> • Diesel PM limit of ≤ 0.15 g/bhp-hr, or • Off-Road Engine Certification Standard for an off-road engine of the same horsepower rating; and • ≤ 50 hours per year for non-emergency operation. <p style="text-align: center;"><u>OR</u></p> <p>The more stringent of</p> <ul style="list-style-type: none"> • Diesel PM limit of ≤ 0.01 g/bhp-hr, or • Off-Road Engine Certification Standard for an off-road engine of the same horsepower rating; and • 51 to 100 hours per year for non-emergency operation (upon District approval) 	<p>The more stringent of:</p> <ul style="list-style-type: none"> • Diesel PM limit of ≤ 0.01 g/bhp-hr; or • Off-Road Engine Certification Standard for an off-road engine of the same horsepower rating

➤ **In-Use Stationary Diesel Engines > 50 HP (Installed or permitted prior to January 1, 2005)**



Emergency Standby	Prime
<ul style="list-style-type: none"> • Emergency use: not limited by ATCM • Non-emergency use: <ul style="list-style-type: none"> - ≤ 20 hours/year: Not limited by the ATCM; - 21 to 30 hours/year: Diesel PM limit of ≤ 0.40 g/bhp-hr; - 31 to 50 hours/year: District approval and Diesel PM limit of ≤ 0.15 g/bhp-hr; - 51 to 100 hours/year: District approval and Diesel PM limit of ≤ 0.01 g/bhp-hr. 	<ul style="list-style-type: none"> • Diesel PM limit of < 0.01 g/bhp-hr; or • Reduce Diesel PM emissions by 85%; or • Reduce Diesel PM emissions by 30% by January 1, 2006, and meet Diesel PM limit of 0.01 g/bhp-hr limit in 2011.

➤ **New Stationary Diesel Engines ≤ 50 HP**

New stationary diesel engines less than or equal to 50 horsepower must meet the current Off-Road Engine Certification Standard for an off-road engine of the same horsepower rating.

7. Q: What is the compliance schedule for in-use emergency standby and prime engines?

A:

Owns 3 or Fewer Engines			Owns 4 or More Engines					
<u>Pre-1990</u>	<u>1990 to 1996</u>	<u>1996+ MY</u>	<u>Pre-1990 MY*</u>		<u>1990 to 1996 MY*</u>		<u>1996+ MY*</u>	
<u>MY</u>	<u>MY</u>	<u>1/1/2008</u>	50%	1/1/07	30%	1/1/07	50%	1/1/08
1/1/2006	1/1/2007		75%	1/1/08	60%	1/1/08	100%	1/1/09
			100%	1/1/09	100%	1/1/09		

* Minimum percentage of engines required to comply by specified dates

8. Q: What are the additional requirements of the regulation?

A: In addition to diesel PM emission standards and operating requirements, the ATCM establishes emission standards for hydrocarbons (HC), nitrogen oxides (NO_x), non-methane hydrocarbons and NO_x (NMHC+NO_x), and carbon monoxide (CO). The ATCM also requires the use of clean fuels. As of January 1, 2006, all new and in-use stationary diesel engines are required to use CARB diesel fuel, alternative diesel fuels, and/or alternate fuels such as CNG. In addition, the ATCM establishes recordkeeping, reporting, and monitoring requirements, emissions data requirements, and test method requirements. The compliance schedules defined in the ATCM are based on the number of engines owned or operated.

9. Q: How does the ATCM address Demand Response Program (DRP) engines, engines located near schools, and engines located in remote areas?

A: **DRP Programs** DRPs are programs for reducing electrical demand. Typically there is a contractual agreement between an engine owner/operator and an electric supply company to provide load reduction during periods of peak demand in return for economic compensation or benefit. The ATCM allows emergency standby engines to participate in two specific types of DRPs: interruptible service contracts (ISCs) and the San Diego Gas and Electric Company's Rolling Reduction Blackout Program (RBRP). Both of the ISC and RBRP engines are only allowed to operate under each program if blackouts are imminent or already triggered. These engines are also subject to more stringent diesel PM emission limits and limits on the total annual hours of DRP operation.

Engines Located Near Schools The ATCM restricts the operation of emergency standby diesel-fueled engines located within 500 feet of a school. These engines are **not** permitted to operate for non-emergency purposes (including operation for DRP purposes) between the hours of 7:30 am and 3:30 pm on days when school is in session, unless the engine can meet a diesel PM emission standard of 0.01 g/bhp-hr.

Engines Located in Remote Areas The ATCM gives each District the authority to delay the implementation of the ATCM's requirements for remotely located in-use prime engines until the year 2011. A remotely located engine is one that is at least one mile (1.0 miles) from the nearest receptor location. In order to qualify for the delay, the remotely located engine must also meet minimum risk-based limits.

10. Q: What are the requirements for engines enrolled in an ISCs or RBRP?

A: The ATCM allows companies enrolled in either an ISC or RBRP to use their diesel-fueled emergency standby engine (s) provided the DRP engine meets a progressively more stringent PM emissions standard when operating under an ISC or an RBRP. Basically any company enrolled in an ISC or RBRP on or after January 1, 2008, that uses its DRP engine (s) to replace electrical service interrupted because of its contractual obligation must demonstrate their DRP engines meet a 0.01 g/bhp-hr diesel PM standard. However, for RBRP companies the more stringent diesel PM emission standard does not apply if their initial enrollment date is prior to January 1, 2008. In contrast, the initial enrollment date is not relevant to companies enrolled in an ISC. Any company enrolled in an ISC on or after January 1, 2008, that uses its DRP engine (s) to replace electrical service interrupted by its contractual obligation must demonstrate their DRP engine (s) must meet a 0.01 g/bhp-hr PM emission standard. The applicability of the 0.01 g/bhp-hr diesel PM emission standard is determined by the definition of "enrolled" in the ATCM. This definition was designed to have different meanings depending on which DRP a company is enrolled in. An advisory was sent to California Air Pollution Control or Executive Officer's alerting them of the impending compliance date that explained the requirements as it applies to emergency standby engines used in response to their ISC or RBRP obligation. The following website provides a link to the Advisory sent to California Air Pollution Control or Executive Officer explaining the January 1, 2008, compliance date for stationary diesel engines enrolled in a DRP: <http://www.arb.ca.gov/diesel/statport.htm>.

Compliance

11. Q: How are owners and operators of stationary diesel engines used in Demand Response Programs to demonstrate compliance?

A: It was the intent of ARB staff to require owners and operators to submit emissions data as necessary, to show compliance with emission standards defined in, section 93115.6 (c) *Operating Requirements and Emission Standards for New and In-Use Emergency Standby Diesel-Fueled CI Engines (>50 hp) Used in Demand Response Programs (DRP Engines)*. Emissions data should be provided in accordance with the provisions of section 93115.13 ATCM for Stationary CI Engines – Compliance Demonstration

12. (a) Q: For in-use emergency standby engines that comply with the ATCM by simply reducing their maintenance and testing hours to below 20 hours per year, is January 1, 2006, the first day you must record data?

A. No. The ATCM requires that a monthly log of usage information relating to the use of emergency standby engines be recorded starting on January 1, 2005. (see section 93115.10 (g) Reporting Requirements for Emergency Standby Engines)

13. Q: When will Districts begin enforcing the 20 hour-per-year limit?

A. The ATCM requires that owners be in compliance by January 1, 2006. However, depending on the specifics of their local ATCM-based rules and permitting programs, Districts may elect to enforce the hour limit prior to January 1, 2006. Both ARB staff and the Districts agree that the enforcement of the 20 hour per year limit should begin no later than January 1, 2007. (Note that the term “year” is meant to reflect a twelve-month period as defined by the district for compliance purposes. Depending on the district, it can mean calendar year, fiscal year, or a rolling twelve-month period.)

14. Q: Will “post-control” testing be adequate to demonstrate compliance if a non-certified control device is installed?

A: If an owner or operator installs a control device that has not been evaluated through the ARB’s Verification Procedure (see <http://www.arb.ca.gov/diesel/verdev/home/home.htm>), the owner can show compliance with the ATCM’s emission limits (e.g. 0.15 g/bhp-hr diesel PM limit) by source testing the engine after the control has been installed. Source testing should be conducted in accordance with the applicable requirements of section 93115.14 - *Test Methods*. If compliance is with a percent reduction (e.g., 85% reduction of diesel PM emissions from baseline levels) then baseline, or “pre-control” testing may also be required.

15. Q: If a “certified” device is installed will compliance testing be required or can parameters be monitored to determine compliance?

A: Yes, parameter monitoring is an option a District can pursue to demonstrate ongoing compliance with the requirements of the ATCM. The ATCM only specifies the requirements for initial compliance. It is left to each District to determine the best approach for ensuring on-going compliance. The “certification” the commenter is referring to is actually correctly termed “verification” and is in reference to the verification of emission reduction claims in accordance with the ARB’s Verification Procedure (see <http://www.arb.ca.gov/diesel/verdev/home/home.htm>).

16. Q: Does the ATCM provide alternatives to demonstrate compliance to meet the 0.01 g/bhp-hr diesel PM emission standard besides source testing?

A: Yes, section 93115.13 (f) is included in the ATCM to provide owners or operators with alternative compliance options to demonstrate compliance to the 0.01 g/bhp-hr diesel PM emission standard of sections 93115.6 through 93115.9. The alternative compliance strategies are intended to recognize that a certified engine that emits no more than 0.15 g/bhp-hr of diesel PM in combination with an emission control strategy that achieves at least 85 % reduction in PM essentially meets the 0.01 g/bhp-hr diesel-PM without the need to confirm exact compliance through additional source testing. Never the less, the air district that issues the permit to operate has the final authority in determining compliance to any emission standard or operating requirement of the ATCM, which may include source tests to demonstrate compliance.

17. Q: How often will an owner be required to source test a diesel engine to show ongoing compliance with the requirements of the ATCM?

A: The ATCM does not establish ongoing compliance testing requirements. It is left to each District’s discretion to determine the appropriate approach for ensuring on-going compliance with the ATCM emission standards. ARB staff anticipates that most emergency standby engines will comply with the ATCM by limiting their maintenance and testing annual hours of operation to less than 20. For these owners, no emission testing is required. For those owners that must show on-going compliance with an emission standard, ARB recommends that District’s use parameter monitoring (e.g. exhaust temperature, backpressure, exhaust opacity) as a screen in determining which owners would be required to source test to show compliance. The operating ranges of the parameters would be engine and control equipment specific. For example, to ensure the proper operation of the CleanAir Systems PERMIT™ diesel

particulate filter, the engine's exhaust temperature must be at or above 300° Celsius for 30 percent of operating time or two hours, whichever is longer. (For a complete list of operating criteria for the PERMIT DPF go to <http://www.arb.ca.gov/diesel/verdev/verifiedtechnologies/stationary.htm>).

Emission Standards

18. Q: How are Not-to-Exceed (NTE) limits, Family Emission Limits (FELs), Alternative NOx standards, and other provisions in the off-road engine certification standards going to be addressed as far as determining compliance with the requirements of the ATCM?

A: The ATCM in a number of places requires engines to meet the emissions standards for similar off-road engines. These referenced standards are defined in the Off-Road Compression Ignition Engine Standards (title 13, CCR, section 2423). Our goal in referencing these standards was to ensure that stationary engines were "as clean" as equivalent off-road engines. To that end, certified off-road engines that comply with the alternative standards (NTEs, FELs, Alternative NOx standards, etc.) meet the Off-Road Compression Ignition Engine Standards and therefore meet the related referenced standards of the ATCM.

19. Q: Is it an oversimplification to state that either an emergency standby diesel engine meets the diesel PM standards in subsection 93115.6 (b)(3)(A) the diesel PM standards and operating requirements for in-use emergency standby engines, with Verified Emission Controls or the engine is subject to the additional standards in subsection 93115.6 (b)(3)(B) the HC, NOx, NMHC+NOx, and CO standards? In other words, can an engine meet one of subsection 93115.6 (b)(3)(A) standards inherently as manufactured without an "emission control strategy" and thereby not trigger the "additional standards"?

A: Yes, an engine that is subject to the diesel PM standard in subsection 93115.6 (b)(3)(A), that can meet the diesel PM standard without the addition of emission control equipment, or meets it through the installation of Verified control equipment (see <http://www.arb.ca.gov/diesel/verdev/home/home.htm>) for information on the Verification Procedure) is not subject to the additional standards defined in subsection 93115.6 (b)(3)(B). The primary purpose of the additional standards is to prevent the increase of non-diesel PM emissions resulting from the installation of diesel PM control equipment.

20. Q: In a number of places in the ATCM, a stationary diesel engine is required to "meet the model year diesel PM standard specified in the Off-Road Compression Ignition Engine Standards for off-road engines with the same maximum rated power." The Off-Road Compression Ignition Engine Standards are complex – there a certification standards, Family Emission limits, opacity standards, etc. If I wanted to take an existing stationary in-use engine and test it to show compliance with the appropriate Off-Road Standards what would that entail?

A: You would test the engine in accordance with the appropriate ISO 8178-4 test cycle, using one of the methods identified in section 93115.14 - Test Methods, or an alternative method approved by the District. The identified test methods require the weighted test results for each pollutant (NOx, HC, NMHC+NOx, and CO) to be compared to the appropriate exhaust certification standard. The exhaust certification standards can be found in Title 13, California Code of Regulations Section (13 CCR) Section 2423, Table 1 (see <http://ccr.oal.ca.gov>).

The diesel PM and other pollutants (NOx, HC, NMHC+NOx, and CO) standards applicable to the subject engine are those of the model year and maximum rated power of the engine installed to meet the applicable PM standard, or if no off-road engine certification standards have been established for an off-road engine of the same model year and maximum rated power, then the Tier 1 standards apply.

Exemptions

21. Q: Exemption section 93115.3 (n) applies to in-use direct-drive fire pump engines. Does it only apply to fire pumps that provide water to sprinkler systems in buildings?

A: No. Exemption section 93115.3 (n) applies to any direct drive fire pump that is used *solely* to pressurize a fire suppression system and operated the number of hours necessary to comply with the inspection, maintenance, and testing requirements of NFPA 25. ARB's intention in establishing the exemption in section 93115.3 (n) was to exempt in-use direct-drive fire pump assemblies that are

operated only the number of hours necessary to comply with NFPA 25. Initially, we thought the only in-use fire-pump assemblies complying with NFPA 25 were located in buildings to pressurize sprinkler systems. WSPA and POTW's have come to us stating that they have in-use direct-drive pumps that are used solely for fire-suppression and are operated in accordance with NFPA 25. Our direction to them was that if they are used solely for fire suppression and are operated in accordance with NFPA 25, then they too would qualify for the exemption. However, if they are called into service for reasons other than fire suppression, i.e., POTW pumps that pressurize water lines due to a pipe break, they would not qualify for this exemption.

22. Q: Where can copies of the National Fire Protection Association (NFPA) Standards be found?

A: NFPA Standards can be purchased through the following website: <http://www.nfpa.org/index.asp>.

23. Q: Can ARB provide assistance in identifying specific engines that may have been exempt by District Rules?

A: Unfortunately, no. Our current workload and limited resources does not allow us to take on such a task.

24. Q: When new, more stringent emission standards become effective, engine wholesalers and dealers within California can be left with an inventory of potentially non-compliant stock engines. Currently, wholesalers cannot return these engines to the manufacturer or sell them outside their sales territory. These engines represent a potentially significant financial loss to California wholesalers and dealers. Does the ATCM provide a limited time period that these prior-year engines may be sold, i.e., a "sell-through" provision?

A: The ATCM provides a limited exemption to ensure a smooth transition to new, more stringent emission standards. However, to ensure stockpiling of engines doesn't occur, the new exemption in section 93115.3 (s) requires district approval and includes additional conditions that must be met by the seller or the owner/operator before these new (prior tiered) stock engines can be sold or operated in California.

Fuel

25. Q: Can ARB confirm that whatever "CARB Diesel" is available in the marketplace is the diesel fuel (not including alternative fuels) allowed for use by new and in-use engines after January 1, 2006?

A: The commenter is correct in assuming that ATCM-compliant CARB diesel is the formulation of CARB diesel available in the marketplace at the time of purchase. New engines and in-use prime engines are allowed to use diesel fuels that meet the definition of CARB Diesel at the time of purchase. In-use emergency standby engines are required to add only diesel fuels that meet the definition of CARB diesel at the time of purchase.

26. Q: What can be done in the field to determine if the diesel fuel qualifies as CARB diesel?

A: Two approaches can be used to enforce the fuel requirement. One is to review fuel purchase records that account for all fuel used in the engine and all fuel purchased for use in the engine. These records must identify the fuel as CARB diesel. The other is to pull a sample of the fuel from the fuel tank and test it to determine if it meets the specifications of CARB diesel (see <http://www.arb.ca.gov/testmeth/slb/fuel.htm> for Test Methods for Determining Parameters of Diesel).

27. Q: The ATCM does not recognize that the refueling practices for emergency standby engines, which are based upon need and can vary from engine to engine, are significantly different than those for prime engines, which are typically fueled on regular schedules. Emergency standby CI engines may also be refueled from a centralized location that delivers varying quantities of complying CARB diesel fuel to multiple engines at different locations. An additional concern is the records or logs of fuel deliveries and subsequent disbursement to emergency standby engines may be handled at a central location or an offsite

location. How can owners/operators in these situations demonstrate compliance with the ATCM fuel requirements for emergency standby engines?

A: The ARB staff understands these impracticalities, and did not intend to require facilities to keep individual engine fuel purchase records for emergency standby engines. To address these concerns, the ARB approved amendments to the ATCM in November 2006 that modified the fuel reporting requirements in section 9315.10 (g)(G) to clearly state the owner/operator shall document the use of CARB diesel fuel or any fuel other than CARB diesel through the retention of fuel purchase records indicating that the fuel purchased and/or added to an emergency standby engine or to any fuel tank directly attached to an emergency standby engine meets the fuel requirements of the ATCM. In addition, the requirement to retain fuel purchase records only on-site was amended to allow retention of these records at an offsite central location within California.

28. Q: Can B-20 (a 20% biodiesel and 80% CARB diesel blend) be marketed and sold in California as CARB Diesel?

A: Yes, it can be sold or marketed as CARB diesel fuel provided the biodiesel blend meets CARB specifications for aromatic and sulfur content (13 CCR, sections 2281, 2282. CCR sections are found at <http://www.oal.ca.gov/>) and meet ASTM D975 for diesel fuel as required by the Division of Measurement Standards (DMS website: <http://www.cdfr.ca.gov/dms/>).

29. Q: I currently operate a stationary diesel-fueled engine on a 100% non-diesel fuel (e.g. B-100). How does the stationary ATCM impact me?

The ATCM allows the use of 100 % biodiesel and biodiesel blends.

Engine Sales

30. Q: If an owner sells an engine for salvage is the owner responsible for the engine complying with new engine standards?

A: No. The new engine standards apply only engines sold *for use* in California.

31. Q: Would an engine that is sold to a rental operation be considered a portable engine?

A: It depends on how it is ultimately used. For example, if a gen-set is rented by a facility and is operated as a stationary engine, i.e., operated for over 12 consecutive months and remains at one location at the facility for the 12 month period, then that engine would be subject to the requirements of the ATCM. If it is rented as a portable engine, i.e., rented to more than one facility during a 12 month period, it would not meet the definition of a stationary engine and would be considered portable.

32. Q: If an engine that is less than 50 hp is sold outside of California, but then returns to California, is the original seller responsible for meeting the standard?

A: No. The ATCM does establish emission standards that must be met by the sellers of engines less than 50 hp. A “seller” is a person who sells an engine directly to an end-user. An end-user is any person who purchases an engine *for operation in California*. It would be unreasonable to require the seller to be responsible for an engine originally sold to an end-user outside California.

33. Q: If an ATCM-compliant engine that is greater than 50 hp and currently meets the in-use engine requirements is moved from California to another state and operated in that state, and then moved back to California to operate again as a stationary engine, is the owner now required to meet the new engine standards upon re-installation at a California facility?

A: Yes. A new engine is one that is installed at a facility after January 1, 2005. The engine in the above scenario is required to meet the new engine standards upon re-installation at the old California facility or installation at a new California facility.

Seller Requirements (< 50 hp)

34. Q: Whom do sellers send reports to at ARB?

A: The reporting form may be found at (<http://www.arb.ca.gov/diesel/statport.htm>), and Sellers should send their completed reports to either of the following addresses:

E-Mail: Ron Hand at rhand@arb.ca.gov or by

Regular Mail: Air Resources Board, P.O. Box 2815, Sacramento, CA 95812, Attention: Ron Hand

35. Q: Is the standard the current model year certification level, as it appears to say in the text in (e)(3), *Emission Standards for New Stationary Diesel-Fueled CI Engines (<50 hp)*, or the engine's model year certification level as it says in Table (6)?

A: Engines that are less than 50 hp sold for use in California must meet the *current* model year certification level for off-road engines that have the same maximum rated power.

Portable versus Stationary

36. Q: Is a portable engine that remains at one facility for more than 12 months subject to the requirements of the stationary engine ATCM?

A: No, not necessarily. It is only considered stationary if it remains in one location (or footprint) at the facility for more than 12 months. However, deliberate circumvention of the stationary ATCM requirements by moving an engine is not allowed. As such, a portable engine that is moved within a facility for the sole purpose of avoiding the stationary engine requirements is subject to district enforcement action. Defining when movement of an engine is considered by the District as circumvention, and when it is not, can be less than obvious. Some districts have addressed this issue by requiring owners to define the "legitimate business purpose" for moving a stationary engine.

Reporting Requirements

37. Q: Are there any reporting requirements for prime engines?

A: Yes. Owners and operators of prime engines are required to submit to their District information on the engine and how it is used in accordance with the requirements of section 93115.10 (a)(3), and information on the control strategy that they choose to comply with in accordance with 93115.10 (a)(4).

38. Q: What forms or format would ARB expect the reports on data be submitted from the Districts? When will ARB ask for these reports?

A: The ATCM requires facilities to submit diesel engine information to the district by July 1, 2005, and this information is passed on to ARB shortly thereafter. A spreadsheet with all of the data fields required to be reported has been created so that facilities may submit data to districts in a standard electronic format. The current draft of this spreadsheet can be found at <http://www.arb.ca.gov/ab2588/diesel/spreadsheet.xls>. Any format that provides the required data fields may be used at the discretion of the district.

Test Method

39. Q: When will a practical field test method for diesel particulate be available?

A: ARB staff cannot at this time give a specific date as to when a quicker and less expensive test method will be available. Recently, ARB staff approved a research project with the objective of developing a short, relatively inexpensive test method for measuring in-use PM emissions from stationary engines in the field. This short test will be based on the current Front Half CARB Method 5 sampling procedures. This method would include a modification of existing filter-based PM measurement methods. A successful short test will correlate with the current off-road diesel engine

certification test as specified in CFR/ISO, and also correlate with variants of the Full CARB Method 5 test procedure (the Front Half Method 5 and the filter-only portion of the Front Half Method 5).

A summary of the research proposal can be found at the following website location, <http://www.arb.ca.gov/research/rsc/12-13-04/dec04adv.pdf>, item number 8.

Verified Emission Control Systems

40. Q: Where can we find a current listing of ARB's verified diesel emission control technologies for stationary engines?

A: The detailed information such as the Executive Orders, compatible engines, and operating criteria for these technologies may be found at the following website:
<http://www.arb.ca.gov/diesel/verdev/vt/stationary.htm>

41. Q: Can ARB provide a list of control strategies currently in the verification procedure?

A: ARB cannot provide a list of control strategies currently in the verification process due to confidentiality issues.

42. Q: Can ARB provide a list of equipment approved for both 30% diesel PM emission control and 85% diesel PM emission control?

A: ARB currently provides information on all verified control technologies at the following website:
<http://www.arb.ca.gov/diesel/verdev/home/home.htm>.

43. Q: The term "emission control strategy" is defined in a very broad sense to include virtually any design feature of an engine that reduces emissions. Can a technology that arguably targets non-PM emissions also be an unverified strategy that triggers the additional standards?

A: The purpose of the "Additional Standards" requirements as defined in section 93115.6 (b)(3)(B) is to guard against increases of NOx, HC, CO emissions when non-Verified diesel PM emission control strategies are employed to reduce diesel PM emissions from in-use emergency standby engines. In the example given, the in-use turbocharged engine in its current OEM configuration meets the diesel PM standard. The "Additional Standards" requirements would not be triggered since the engine was not modified.

If the in-use engine was modified to meet a diesel PM emission standard, the "Additional Standard" requirements would only be triggered if the emission control strategy was not Verified (for more on the Verification Procedure, go to <http://www.arb.ca.gov/diesel/verdev/home/home.htm>). The reason for this is because Verified Devices must conform to the NOx, HC, and CO requirements identified in the Verification Procedure. Non-Verified diesel PM control strategies must meet the appropriate off-road certification standard (with Tier 1 standards as a backstop), or must not increase emissions of CO, HC, or NOx by more than 10% (see section 93115.3 6 (b)(3)(B)).

AB 2588

44. Q: When is the planned adoption date for changes to AB 2588 that will expand the program applicability to include most diesel engines?

A: The ARB adopted amendments to the AB 2588 Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines Regulation (Title 17, California Code of Regulations, Section 93300.5) on November 16, 2006. On August 27, 2007, the OAL approved the amendments. The amendments became effective on September 26, 2007.

Among other amendments, the "Hot Spots" requirements now harmonize with the ATCM for stationary diesel-fueled engines currently in effect. This is being done to minimize duplicative requirements, and to ensure that potential risks from all engines are evaluated and mitigated where necessary. To illustrate, a new chapter was added on diesel engine reporting requirements and other minor revisions to bring the

Guidelines Regulation up to date. In essence, the amendments to the Guidelines Regulation are written to have the “Hot Spots” Program catch up with existing actions already being taken to address diesel engines and other activities already being implemented in California.

Overall, the amendments were designed to leverage the inventory reporting and risk reductions that are required under the stationary diesel engine ATCM, including in-use agricultural diesel-fueled engines. The net result is the amendments were written to minimize duplicative efforts, and to focus requirements on those facilities that may have significant residual risk after the ATCM is fully implemented.

Further questions regarding this subject should be directed to Chris Halm, Staff Air Pollution Specialist, Community Health Section, at (916) 323-4865 or chalm@arb.ca.gov.