

STAFF REPORT

Proposed Rule 4.16: Registration Requirements for Compression Ignition Engines Used In Agricultural Operations

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Agricultural Operations***

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Executive Summary

Toxic pollutants, including Toxic Air Contaminants (TAC) and Hazardous Air Pollutants (HAP), are regulated for their potential health impacts to localized areas. In particular, diesel exhaust particulate matter or diesel soot from diesel engines was identified by the California Air Resources Board (CARB) in 1998 as a TAC. Research has shown that there are corresponding links between areas of high exposure to diesel particulate matter and cancer cases in the population. California Health and Safety Code (CH&SC), Section 39650 requires that CARB develop Airborne Toxic Control Measures (ATCMs) to reduce public exposure to toxic pollutants. The Districts are then required to implement and enforce ATCMs developed by CARB, as required under CH&SC, Section 39666(d).

On February 14, 2004, the State adopted the Airborne Toxic Control Measures for Stationary Compression Ignition Engines (Stationary ATCM). The primary purpose of the Stationary ATCM was to reduce the diesel particulate emissions from stationary diesel engines and thereby reduce the associated health impacts. The Stationary ATCM requires that all new prime engines meet very stringent particulates emission levels, that all existing prime engines be retrofitted with control equipment to reduce particulates, and that all emergency stationary engines limit the hours of operation for maintenance and testing. Amendments to the Stationary ATCM were approved by the Office of Administrative Law (OAL) and effective on September 9, 2005.

On November 16, 2006, the CARB approved additional amendments to the Stationary ATCM. These amendments included emission limits and registration requirements for stationary diesel-fueled compression ignition (CI) agricultural engines greater than 50 bhp.

In addition to the measures regulating diesel particulates, the CARB instituted measures for portable diesel engines. On February 26, 2004, the CARB adopted the Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater (Portable ATCM). The Portable ATCM requires all subject portable engines operated within California to be certified to meet the applicable non-road engine standards listed in Title 13 of the California Code of Regulations or in Title 40 Subpart 89 of the Code of Federal Regulations. Furthermore, engine fleets shall reduce their diesel PM emission averages over time becoming more stringent in 2013, 2017, and 2020.

In response to changes in the Statewide Portable Equipment Registration Program regulation and comments from portable engine owners, the CARB modified the Portable ATCM and allowed Districts to register or permit non-certified engines that meet specified residency requirements. The amendments were adopted as an emergency regulation and became effective April 27, 2007. Portable agricultural engines are not exempted in the Portable ATCM.

As required by law, the District proposes to adopt by reference the amendments to the Stationary ATCM to reduce diesel PM emissions from stationary compression ignition engines used in agricultural operations and adopt by reference the Portable ATCM. In order to implement the ATCMs, the District proposes to amend two existing rules and adopt two new rules. The proposals are to amend to Rule 4.3 and Rule 11.1 and adopt a registration program (Rule 4.16), which is the subject of this Staff Report, and a fee rule (Rule 7.14).

CARB has estimated that there are approximately 529 compression ignition engines (315 stationary and 214 portable) used in agricultural operations in Yuba and Sutter Counties that are subject to the registration requirements.

1.0 Purpose:

The purpose of proposed rule 4.16 – Registration Requirements for Compression Ignition (CI) Engines Used in Agricultural Operations is to establish standards and procedures for the issuance of Certificate of Registration by the Air Pollution Control Officer (APCO) for registration of a CI engines rate at 50 brake horsepower or greater used in agricultural operations.

2.0 Applicability

This rule applies to all CI engines that are used in agricultural operation and are subject to the requirements of the Airborne Toxic Control Measure for Stationary CI Engines (Stationary ATCM) or the Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines rated at 50 Horsepower and Greater (Portable ATCM).

3.0 Background:

Historically, CI engines used in agricultural operations have not been subject to local air districts permitting or registration programs. However, this exemption for agricultural operation changed when California legislature adopted Senate Bill (SB) 700 on September 2003. SB 700 removed a long-standing statute that exempts agricultural operations from obtaining operating permits/registrations for sources of air pollution.

Without an agricultural exemption, CARB was allowed to study the health impacts of the diesel-fired agricultural equipment, including stationary and portable engines, on public health. Because diesel particulate matter from compression ignition engines was identified as a TAC, CARB developed ATCMs to help reduce public exposure to toxic pollutants. On February 14, 2004, CARB adopted the Stationary ATCM, which included emissions standards for “new” stationary engines used in agricultural operations. Then, after further studies, CARB adopted amendments to the stationary ATCM on November 16, 2006, to include emission limits for “in-use” stationary compression ignition engines used agricultural operations.

In addition to the measure for regulating stationary CI engines, CARB adopted the Portable ATCM on February 14, 2004, which was later amended on April 27, 2007. The Portable ATCM applies all CI engines that meet the definition of “portable”. Thus, all CI engines were subject to either the Stationary ATCM or the Portable ATCM.

The District is required by CH&SC, Section 39666(d) to adopt, implement and enforce the ATCMs. However, the District permitting program currently does have the authority to require permit for engines used in agricultural operations unless the permitted facility/engines meet the threshold for permitting as outlined in SB700. Thus, in order to meet Section 39666(d) CH&SC, the District developed this registration program and an associated fee rule authorized by CH&SC, Section 39656, 39659, 41512.5, and the Stationary ATCM adopted by CARB on November 16, 2006. The District also proposes to adopt by reference the amendments to the Stationary ATCM and adopt by reference the Portable ATCM.

4.0 Registration Requirements:

Proposed Rule 4.16 requires the owner or operator of in-use CI engines used in Agricultural operations to submit an application to the District for a Certificate of Registration. For stationary CI Engines, this rule will become effective on the date that Stationary ATCM with amendments to include in-use engines used in agricultural operations, adopted on November 16, 2006 by the California Air Resources Board (CARB), is approved by the State Office of Administrative Law (OAL), or on the date the District Board adopts the amendments into District Regulation XI; whichever occurs later. Similarly, for portable CI engines, this rule becomes effective on the date that Portable ATCM adopted on March 22, 2007, by CARB, is approved by the State OAL, or on the date that the District Board adopts the Portable ATCM into District Regulation XI; whichever occurs later.

Once this rule becomes effective, the proposed rule requires that the owner/operator of any stationary in-use agricultural engine and owner/operator of any new stationary agricultural engine installed after the effective date of this rule or before January 1, 2008, shall submit an application for Certificate of Registration no later than March 1, 2008 for each engine subject to this rule. For new engine installed on or after January 1, 2008, the owner/operator shall apply for a Certificate of Registration no later than 90 days after the date of initial installation.

Similarly, for Portable Agriculture CI engines, the owner/operator shall submit an application for a Certificate no later than March 1, 2008, if the engine was purchased before January 1, 2008, and no later than 90 day after the date of purchase if the engine was purchased on or after January 1, 2008.

The proposed rule also establishes application processing timelines, authorizes on-site inspections, administrative processed such as renewals, and compliance requirements.

5.0 Socioeconomic Impact:

California Health and Safety Code, Section 40728.5, Required Assessment, subsection (d) states “this section does not apply to any district with a population of less than 500,000 persons”. The population in Feather River Air Quality Management District is less than 500,000 persons, and per California Health and Safety Code, a socioeconomic impact analysis is not required.

6.0 Cost-effectiveness:

California Health and Safety Code, Section 40703 states that the District must consider, and make public, “the cost-effectiveness of a control measure”. Proposed rule 4.16 are administrative in nature. The purpose of rule 4.16 is to implement a registration program in order to track and enforce CI engines which are subject to the Stationary ATCM or the Portable ATCM. Therefore, it is not necessary to calculate the cost-effectiveness of the proposed rule.

In addition, because Best Available Retrofit Control Technology (BARCT) or Best Available Control Technology (BACT) requirements and feasible control measures are not involved, an incremental cost-effectiveness analysis under Health & Safety Code Section 40920.6 is not required.

7.0 Environmental Review and Compliance:

Proposed Rule 4.16 is categorically exempt from the California Environmental Quality Act (CEQA) under Sections 15307 and 15308 of the State CEQA Guidelines and no exceptions to these exemptions apply. This exemption is allowed when the rule will help improve air quality in Yuba and Sutter County. California Public Resources Code (Section 21159) requires an

environmental analysis of the reasonably foreseeable methods of compliance. The District has concluded that no reasonably foreseeable adverse environmental impacts will be caused by adoption of the proposed rule.

8.0 Written Analysis of Existing Federal and District Regulations

California Health and Safety Code, Section 40727.2(a) requires the District to provide a written analysis of existing regulations prior to adopting, amending or repealing a regulation. Section 40727.2(a) states:

In complying with Section 40727, the district shall prepare a written analysis as required by this section. In the analysis, the district shall identify all existing federal air pollution control requirements, including, but not limited to, emission control standards constituting best available control technology for new or modified equipment, that apply to the same equipment or source type as the rule or regulation proposed for adoption or modification by the district. The analysis shall also identify any of that district's existing or proposed rules and regulations that apply to the same equipment or source type and of which the district has been informed pursuant to subdivision (b). The analysis shall be in a format that minimizes paperwork and, at the option of the district, may be in matrix form.

However, in Section 40727.2(g) of the California Health and Safety Code, it states that if the proposed new or amended rule does not impose a new emission limit or standard, make an existing emission limit or standard more stringent, or impose new or more stringent monitoring, reporting, or recordkeeping requirements, a district may elect to comply with Section 40727.2(a) by finding that the proposed new or amended rule or regulation falls within the categories stated in this section.

Therefore, the requirements of Health and Safety Code, Section 40727.2(a) are satisfied pursuant to Health and Safety Code, Section 40727.2(g) since Rule 4.16 are administrative in nature and include no emission control standards.

9.0 Required Findings:

Findings required by Division 26 of the California Health and Safety Code requires local districts to comply with a rule adoption protocol as set forth in Section 40727 of the Code. This section has been mandated to contain six findings that the governing boards must make when developing, amending, or repealing a rule or regulation. These findings and their definitions are included in Table 1.

Table 1. Required Findings

FINDING	DEFINITION	REFERENCE
Authority	A district shall adopt rules and regulations and do such acts as may be necessary or proper to execute the powers and duties granted to, and imposed upon, the district by this division and other statutory provisions	California Health and Safety Code, Sections 39656, 39659, 39666, 40000, 40001, and 40702 are provisions of law that provide air districts with the authority to adopt the proposed regulation.
Necessity	The District has demonstrated that a need for the rule, or for rule amendment or repeal.	CH&SC 39666(d) requires the District to adopt, implement and enforce ATCMs. Proposed Rule 4.16 is necessary because it is a registration program designed to monitor and track the compliance progress of agricultural engines which are subject to Stationary or Portable ATCM. This rule outlines the requirement of a registration program which is the key component to implement and enforce the ATCMs.
Clarity	The rule is written or displayed so that its meaning can easily be understood by the persons directly affected by it	There is no indication, at this time, that the proposed rules are written in such a manner that it can not be easily understood by persons affected by the rule.
Consistency	This rule is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or State or federal regulations.	This rule is administrative in nature for it provides the means for the District to implement and enforce state law. Thus, by implementing and enforcing state law is consistent with applicable state and federal statutory requirements.
Non-Duplication	The rule does not impose the same requirements as an existing State or federal regulation, unless the District finds that the requirements are necessary and proper to execute the powers and duties granted to, and imposed upon, the district	This rule is administrative in nature for it provides the means for the District to implement and enforce state law. Thus, it does not impose requirements that duplicate existing laws or regulations.
Reference	Any statute, court decision, or other provision of law that the district implements, interprets, or makes specific by adopting, amending, or repealing a regulation.	California Health and Safety Code, Division 26, Part 3, Section 40000, 40001, 40701, and 40702.