



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

WORKSHOP NOTICE

December 22, 2010

TO: INTERESTED PARTIES
FROM: EXECUTIVE OFFICER / APCO
SUBJECT: **PROPOSED NEW REGULATION 11, RULE 17: LIMITED USE STATIONARY COMPRESSION IGNITION (DIESEL) ENGINES IN AGRICULTURAL USE**

The Bay Area Air Quality Management District (District) is proposing Regulation 11, Rule 17: Limited Use Stationary Compression Ignition Engines in Agricultural Service as a local regulation that is equivalent to the Air Toxic Control Measure (ATCM) for Stationary Compression Ignition (CI – also referred to as diesel) Engines adopted by the California Air Resources Board (CARB) for the same category of sources. The intent of this regulation is to adopt CARB requirements for stationary engines in agricultural operations, but to also address local compliance issues faced by low-use stationary agricultural diesel engines. Staff of the Bay Area Air Quality Management District will conduct a public workshop in each county with significant agricultural interests to review and discuss this proposed regulation. The schedules and locations for these workshops are shown on Attachment A (below).

BACKGROUND:

CARB originally adopted the ATCM in 2004. The ATCM affected diesel engines driving a wide variety of machinery including electrical generators, conveyors, pumps and compressors. The ATCM required all applicable sources of Toxic Air Contaminants (TACs) to hold valid operating permits or be registered with the local air district, unless the source is covered by a specific exemption. In 2006, CARB determined that both emergency standby engines and agricultural engines were potentially significant sources of air pollution, so both categories of engines were included in the ATCM and brought into the registration / permit program. The ATCM requires stationary agricultural diesel engines from 100 – 750 horsepower to meet stringent emissions standards by December 31, 2010. The most cost effective approach for engines of this size is replacement with a new, low emissions engine. Additionally, the ATCM requires replacement of engines from 50 – 100 horsepower by December 31, 2011.

Under Section 39666 of the Health and Safety Code (H&SC), local air districts are charged with implementing and enforcing ATCMs that affect stationary sources. The District has enforced the ATCM for stationary CI engines since it became effective. Section 39666 of the H&SC also allows districts to adopt equivalent or more stringent local rules for the same sources. When the ATCM was amended in 2006 to include stationary agricultural engines, agricultural interests raised concern about replacement of low-use diesel engines. CARB staff and staff from several air quality management districts in the state have been working together to identify acceptable equivalent local rules that resolve the concerns regarding these low-use agricultural diesel engines. The proposed Regulation 11, Rule 17: Limited Use Stationary Compressions Ignition Engines in Agricultural Use is the result of that effort in the Bay Area.

WORKSHOP DISCUSSION:

CARB included an exemption in the ATCM for diesel driven air movement fans used for frost protection in orchards and vineyards. However, CARB did not include exemptions for other low-use diesel engines including water pumps used to occasionally irrigate during hot summer periods, or used to spray water as an alternate method of frost protection. Water for supplemental irrigation is very seldom used because most fruit trees and grape vines have deep roots, and quality of the fruit is degraded with excess water. Similarly, frost protection is seldom needed and the number of days and hours of potential frost are highly variable each year, averaging about 80 hours per year. Regulation 11, Rule 17 is designed to provide a deferred timetable for replacement of limited use diesel engines because: (1) Most low-use agricultural diesel engines have many years of useful life remaining, so early replacement represents an economic impact that was not adequately considered in CARB's ATCM economic analysis; and (2) cleaner Tier 4 engines are scheduled to be available in the 2014/2015 timeframe. Replacing current low-use agricultural diesel engines with Tier 4 engines will substantially reduce long-term emissions.

Exemption for Very Low-Use Engines

Proposed Regulation 11, Rule 17 would exempt from emissions control requirements any agricultural engine that operates fewer than 20 hours per year, and is located more than 200 meters (about one quarter mile) from a residential area, school, or health facility. This is consistent with the provisions currently included in the ATCM for emergency standby engines.

Alternative Compliance Plan for Low-Use Engines

Under the proposed Regulation 11, Rule 17, the owner or operator of an agricultural diesel engine may apply for a low-use Alternative Compliance Plan (low-use ACP). There are five criteria for an agricultural engine to be eligible for the low-use ACP. The engine must:

- ... Be used exclusively for an agricultural operation;
- ... Be equipped with a non-resettable hour meter;
- ... Be registered with the District;
- ... Operate fewer than 100 hours per year; and
- ... Be located more than 200 meters from a residential area, school, or health facility.

If the low-use ACP is approved by the Air Pollution Control Officer (APCO), the engine may continue to operate for an extended period. The proposed alternate deadlines for ATCM compliance are based on the engine Tier of the current engine, as follows:

- ... Tier 0 engines may continue to operate until December 31, 2020.
- ... Tier 1 engines may continue to operate until December 31, 2020.
- ... Tier 2 engines may continue to operate until December 31, 2025.

Each engine must be replaced with the highest tier (lowest emissions) engine available for purchase at the time of replacement. The ACP deadlines are designed to enable replacement of existing engines with Tier 4 engines.

Shortened Compliance Term for Engines No Longer Eligible for an Exemption or Low-Use ACP

CARB's ATCM provides a period of up to eighteen months for an agricultural engine that may change its operation, and therefore may no longer be exempt to come into compliance with the otherwise applicable emissions standards. Proposed Regulation 11, Rule 17 shortens that period for engines that can no longer meet the requirements for an exemption or the terms of their approved low-use ACP. The proposed rule would allow six months to remove the engine from service or replace it with an engine that complies with the otherwise applicable standards.

Existing Strategic Funding Continues with Delayed Replacement Schedule

Under the proposed ACP, replacement deadlines are extended until 2020/2025. This provides the opportunity for continuation of existing Strategic Incentives Funding programs administered by the District. Under these programs, farmers may receive up to 85% of the cost of diesel engine replacement by replacing engines before the compliance deadline. If CARB deems Regulation 11-17 to be equivalent to the ATCM, this funding would continue to be available for affected engines until the new compliance deadlines.

Staff welcomes your participation in the workshop and input on the proposed rule. Copies of the proposed Regulation 11-17 and workshop report are available on the District's website at <http://www.baaqmd.gov/pln/ruledev/workshops.htm>. For questions or comments on the proposed rule, please contact Guy A. Gimlen, Senior Air Quality Engineer, at (415) 749-4734 or via e-mail at ggimlen@baaqmd.gov. **Written comments, submitted by U.S. mail or electronic mail, are requested by the end of Friday, February 11, 2011.**

**Attachment A
Schedule for Public Workshops**

Regulation 11, Rule 17: Limited Use Stationary Compression Ignition (Diesel) Engines in Agricultural Use

| <u>Date</u> | <u>Time</u> | <u>Location</u> |
|------------------|-------------|---|
| January 10, 2011 | 1 - 3 pm | Napa County Napa County UC Cooperative Extension Office 1710 Soscol Avenue, Napa, CA 94559 |
| January 11, 2011 | 6 – 8 pm | Sonoma County Finley Community Center – Cyprus Room 2060 West College Avenue, Santa Rosa, CA 95401 |
| January 12, 2011 | 1 – 3 pm | Sonoma County Petaluma Community Center – Activity Room 320 North McDowell Blvd., Petaluma, CA 94954 |
| January 18, 2011 | 3 – 5 pm | Alameda County Martinelli Event Center 3585 Greenville Road, Livermore, CA 94550 |
| January 19, 2011 | 3 – 5 pm | Contra Costa County Office of Weights & Measures - Conference Room 2366A Stanwell Circle, Concord, CA 94520 |
| January 20, 2011 | 6 – 8 pm | Santa Clara County Gilroy Senior Center 7371 Hanna Street, Gilroy, CA 95020 |
| January 24, 2011 | 1 – 3 pm | Marin County Dance Palace Community Center 503 B Street, Point Reyes, CA 94956 |
| January 25, 2011 | 3 – 5 pm | San Mateo County Ocean Shore Train Depot 110 Higgins Canyon Road, Half Moon Bay, CA 94019 |
| January 26, 2011 | 2 – 4 pm | Solano County Solano County UC Cooperative Extension Office 501 Texas Street, Fairfield, CA 94533 |