State of California
AIR RESOURCES BOARD

Resolution 06-39

November 16, 2006

Agenda Item No: 06-10-5

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (the Board or ARB) to adopt standards, rules, and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to, and imposed upon, the Board by law;

WHEREAS, under section 39650 of the Health and Safety Code, the Legislature finds and declares that it is the public policy of the State that emissions of toxic air contaminants should be controlled to levels which prevent harm to the public health;

WHEREAS, on August 27, 1998, the Board identified diesel exhaust particulate matter (hereafter referred to as "diesel PM") as a toxic air contaminant pursuant to article 3 (commencing with section 39660), chapter 3.5, part 2, division 26 of the Health and Safety Code;

WHEREAS, in identifying diesel PM as a toxic air contaminant, the Board determined that there is not sufficient scientific evidence to support identification of a threshold level for diesel PM below which no significant adverse health effects are anticipated (as codified in title 17, California Code of Regulations, section 93000);

WHEREAS, pursuant to section 39669.5(a) of the Health and Safety Code, the Office of Environmental Health Hazard Assessment listed diesel PM and other compounds associated with diesel exhaust as possibly causing infants and children to be especially susceptible to illness;

WHEREAS, section 39665 of the Health and Safety Code directs ARB staff, with participation of local air pollution control and air quality management districts (hereafter referred to as "districts"), and consultation with affected sources and the interested public, to prepare a report on the need and appropriate degree of regulation for each substance which the Board has determined to be a toxic air contaminant;

WHEREAS, sections 39658, 39665, and 39666 of the Health and Safety Code authorize the Board to establish airborne toxic control measures (ATCMs) for substances identified as toxic air contaminants in accordance with specific criteria;

WHEREAS, for toxic air contaminants for which the Board has not specified a threshold exposure level, section 39666 of the Health and Safety Code requires ATCMs to be designed to reduce emissions to the lowest level achievable through the application of

best available control technology (BACT) or a more effective control method, considering factors specified in section 39665, unless the Board determines, based on an assessment of risk, that an alternative level of emissions reduction is adequate or necessary to prevent an endangerment of public health;

WHEREAS, pursuant to section 39665 of the Health and Safety Code, the Board adopted a comprehensive risk reduction plan to significantly reduce diesel PM emissions from diesel-fueled engines and vehicles on September 28, 2000;

WHEREAS, on February 26, 2004, the Board adopted Resolution 03-30 approving the Airborne Toxic Control Measure for Stationary Compression Ignition Engines as set out in title 17, California Code of Regulations, section 93115;

WHEREAS, among other provisions, title 17, California Code of Regulations, section 93115 as approved required stationary compression-ignited engines, with the exemption of existing (i.e., in-use) stationary diesel engines used in agriculture (hereafter referred to as "in-use agricultural engines"), to meet diesel PM and other air pollutant emission standards;

WHEREAS, in Resolution 03-30, the Board directed the Executive Officer to work with the agricultural community and to report to the Board on the progress of ARB staff's work in identifying how best to further reduce diesel PM and oxides of nitrogen (hereafter referred to as "NOx") emissions from agricultural engines, including evaluations of the cost-effectiveness of replacing in-use agricultural engines with electric motors;

WHEREAS, ARB staff investigated requiring in-use agricultural engine electrification in consultation with the U.S. Department of Agriculture, California Energy Commission, Pacific Gas and Electric, Southern California Edison, engine manufacturers and distributors/dealers, fuel delivery companies, California universities, the Agricultural Energy Consumers Association, the Agricultural Energy Subcommittee of the Agricultural Advisory Committee for Air Quality, and others;

WHEREAS, in a memorandum dated August 13, 2004, the Executive Officer reported to the Board that the selection of equipment and power source for agricultural applications is dependent on many variables requiring site-specific analyses and that electrification is not cost-effective or practical for all in-use agricultural engines;

WHEREAS, the Executive Officer further reported to the Board in a memorandum dated August 13, 2004, that ARB staff planned to work with the agricultural community, districts, and electric utilities to overcome economic and other obstacles to electrification while it developed proposed amendments to title 17, California Code of Regulations, section 93115 that would include a variety of compliance options, as well as electrification, for reducing in-use agricultural engine exhaust emissions;

WHEREAS, title 17, California Code of Regulations, section 93115 was amended on September 9, 2005, and since that time the districts, engine manufacturers, industry representatives, and others have raised several issues regarding existing requirements for stationary compression ignition engines primarily used in applications other than agriculture;

WHEREAS, ARB staff has worked closely with districts, affected industries, and the public to find solutions to these issues;

WHEREAS, ARB staff has concluded that the definition of CARB Diesel Fuel needs to be harmonized with ARB fuel regulations and that requirements to verify biodiesel, biodiesel blends, Fischer-Tropsch diesel, and emulsified diesel fuels in order to use them to fuel stationary compression ignition engines should be removed;

WHEREAS, ARB staff, in consultation with districts, industry representatives, and end users, has concluded that fuel reporting requirements for emergency standby engines are impractical for centralized fueling operations and should be streamlined;

WHEREAS, ARB staff, in consultation with districts, has determined that the existing definition of "maintenance and testing" does not provide additional hours to perform testing on an engine that breaks down and needs repair during routine maintenance operations and has determined that the additional hours needed to test the repaired engine should be counted as "maintenance and testing" hours and should not be considered as "emergency use;"

WHEREAS, ARB staff, in consultation with Vandenberg Air Force Base staff and the districts, has determined that the definition of "emergency use" needs to clarify that day-of-launch system checks and launch tracking at command destruct sites must occur within 24 hours of the scheduled launch time;

WHEREAS, consistent with the intent of title 17, California Code of Regulations, section 93115 to reduce the need for source testing through the installation of engines certified to Off-Road CI Engine Certification Standards in combination (if necessary) with a Verified Diesel Emission Control Strategy, ARB staff has determined that certified Tier 3 engine (or Tier 2 engine for engines greater than 750 horsepower) meeting a 0.15 grams per brake horsepower-hour (g/bhp-hr) PM emission standard and equipped with a Level 3 Verified Diesel Emission Control Strategy should be allowed to be an acceptable compliance option for meeting the less than or equal to 0.01 g/bhp-hr diesel PM emission standard;

WHEREAS, ARB staff has determined that districts should be allowed to exempt engines from title 17, California Code of Regulations, section 93115 provided they are used as engine test cells and test stands for testing burners or CI engines, for operation or performance testing of fuels, fuel additives, or emission control devices at research and development facilities, or exclusively for maintenance, repair, or rebuild training at educational facilities;

WHEREAS, ARB staff, in consultation with engine manufacturers, distributors, dealerships, and operators, has determined that title 17, California Code of Regulations, section 93115 should include a new engine "sell-through" provision that allows the sale and use of stationary CI engines certified to the Off-Road CI Engine Certification Standards (title 13, CCR, section 2423) immediately preceding the transition to new standards;

WHEREAS, ARB staff has determined that multiple sections in the regulation need to be renumbered and references updated to facilitate the determination of applicability of requirements;

WHEREAS, ARB staff has worked closely with air districts, affected industries, and the public, as required by Health and Safety Code section 39665, to prepare a report on the need for, and appropriate degree of, control of diesel PM from in-use agricultural engines and on the need for additional amendments to facilitate the implementation of existing requirements that primarily affect stationary compression ignition engines used in applications other than agriculture;

WHEREAS, the Staff Report: Initial Statement of Reasons for Proposed Requirements for Stationary Diesel In-Use Agricultural Engines (Initial Statement of Reasons), released September 29, 2006, along with the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles, approved by the Board on September 28, 2000, constitute the reports required under Health and Safety Code section 39665;

WHEREAS, the Initial Statement of Reasons discussed, to the extent data could reasonably be made available, the factors specified in Health and Safety Code section 39665(b);

WHEREAS, the Initial Statement of Reasons included a discussion of ARB staff's risk evaluations for diesel PM from in-use agricultural engines based on U.S. Environmental Protection Agency (U.S. EPA)-approved and ARB-recommended air dispersion models that indicate potential cancer risks for off-site receptor locations near agricultural engines up to levels exceeding 100 chances in a million;

WHEREAS, in accordance with Health and Safety Code section 39665(c), the Initial Statement of Reasons was made available for public review and comment beginning on September 29, 2006, at least 45 days prior to the public hearing to consider the proposed amendments to title 17, California Code of Regulations, section 93115;

WHEREAS, the proposed amendments, including draft versions, were discussed and made available to the public for review and comment at two public meetings on July 26, 2006, and at four public workshops on April 26, April 27, July 27, and September 20, 2006;

WHEREAS, in response to public comments made at the public consultation meetings and workshops and on other occasions during the 45-day public review and comment period for the proposed amendments, ARB staff is suggesting modifications to the originally proposed amendments to title 17, California Code of Regulations, section 93115 to remove limits on annual hours of operation for the remotely-located agricultural engine exemption, to remove a requirement for sellers to report annually on the operating hours at delivery for each engine sold, and to make minor changes to clarify the regulatory language.

WHEREAS, Attachment A hereto contains the originally proposed amendments to title 17, California Code of Regulations, section 93115 as they were set forth in Appendix A of the Initial Statement of Reasons (September 2006), and Attachment B hereto contains the ARB staff's suggested modifications to the original proposed amendments;

WHEREAS, the proposed amendments to title 17, California Code of Regulations, section 93115, as modified in Appendix B, would reduce emission of diesel PM and its associated risks by prohibiting the operation of agricultural engines in California that violate applicable emission standard, fuel-use, or reporting requirements by the specified compliance dates;

WHEREAS, the proposed amendments to title 17, California Code of Regulations, section 93115, as modified in Appendix B, would require owners or operators to register and pay fees for each new or in-use agricultural engine, except a new or in-use agricultural wind machine, to the district for the purposes of identifying affected engines and implementing and enforcing the proposed amendments to the ATCM;

WHEREAS, the Board has considered the impact of the proposed amendments to title 17, California Code of Regulations, section 93115 on the economy of the State and the potential for adverse economic impacts on California business enterprises and individuals;

WHEREAS, section 43013(b) authorizes ARB to establish emission standards for nonvehicle engine categories including but not limited to farm equipment;

WHEREAS, the California Environmental Quality Act and Board regulations require that no project which may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, a public hearing has been held in accordance with the provisions of chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code;

WHEREAS, pursuant to the Initial Statement of Reasons, written comments and public testimony it has received, the Board finds that:

1. Adverse health and environmental impacts result from the emissions of diesel PM from in-use agricultural engines, and mitigation measures are necessary to reduce these toxic air contaminant emissions and their impacts;

2. The proposed amendments to title 17, California Code of Regulations, section 93115 would minimize emissions of diesel PM from in-use agricultural engines by establishing requirements that are based on the application of BACT for diesel PM in accordance with section 39665(b) of the Health and Safety Code;

3. The proposed amendments to title 17, California Code of Regulations, section 93115 in combination with existing District rules, would reduce Statewide emissions of diesel PM and NOx by approximately 90 percent (440 tons per year and 9,400 tons per year, respectively) by 2022;

4. The proposed amendments to title 17, California Code of Regulations, section 93115 would reduce risks associated with exposure to diesel PM and would significantly reduce risks for receptors near engines by the implementation and enforcement of emission standards and by providing districts with information to conduct risk screens in accordance with district AB 2588 Hot Spots Programs in cases where emission standards are not sufficiently health protective;

5. The economic and cost impacts of the proposed amendments to title 17, California Code of Regulations, section 93115 have been analyzed as required by California law, and the analysis as set forth in the Initial Statement of Reasons, indicates that the typical capital cost for a business with one to three in-use agricultural engines will range from $6,900 to $33,000, with annual costs associated with registration and enforcement ranging from $26 to $242, or more depending on the district;

6. The proposed amendments to title 17, California Code of Regulations, section 93115 for stationary compression ignition engines that are primarily used in applications other than agriculture will not impose new standards, implementation timelines, or other requirements nor will these proposed amendments adversely affect public health or the environment, or result in adverse economic impacts; but, are necessary to clarify and/or remove specific inconsistencies, resolve implementation issues, and reduce the economic burden of sources subject to title 17, California Code of Regulations, section 93115;

7. No alternative considered or that has otherwise been identified and brought to the attention of ARB staff would be more effective at carrying out the purpose of title 17, California Code of Regulations, section 93115, or be as effective and less burdensome to the affected private businesses and public agencies than the proposed amendments;

WHEREAS, pursuant to the requirements of the California Environmental Quality Act and the Board's regulation, the Board further finds that based on its independent judgment and analysis of the whole record before it, composed of all materials in the rulemaking record that is available at the Board's offices, amended title 17, California Code of Regulations, sections 93115.1 through 93115.15 inclusive approved herein will not have a significant adverse effect on the environment;

WHEREAS, the Board further finds, in accordance with Health and Safety Code section 39650(e), that while absolute and undisputed scientific evidence may not be available to determine the exact risk from diesel PM from in-use agricultural engines, it is necessary to take action to protect public health and that the maximum emission reductions permitted by law should be obtained;

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves amendments to title 17, California Code of Regulations, sections 93115.1 through 93115.15 inclusive as set forth in Attachment A hereto, with the modifications set forth in Attachment B hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to incorporate the modifications described in Attachment B into the amendments contained in Attachment A, with such other conforming modifications as may be appropriate, including, but not limited to, modifications related to the use of 85 percent PM control devices, and then to adopt the modified amendments after making the modified regulatory language available for supplemental public comment for a period of 15 days, provided that the Executive Officer shall consider such written comments regarding the modifications as may be submitted during this period, shall make additional modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he/she determines this is warranted.

BE IT FURTHER RESOLVED that the Board directs ARB staff to assist the districts, as necessary, to:

1. Develop and implement registration programs for new and in-use agricultural engines;

2. Ensure that agricultural engines posing a significant risk to nearby receptors are identified and addressed in conjunction with district AB 2588 Hot Spots Programs; and

3. Ensure that Carl Moyer Program engine replacement incentive funding priority is given to applications for new electric motors and stationary diesel engines for use in agriculture.

BE IT FURTHER RESOLVED that the Board directs ARB staff to work closely with all stakeholders including engine manufacturers, California equipment dealers and distributors, and equipment end users to ensure that compliant new agricultural engines are available to meet emission standard compliance dates.

RECEIVED BY
Office of the Secretary
AUG 16 2007
NATURAL RESOURCES AGENCY OF CALIFORNIA

I hereby certify that the above is a true and correct copy of Resolution 06-39, as adopted by the Air Resources Board.

Lori Andreoni

Lori Andreoni, Clerk of the Board

Resolution 06-39

November 16, 2006

Identification of Attachments to the Resolution

Attachment A:	The Proposed Amendments to the Airborne Toxic Control Measure for Stationary Compression Ignition Engines (including the proposed adoption of title 17, California Code of Regulations, section 93115.1 through 93115.15 inclusive to supersede the requirements set forth in title 17, California Code of Regulations, section 93115) as set forth in Appendix A to the Initial Statement of Reasons, (released September 29, 2006).
Attachment B:	Staff's Suggested Modifications to the Original Proposal (distributed at the Board Hearing on November 16, 2006).