

State of California
AIR RESOURCES BOARD

Resolution 10-33

October 21, 2010

Agenda Item No: 10-9-2

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (ARB or Board) 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 ("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 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 airborne toxic control measures 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, on September 28, 2000, the Board adopted a comprehensive risk reduction plan to significantly reduce diesel PM emissions from diesel-fueled engines and vehicles;

WHEREAS, on February 26, 2004, the Board adopted Resolution 03-30 approving the Airborne Toxic Control Measure for Stationary Compression Ignition Engines (hereafter referred to as "ATCM") as set out in title 17, California Code of Regulations, section 93115. The ATCM was subsequently amended in 2006 to include exhaust emission limits for in-use engines used in agricultural operations;

WHEREAS, the ATCM establishes emission standards for diesel PM and other pollutants, as well as operating requirements for new and in-use stationary diesel engines. The emission standards are different depending on whether an engine is used as an emergency standby engine or as a prime engine;

WHEREAS, for new emergency standby engines, the ATCM requires engines to meet a 0.15 grams per brake horsepower hour (g/bhp-hr) diesel PM emission limit. In addition, these engines must meet the Off-Road Compression Ignition Engine Standards ("Off-Road Standards"), title 13, CCR, section 2423, for diesel PM when it is more stringent than 0.15 g/bhp-hr and the other pollutant standards for the model year of the engine. The Off-Road Standards specify a series of progressively more stringent emission limits, or "tiers," which vary based on engine power ratings;

WHEREAS, for new emergency standby engines, the Tier 4 Off-Road Standards specify more stringent emission limits for PM than the 0.15 g/bhp-hr PM standard in the ATCM. When these Off-Road Standards become effective, they will replace the previous 0.15 g/bhp-hr PM standard. The Tier 4 standards will generally require the use of after-treatment exhaust devices such as diesel particulate filters and selective catalytic reduction;

WHEREAS, after the ATCM was implemented, the United States Environmental Protection Agency (U.S. EPA) promulgated national New Source Performance Standards ("NSPS") for stationary diesel engines that were different from the ATCM for new emergency standby engines. The NSPS standards do not require new emergency standby engines to meet Tier 4 standards that would require after-treatment devices;

WHEREAS, ARB staff investigated the technical feasibility and cost-effectiveness of requiring new emergency standby engines to be equipped with after-treatment control devices and, based on the best available information, concluded:

- It is not cost-effective to routinely apply after-treatment technologies on these engines, which typically have low hours of annual operation,
- There are economic and operational constraints to the routine use of selective catalytic reduction after-treatment devices on emergency standby engines, and
- Tier 4 compliant emergency standby engines that rely on after-treatment controls would not be available directly from engine manufacturers, which means that "end-users" would need to arrange for the installation of after-treatment control devices on these engines from outside vendors;

WHEREAS, ARB staff, in consultation with the districts, affected industries, and members of the public, has concluded that it is appropriate to closely align the emission standards in the ATCM with those in the NSPS, subject to certain exceptions such as providing the districts with the ability to impose more stringent conditions on a site-specific basis where additional controls are warranted;

WHEREAS, ARB staff has concluded that it is appropriate to maintain the 0.15 g/bhp-hr PM limit in the existing ATCM for new emergency standby engines;

WHEREAS, ARB staff has concluded that for new emergency standby direct-drive fire pump engines, it is also appropriate to align with the emissions standards in the NSPS, which specifies standards similar to those for other emergency standby engines, but with a three year delay in implementation;

WHEREAS, ARB staff has concluded that for prime engines it is appropriate to align the ATCM with the NSPS Tier 4 final emissions standards and sell-through provisions when transitioning from one tier to the next;

WHEREAS, ARB staff has concluded that it is appropriate to further align with the NSPS standards for engines less than or equal to 50 horsepower;

WHEREAS, the proposed amendments also include various modifications and clarifications to existing regulatory language, including amending definitions, removing provisions no longer needed, and making various minor changes to correct errors or improve clarity;

WHEREAS, ARB staff worked closely with the districts, affected industries, and members of the public in developing the proposed amendments to the ATCM;

WHEREAS, the Staff Report: Initial Statement of Reasons for Proposed Amendments to the Airborne Toxic Control Measure for Stationary Compression Ignition Engines (Initial Statement of Reasons), released September 1, 2010, constitutes the report 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 the expected cost savings due to close alignment of the emissions standards in the ATCM with those in the NSPS. The cost savings would be realized by private businesses and public agencies when they purchase new stationary engines or replace engines with less expensive new models that would not require the addition of after-treatment control devices;

WHEREAS, the Initial Statement of Reasons included a discussion of the small decrease in the projected future emission reductions from the ATCM due to close alignment of the emissions standards in the ATCM with those in the NSPS. Emission reductions from stationary compression-ignition engines will still continue to decline significantly over time, and the ATCM will continue to ensure that the health risks from these engines are minimized;

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 1, 2010, at least 45 days prior to the public hearing to consider the proposed amendments;

WHEREAS, the proposed amendments, including draft versions, were discussed and made available to the public for review and comment at two public workshops on March 1, 2010, and June 21, 2010;

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;

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; and

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

1. Due to the low number of annual hours of operation, it is not cost-effective to routinely require the use of after-treatment technologies on new stationary emergency standby engines subject to the ATCM;

2. The proposed amendments to title 17, California Code of Regulations, section 93115, would closely align the emission standards for stationary emergency standby engines in the ATCM with subsequently promulgated federal NSPS standards which do not require the use of after-treatment emission control devices;
3. The economic and cost impacts of the proposed amendments have been analyzed as required by California law, and the analysis, as set forth in the Initial Statement of Reasons, indicates that the proposed amendments would result in estimated cost savings to affected private businesses and public agencies of \$46 million annually between 2010 and 2020;
4. The proposed amendments would result in a negligible change in greenhouse gas emissions;
5. The proposed amendments would result in small decreases in the future emission reductions of diesel PM and nitrogen oxides expected from the ATCM, due to closely aligning the emissions standards in the ATCM with those in the NSPS;
6. The loss of projected diesel PM emission reductions will be about 0.01 tons per day (T/D) in 2015 and 0.03 T/D in 2020 as compared to the current ATCM; these foregone emission reductions are about one hundredth of one percent (0.01%) of the total Statewide diesel PM emissions in 2015 and four hundredths of one percent (0.04%) in 2020;
7. The loss of projected NOx emission reductions will be about 0.4 T/D and 0.8 T/D in 2020; these forgone emission reductions are about one hundredth of one percent (0.01%) of total Statewide emissions of NOx and three hundredths of one percent (0.03%) in 2020;
8. The decreases in future emission reductions described above are very small, but could nevertheless constitute an adverse environmental impact;
9. The considerations identified above override any adverse environmental impacts that may occur as a result of these small decreases in future emission reductions;
10. Under the proposed amendments, the ATCM will continue to ensure that the risks from emergency standby engines are minimized for people living close to emergency standby engines;

11. Under the proposed amendments, the districts can require additional controls on stationary emergency standby engines where necessary on a site-specific basis, and under programs such as New Source Review and the Air Toxics "Hot Spots" Program (AB 2588), that work in concert with the ATCM to ensure that emissions and risks from stationary engines are adequately mitigated;
12. Except as identified above, there are no feasible mitigation measures or alternatives that would reduce the potential adverse environmental impacts, while at the same time ensuring that purpose of the proposed amendments would be achieved.
13. No reasonable 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 the proposed amendments, or be as effective and less burdensome to the affected private businesses and public agencies than the proposed amendments.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the proposed amendments to title 17, California Code of Regulations, sections 93115.3, 93115.4, 93115.6 through 93115.10, and 93115.13, as set forth in Attachment A hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to determine if additional conforming modifications to the regulation are appropriate. If no additional modifications are appropriate, the Executive Officer shall take final action to adopt the regulation, as set forth in Attachment A hereto. If the Executive Officer determines that additional conforming modifications are appropriate, the Executive Officer shall adopt the modified regulation after making the modified regulatory language and any additional supporting documents and information available to the public for a period of 15 days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make such further modifications as may be appropriate in light of the comments received, and shall present the regulation to the Board for further consideration if he determines that this is warranted.


BE IT FURTHER RESOLVED that the Board directs the Executive Officer to issue an advisory indicating that during the time period in which the amendments are being finalized, it will be permissible to purchase a new emergency standby engine without after-treatment.

BE IT FURTHER RESOLVED that the Board directs ARB staff to work closely with all stakeholders including the local air pollution control districts, engine manufacturers, California equipment dealers and distributors, and equipment end users to ensure that all parties are aware of the amendments to the emission standards and other provisions in the ATCM.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to send the amended ATCM to the districts for implementation and enforcement and to provide assistance to the districts in implementing and enforcing the ATCM.

BE IT FURTHER RESOLVED that the Board directs the staff to monitor the implementation of the amended ATCM and to propose amendments to the ATCM for the Board's consideration when warranted to resolve any implementation problems, to achieve additional feasible emission reductions, and to reflect any changes to BACT for stationary diesel-fueled engines.

I hereby certify that the above is a true and correct copy of Resolution 10-33, as adopted by the Air Resources Board.


Mary Alice Morency, Clerk of the Board

Resolution 10-33

October 21, 2010

Identification of Attachments to the Resolution

Attachment A: The Proposed Amendments to the Airborne Toxic Control Measure for Stationary Compression Ignition Engines as set forth in Appendix A to the Initial Statement of Reasons, (released September 1, 2010).