California Environmental Protection Agency Air Resources Board

Final Statement of Reasons for Rulemaking

Including Summary of Comments and Agency Responses

PROPOSED AMENDMENTS TO THE AIRBORNE TOXIC CONTROL MEASURE FOR STATIONARY COMPRESSION IGNITION ENGINES (Stationary Diesel Engine ATCM)

Public Hearing Date: October 21, 2010

Agenda Item No.: 10-9-2

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State of California AIR RESOURCES BOARD

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I. GENERAL

The Staff Report: Initial Statement of Reasons for Rulemaking ("Staff Report") entitled "Proposed Amendments to the Airborne Toxic Control Measure for Stationary Compression Ignition Engines" released on September 1, 2010 is incorporated by reference herein.

In this rulemaking, the Air Resources Board (ARB or Board) adopted amendments to the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines. The amendments will closely align the ATCM emission limits with the U.S. Environmental Protection Agency's (U.S. EPA) federal Standards of Performance for Stationary Compression-Ignition Internal Combustion Engines (NSPS). For new emergency standby engines, the amendments removed the provision in the ATCM that would have required new emergency standby engines to meet after-treatment based emission standards beginning in 2011. Consistent with NSPS, the amendments require that new emergency standby engines be certified to the U.S. Environmental Protection Agency's Nonroad Standards (40 CFR Parts 9, 69 et.al.). Other minor amendments include clarification of the requirements for prime engines, modification of the sell-through requirements, conforming changes to definitions, and modification of reporting requirements.

The rulemaking was initiated by the September 1, 2010 publication of a notice for public hearing on October 21, 2010. A "Staff Report: Initial Statement of Reasons" (staff report or ISOR) was also made available for public review and comment starting on September 1, 2010. The Staff Report contains an extensive description of the purpose and necessity for the amendments to the regulation. The text of the proposed amendments to title 17, California Code of Regulations (CCR), section 93115 was included as Appendix A to the Staff Report. These documents were posted on ARB's Internet website for the rulemaking at:

http://arb.ca.gov/regact/2010/atcm2010/atcm2010.htm.

On October 21, 2010, the Board conducted the public hearing and received oral and written comments. At the conclusion of the hearing, the Board adopted Resolution 10-9-2, which approved the proposed amendments without modification. The Board also instructed staff to issue an Implementation Advisory to let potential buyers know that it will be permissible to purchase a new emergency standby engine without after-treatment devices while the amendments are finalized.

Fiscal Impacts. In developing the amendments, ARB staff evaluated the potential economic impacts on representative private persons, businesses, and public entities. According to those evaluations, approximately \$46 million will be saved annually between 2010 and 2020. Approximately half of this savings will be attributed to private businesses and half to public entities. A complete assessment of the economic impacts of the amendments is presented in the Staff Report.

The Executive Officer has determined that this regulatory action will not create costs to any State agency, or in federal funding to the State, and will not create costs or mandate to any local agency or school district. This regulatory action will result in cost savings for those public agencies that purchase new emergency standby engines. The Executive Officer also has determined that the amendments will have no adverse impact on business competiveness, employment, business creation, elimination, or expansion. The proposed regulatory action may result in the creation of jobs or businesses, or expansion of businesses if the cost savings are invested in productive assets other than emergency standby engines equipped with after-treatment.

Consideration of Alternatives. The regulatory amendments in this rulemaking were the result of extensive discussions involving ARB, engine manufacturers, the local air pollution and air quality management districts (Districts), and key stakeholders. As discussed in the Staff Report, staff evaluated and ultimately rejected three regulatory alternatives: (1) enforce the existing ATCM which will require Tier 4 engines with aftertreatment control devices for new emergency standby engines beginning in 2011, ¹ (2) require new emergency standby engines to be retrofitted with an aftermarket DPF, and (3) require new emergency standby engines to meet the Tier 4 interim emission standards.

For the reasons set forth in Chapter III of the Staff Report, in staff's comments and responses at the hearings, and in the FSOR, the Board has determined that none of the alternatives considered by the agency or that have otherwise been identified and brought to the attention of the agency would be more effective in carrying out the purpose for which the regulatory action was proposed or would be as effective and less burdensome to affected private persons than the action taken by the Board.

emission standards, the Tier 4 interim and the Tier 4 final.

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¹ The ARB and the U.S. EPA have adopted essentially the same emissions standards for off-road diesel engines. These diesel engine standards are phased in over several years and have Tiers, i.e. Tier 1, 2, 3, and 4; with increasing levels of stringency. The Tier 4 standards are broken into two subsets of

II. SUMMARY OF COMMENTS AND AGENCY RESPONSES TO THE ORIGINAL PROPOSAL

The Board received both written and oral comments during the formal 45-day rulemaking comment period which began with the notice publication on September 1, 2010 and ended with the Board hearing on October 21, 2010.

We received written and/or oral comments in support of the regulation or the rulemaking process from the following persons:

Timothy A. French, Engine Manufacturers Association (Written and Oral) Randal Friedman, Department of Defense (Oral)

These comments were in support of the regulation amendments and thus are not separately summarized and responded to in this FSOR.

Written comments were also provided by the three persons identified below. Following the list is a summary of each objection or recommendation made regarding the proposed action, together with an explanation of how the proposed action has been changed to accommodate the objection or recommendation or the reasons for making no change. The comments have been grouped by topic whenever possible.

Comments Received During the 45-day Comment Period (Excluding Statements in Support of the Regulation)

Abbreviation	Commenter
Roxon	Dana F. Roxon, P.E.
	Assistant Manager
	Marin Municipal Water District
	Written testimony: September 10, 2010
Ahdout	Saeed Ahdout
	Written testimony: October 15, 2010
BCAQMD	David Lusk
	Senior Air Quality Engineer
	Butte County Air Quality
	Management District
	Written testimony: October 20, 2010

A. NOx BACT Requirements

Comment: The ATCM addresses the PM issue, but it seems that the NOx limit is imposed by the local air district for the emergency generator, which does not ease the Best Available Control Technology (BACT) requirement. Compliance with the NOx limit for Tier I or II engines can only be met by installing selective catalytic reduction (SCR), which can exceed the actual cost of the generator. (Ahdout)

Agency Response: The commenter is correct in his assumption that the proposed amendments will not change the District BACT requirements for emergency standby engines. The focus of the amendments was to amend the requirements for these engines in the ATCM, not to revise oxides of nitrogen (NOx) BACT requirements. The District NOx BACT requirements are necessary to ensure that a new installation does not compromise the ability to attain the federal and state ozone standards. Furthermore, the commenter is incorrect in his assumption that BACT for emergency standby engines will necessitate installation of SCR. There may be some unique situations where SCR devices may be necessary to control the NOx emissions from an emergency standby engine. However, for the vast majority of emergency standby engines, SCR devices have not been required to meet District NOx BACT for these engines, and staff does not anticipate this practice to change in the near future.

B. Emergency Standby Engine Requirements

Comment: The proposed amendments do not harmonize the requirements of new emergency standby engines less than 175 hp. This disjoint will continue to cause confusion for the regulated community. A person may purchase an engine that does not meet the standard and would be forced to purchase a new engine or install a diesel particulate filter (DPF). The District would recommend the diesel PM standards be amended to match the off-road standards completely. (BCAQMD)

Agency Response: The commenter is correct in that the proposed amendments do not completely harmonize with the NSPS for less than 175 hp engines. For these engines, the diesel particulate matter (PM) standard will remain at 0.15 grams per brake-horsepower-hour (g/bhp-hr). Engines meeting 0.15 g/bhp-hr are currently available and therefore represent best available control technology for diesel PM. This standard has also been in effect since January 1, 2005 and it is not appropriate to amend the PM standard for these engines. This PM emission limit ensures that the potential cancer risk is mitigated from these smaller engines and is necessary to protect public health and improve air quality. In addition, operators should not have to install a DPF to meet this standard as engines are available off-the-shelf that can meet the PM emission standard. In order to help operators identify compliant engines, ARB staff maintains a website that provides a list of engines by model year that can meet the 0.15 g/bhp-hr PM. See http://www.arb.ca.gov/diesel/ag/agengtables.htm.

Comment: The ARB should give favorable consideration to an amendment to the Bay Area Air Quality Management Districts Regulation 9, Rule 8, Section 9-8-231 to include another definition of "emergency use." Specifically, the definition of emergency use should include the pumping of water for municipal use during a drought emergency, in areas where electric power is not readily available. (Roxon)

Agency Response: The commenter requests that the BAAQMD modify the definition of emergency use in District Regulation 9. Regulation 9 "Nitrogen Oxide and Carbon Monoxide from Stationary Internal Combustion Engines," is a BAAQMD regulation designed to reduce nitrogen oxide and carbon monoxide from stationary spark-ignited and diesel engines. As such, the comment does not raise any objections or recommendations directed to the ATCM amendments and it is not necessary to respond as part of this rulemaking.