

VIA EMAIL
August 25, 2005

Mr. Mark Prettyman
Environmental Scientist
Delaware DNREC-AQM
Dover, Delaware

**RE: PUBLIC COMMENTS ON PROPOSED REGULATION NO. 1144:
CONTROL OF STATIONARY GENERATOR EMISSIONS**

Dear Mr. Prettyman:

The Engine Manufacturers Association (EMA) is the national trade association representing the manufacturers of internal combustion engines. Our 27 member companies produce the engines that are used in heavy-duty trucks and buses, construction and farming equipment, lawn and garden equipment, marine vessels, locomotives and stationary sources such as emergency and prime power generators, gas and pipeline compression operations, and direct drive power sources. In particular, EMA members manufacture and market engine systems and generators utilizing diesel-fueled compression ignition and gaseous-fueled reciprocating engines that are the subject of the proposed Regulation 1144 – Control of Stationary Generator Emissions. As such, EMA members and their products are directly affected by the requirements and emissions standards of the proposed regulations.

EMA participated in the stakeholder workshops and provided written comments and recommendations on previous versions of the proposed Regulation 1144. This stakeholder involvement provided an important opportunity for all interested parties to participate in the regulatory development process and to offer recommendations to improve the proposed regulation. EMA appreciates the efforts of the Department of Natural Resources and Environmental Control Staff to listen to, and incorporate, many of our recommendations into the final proposed rule. The stakeholder process was a valuable tool that served to develop a reasonable and feasible regulatory control programs for stationary engines in Delaware

In response to the Notice of Public Hearing and Call for Comments, EMA submits the following comments for inclusion in the public record.

In general, EMA supports DNREC's overall approach to regulating stationary generator emissions in the state and believes that the proposed emission standards are technically feasible. The proposed emissions standards for new stationary engines strike the proper balance between the desire to reduce emissions from stationary engines to improve Delaware's air quality while at the same time allowing for the use of distributed generation to serve the needs of business and government. Specifically, the proposed NO_x emissions standard of 2.2 lbs/MW-hr will require that new facilities be equipped with state-of-the art, gaseous-fueled engines or compression-ignition engines with aftertreatment. The proposed NO_x standard is sufficiently stringent to protect air quality in the state while allowing the introduction of highly efficient natural gas

engines that can achieve the standard without the use of expensive aftertreatment systems. This balanced approach will encourage the deployment of additional distributed generation and combined-heat and power installations that will help assure a more stable and dependable system of electricity generation.

The regulation also establishes achievable future standards that are contingent on a technical review of the state of the technology prior to implementation of the 2012 standards. This sets a reasonable course for future emission reductions that should parallel the anticipated technology developments in the industry.

Although supportive of the general approach and emissions standards proposed in Regulation 1144, EMA has the following specific comments that should be revised before the regulation is finalized.

- EMA continues to object to the inclusion of CO₂ as a pollutant in the regulation. CO₂ is not a federally regulated pollutant, and engine manufacturers currently neither control nor test engines for the levels of this exhaust component. Other than increasing efficiency, there is no way to control CO₂ emissions. Despite the fact that stationary engines should not have any difficulty in meeting the proposed standards, EMA continues to believe that it is inappropriate to regulate CO₂ as a pollutant in Regulation 1144.
- The emissions standards for new emergency generators in Section 3.1.2 need to be clarified to ensure that aftertreatment devices are not required. EMA supports the concept that emergency generators comply with emissions standards established by the US EPA for nonroad engines as identified in Chapter 40 of the Code of Federal Regulations. In general, new emergency generators should be required to meet Tier 2 and Tier 3 emissions standards as they are phased in for the horsepower range of the emergency engine.

However, EPA has recently approved the new Tier 4 nonroad regulations that will be effective starting in 2011. These Tier 4 nonroad standards are sufficiently stringent to force the use of aftertreatment devices on mobile, nonroad engines to control particulate matter (PM) and NO_x emissions. Engine manufacturers do not support the use of aftertreatment devices on compression-ignition engines used in emergency applications since the aftertreatment devices may adversely affect the required performance and operation of the engine under emergency conditions.

Emergency engines must meet very stringent performance standards that are required by national codes and standards. Since emergency engines are needed to support life-saving functions or prevent significant economic losses, it is critical that these engines meet their performance requirements. The addition of aftertreatment devices to control emissions has the potential to decrease engine performance or cause failures, and therefore should not be required on emergency engines. In addition, emissions from emergency engines are small since they operate so infrequently.

Section 3.1.2 needs to be modified to clarify that emergency engines only need to meet Tier 2 and Tier 3 nonroad standards and not the newly developed Tier 4 standards. The reference to

Chapter 1039 and 1048 should be removed. Alternatively, the regulation could state that emergency engines are required to meet the recently proposed US EPA NSPS regulation for compression ignition engines which will not require emergency engines to use aftertreatment devices.

- The emissions standards of Section 3.2.2 for new distributed generators using landfill and digester gases should apply to engines greater than 200 hp. Because engines using these fuels generally cannot use aftertreatment, applying the 2.2 lbs standard to very small engines may preclude operators from uses small sources of these fuels for distributed generation. Lean burn engines that can meet the proposed emissions standards are not available in this smaller horsepower range.
- Previous versions of the regulation required that suppliers certify their equipment to meet the emissions standards for a period of 15,000 hours or 3 years of operation. EMA commented previously that no manufacturer would be able to certify or guarantee that their product would remain in compliance for that length of time and that such requirements were well beyond what the US EPA requires for mobile source engines.

Regulation 1144 proposes that suppliers certify their products for 3,000 hours or five years of operation, whichever is less. The 3,000 hour certification time period is much more reasonable and within the bounds of normal industry practice. However, the standard industry practice for stationary engines and generators is to warrant or guarantee products and emissions for one year. Consequently, while manufacturers would certainly be able to certify emissions for 3,000 hours of operation, the proposed five year time period still goes beyond current industry standards. EMA recommends that the time period for compliance to the standards be set be at one year instead of 5 years.

- The regulation should clarify that if a supplier certifies a generator in accordance with Section 7.1 of the proposed regulation that the owner does not have to verify the compliance with the emissions standards as required by Section 7.3. It appears redundant to have the owner verify the level of a generator's emissions if that generator is certified and already has a label so indicating.

EMA believes that the proposed regulation is much improved and provides an appropriate balance between air quality and economic feasibility. The proposed emissions standards for Distributed and Emergency Generators are technically feasible and can be met by today's new low-emissions engine technology. The proposed 2005 standards will also serve to encourage clean-distributed generation in the State.

Please feel free to contact me if you have any questions, or if EMA can be of additional assistance.

Sincerely,
Joe Suchecki
Joseph L. Suchecki
Director, Public Affairs