

**EXECUTIVE COMMITTEE**

**PRESIDENT**

**Marian A. Orfeo**

*Director of Planning*

*& Coordination*

*Massachusetts Water*

*Resources Authority*

*Boston, MA*

**VICE PRESIDENT**

**Kevin L. Shafer**

*Executive Director*

*Milwaukee Metropolitan*

*Sewerage District*

*Milwaukee, WI*

**TREASURER**

**Jeff Theerman**

*Executive Director*

*Metropolitan St. Louis*

*Sewer District*

*Saint Louis, MO*

**SECRETARY**

**David R. Williams**

*Director of Wastewater*

*East Bay Municipal*

*Utility District*

*Oakland, CA*

**PAST PRESIDENT**

**Christopher M. Westhoff**

*Assistant City Attorney*

*Public Works General Counsel*

*City of Los Angeles*

*Los Angeles, CA*

**EXECUTIVE DIRECTOR**

**Ken Kirk**

June 3, 2009

Air and Radiation Docket and Information Center

Environmental Protection Agency

1200 Pennsylvania Avenue, NW

Washington, DC 20460

Submitted via [www.regulations.gov](http://www.regulations.gov)

**Re: Docket ID No. EPA-HQ-OAR-2008-0708**

The National Association of Clean Water Agencies (NACWA) appreciates the opportunity to comment on the proposed national emission standards for hazardous air pollutants (NESHAP) for stationary reciprocating internal combustion engines (RICE). NACWA represents the interests of nearly 300 publicly owned wastewater treatment agencies nationwide, serving the majority of the sewered population in the U.S. The proposed NESHAP affect NACWA members because various aspects of the wastewater treatment process require that they purchase, own, and operate many reciprocating engines which are fired on various fuels. NACWA supports parts of the proposed NESHAP, but has concerns about specific proposed requirements and their impact on wastewater utilities.

**Carbon Monoxide Limits for Digester Gas Engines**

NACWA supports the use of carbon monoxide as a surrogate for hazardous air pollutants (HAPs), which will simplify compliance and reduce costs for utilities. NACWA is concerned, however, that the carbon monoxide emissions limits are too stringent for existing RICE, especially for those engines that use landfill or digester gas and those that are used for emergency situations. The digester gas generated in the wastewater treatment process contains methane, a potent greenhouse gas, which can be beneficially used to power engines while simultaneously reducing a utility's reliance on other fuel sources and reducing greenhouse gas emissions. Low emissions levels may be an appropriate requirement for new engines, but the cost to retrofit existing digester gas engines and install emissions controls has not been justified in the proposed rule. The cost-benefit analysis summary contained in the proposed rule is insufficient, and a more detailed analysis for digester gas engines should be conducted and presented. New emissions controls on existing engines are likely to cost millions of dollars for each utility, a serious financial burden. Utilities should be encouraged to continue using their existing digester gas engines, rather than face a situation where it is more cost-effective to purchase power from an electric utility and to waste a valuable fuel source by flaring the digester gas.

EPA proposes a stringent emissions limit of 177 parts per million by volume on a dry basis (ppmvd) carbon monoxide for the major source RICE subcategory of Landfill/Digester  $50 \leq \text{HP} \leq 500$  and the area source RICE subcategory of Landfill/Digester Gas  $\text{HP} > 500$ , which the Agency determined was the maximum achievable control technology (MACT) limit. The documentation for this determination is inadequate in the proposed rule, however. The average of the best performing 12 percent of engines that EPA reportedly selected for determining MACT under the Clean Air Act may not be representative of the types of engines that utilities operate to perform wastewater treatment functions, or may not be representative of engines that operate in Air Basins that had to modify their combustion settings to achieve low NO<sub>x</sub> emission limits. Obtaining the proposed emissions limits may not only be costly for wastewater utilities, it may be technically infeasible. EPA states that its Population Database shows no existing landfill or digester gas engines using catalyst type controls, that compounds in landfill and digester gas can foul add-on catalyst controls, and that pretreatment systems to clean the fuel before combustion are currently not a reliable technology. EPA does not provide any alternatives that can be used to meet the low proposed carbon monoxide limits.

Because of the technical problems involved with emissions controls, EPA should either raise the proposed carbon monoxide limits or substitute an operation limitations and maintenance practices standard for all existing digester gas RICE, as EPA has proposed for the area source RICE subcategory Landfill/Digester Gas  $50 \leq \text{HP} \leq 500$ . NACWA supports this maintenance and inspection standard and would support an identical or similar requirement for other subcategories of digester gas engines.

#### Emergency Spark Ignition (SI) Engines

As with digester gas engines, NACWA is concerned that the proposed limit of 2 ppmvd formaldehyde is too low for the major source RICE subcategory of Emergency SI  $50 \leq \text{HP} \leq 500$  and the area source RICE subcategory of Emergency SI  $\text{HP} > 500$ . These emergency engines are rarely used, and expensive new emissions controls on existing engines are not justified by the benefits of reducing emissions. EPA should use a different method, rather than the low formaldehyde level, to control emissions from emergency use engines. One alternative is the maintenance and inspection standard used for the subcategory Emergency SI  $50 \leq \text{HP} \leq 500$  at area sources, and another alternative is the approach taken by the California Air Resources Board to restrict the number of hours that an emergency engine can operate. NACWA supports the maintenance and inspection standard for the area source RICE subcategory Emergency SI  $50 \leq \text{HP} \leq 500$  and would support an identical or similar requirement for other emergency engines, or a standard that reasonably limits the operating time of emergency engines.

#### Startup, Shutdown, or Malfunction Periods

The proposed rule does not provide any relaxation of the stringent emissions limits for most subcategories of engines during periods of startup, shutdown, or malfunction (SSM). EPA notes in the proposed rule that startup and malfunction are not exempt from the new proposed standards because of the December 19, 2008 *Sierra Club v. EPA* decision in the Court of Appeals for the District of Columbia Circuit, which vacated the SSM exemption. Because EPA is still evaluating this decision and has time to appeal it, the Agency should delay establishment of SSM emissions requirements as low as those proposed for normal operation. EPA admits in the proposed rule that it “does believe that emissions will likely be different during periods of startup and malfunction,” and that it does not have specific data on emissions during start-up and malfunction. NACWA believes that EPA should take more time to collect data on emissions during these events, and on the effectiveness and costs of emissions controls, before finalizing a rule that will prove costly to utilities and other users of stationary RICE.

Clarification for Landfill/Digester Gas Engines at Major Sources

Landfill/Digester Gas HP>500 is included as an area source RICE subcategory in Table 2, but not as a major source RICE subcategory in Table 1. The proposed rule should clarify the status of this RICE subcategory for major sources. Some engines that use digester gas with HP>500 are compression ignition (CI) engines, which makes it appear that they could fall under the major source RICE subcategory of Non-Emergency CI>300 HP, with a 4 ppmvd carbon monoxide or 90% carbon monoxide reduction standard. EPA should clarify that this standard only applies to diesel engines, not to landfill/digester gas engines, if that is indeed the intent of the proposed rule.

Thank you for consideration of our comments on the proposed NESHAPs for RICE. Please contact me at 202/296-9836 or [cfinley@nacwa.org](mailto:cfinley@nacwa.org) if you have any questions about NACWA's comments.

Sincerely,

A handwritten signature in cursive script, reading "Cynthia A. Finley".

Cynthia A. Finley  
Director, Regulatory Affairs