

CENTRAL STATES WATER

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CSWEA 2012 BUYERS' GUIDE

Central States Water Environment Association
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PROFILE: Village of Bartlett
Wastewater Treatment Plant



Your Facility's Engines/Generators Are Regulated

By Renee Lesjak Bashel, Project Manager and Megan Corrado, Project Engineer, SCS BT Squared

In 2004, the U.S. Environmental Protection Agency (USEPA) initiated what was to be a complicated set of regulations affecting reciprocating internal combustion engines (RICE) under the National Emission Standards for Hazardous Air Pollutants (NESHAPs). USEPA's RICE rule is known by many names: 40 CFR Part 63 Subpart ZZZZ, Quad Z NESHAP, or RICE MACT, to name a few. At first the rule only applied to big emitters of air pollution (otherwise known as major sources). After changes in 2008 and 2010, the rule now includes all stationary RICE, regardless of the amount of emissions a facility produces. The most recent rule changes have compliance dates that are quickly approaching. Depending on the engine type, deadlines fall in either May or October of 2013.

A wide range of industries as well as commercial and institutional operations (e.g., malls, hospitals, and local government) who have never had to meet state or federal air pollution standards may have to meet the RICE rule requirements. Newly regulated entities include water and wastewater utilities that have backup engines

to keep their pumps on during power outages. While there are some exemptions for residential, commercial, and institutional facilities, USEPA guidance dated August 9, 2010, has established that wastewater treatment plants are not exempt from this rule.

The RICE rule has over 70 different applicability combinations, which

depend on multiple variables: facility-wide emissions, engine age, size (hp), use (emergency or non-emergency), and fuel type. One requirement that will have a big impact on small sources of air pollution (otherwise known as area sources) is that those with old (pre-June 12, 2006) stationary engines on interruptible rate agreements (non-



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emergency) will be required to install emissions controls. These controls can cost on the order of roughly \$20,000 to \$30,000 per engine.

Earlier this year, USEPA proposed changes to the RICE rule that would allow emergency engines operating under interruptible rate agreements to run for up to 50 hours per year before controls are required. This possible reprieve will only be temporary. The 50 hours per year allowance will expire in 2017, if the rule is amended as proposed. If that proposed change does not make it into the final rule, then required controls will still need to be installed by the applicable compliance date in 2013.

Not all engines will need controls. Engines that are less than six years old (ordered on or after June 12, 2006),

whether emergency or not, can simply comply with the rule if they can be certified as Tier 2 engines. Newer engines that cannot be certified as Tier 2 will likely have to install controls to meet the emissions standards in the RICE rule.

Older emergency engines can meet the regulatory requirements through maintenance and work practices that include oil and filter changes, and inspections of the air cleaner, hoses, and belts at pre-determined frequencies. Maintenance logs are also required to document compliance with the rule. Maintenance and recordkeeping requirements are still in force in 2013, irrespective of the proposed change.

In addition to money, coming into compliance also requires time. Because of the variables involved, it may take

a while to figure out what emission limits apply to each engine, conduct a cost/benefit analysis to determine if an interruptible rate agreement is worth maintaining, submit notifications to the USEPA, and have controls installed. Anyone required to install controls will also have to conduct emissions testing to prove they meet the standards.

Most of these actions are required by the RICE rule (with the exception of the cost/benefit analysis, of course). However, conducting a cost/benefit analysis may be worthwhile. Some have come to the conclusion that staying on an interruptible rate agreement is worth allowing large old diesel engines to be considered non-emergency under this rule, due to a two- to three-year return on investment.

The proposed amendment to this rule is not expected to be issued final until early 2013, possibly by March. With the current compliance dates coming as early as May 2013 for some, and the uncertainty of the final rule changes, it may be the right time to consider requesting an extension for meeting the RICE rule requirements. Extensions of up to one year may be granted, provided that the extension request is made at least 120 days prior to the applicable compliance date. This means that an extension request would have to be submitted by either February 2013 or July 2013 (again, depending on engine type).

It is important to note that ALL stationary RICE are regulated under this federal rule. If you do not know how your facility is affected, a good place to start is taking an inventory of all stationary RICE on your property, no matter how small.

For more information regarding how air rules apply to your facility's engines, please feel free to contact us at 608-224-2830 or see our article on page 40 of the Fall 2011 issue of *Central States Water*. [CS](#)

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