

Reciprocating Internal Combustion Engines (RICE) Regulatory Alert



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Do you own or operate a generator run by a reciprocating internal combustion engine? If so, you are subject to the requirements of at least one of three federal regulations. This article briefly summarizes the requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 subpart ZZZZ, commonly referred to as the "RICE" rule.

A Reciprocating Internal Combustion Engine (RICE) uses pistons to alternatively move back and forth to convert pressure into rotating motion, and is the type of engine used in electrical generators. RICE may be used at any size printing plant to generate electricity. The more common reasons for operating RICE are to generate electricity during power outages or to generate electricity as part of an agreement with the local utility for "interruptible" service.

Some engines are exempt from the RICE rule, albeit they are still obligated to comply with 40 CFR 63 subpart ZZZZ operational requirements described below. The exemption applies to existing emergency engines, and is any existing engine located at an area source of hazardous air pollutants (a facility emitting low levels of hazardous air pollutants), and which is used or obligated to be available no more than 15 hours per year for emergency demand response, and is not used for local reliability. It is an "existing" engine if it was constructed (ordered)

before June 12, 2006, regardless of its size.

An existing emergency engine can be operated for an unlimited period of time during emergencies (e.g.,

power outage, fire, flood) and may operate for 100 hours per year for maintenance check and readiness testing provided that the tests are authorized by the RICE rule (see §63.6640(f)(3) and (4)). Emergency stationary RICE also can be operated up to 50 hours per year for non-emergency situations, which are counted towards the 100 hours per year for maintenance check and readiness testing, but cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

If you own and operate a RICE classified as an existing emergency engine (backup generator), the regulatory requirements extend to operational standards including having to operate and maintain the engine and control device, if any, in accordance with the manufacturer's instructions; conduct routine oil analyses or change the oil across a prescribed schedule; equip the generator with an hour meter and record hours of operation; keep records of maintenance; and in some circumstances, file an annual report for emergency engines used for emergency demand response or local reliability.

Regulatory update: if your RICE was previously classified as an emergency engine and was used for emergency demand response during periods in which an Energy Emergency Alert level 2 was declared or was operated for periods when there was a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency, the U.S. Court of Appeals for the District of Columbia Circuit recently vacated these provisions, and engines used for these purposes no longer qualify for "emergency" status. If the engine(s) was re-designated as a result of the vacatur, initial performance testing and initial notifications are required. Final amendments were posted on June 28, 2016. As of this update, these have not been published in the Federal Register.

If your RICE does not meet the definition of an "existing emergency engine" as described above, the RICE rule, as well as New Source Performance Standards found at 40 CFR Part 60, may be applicable. These rules are summarized by EPA at <https://www3.epa.gov/region1/rice>.

For more information or for any assistance you may need navigating the regulatory requirements for RICE, contact Ann O'Brien (aobrien@scsengineers.com) or Cheryl Moran (cmoran@scsengineers.com) at SCS Engineers in Madison, WI.

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Your RICE may no longer qualify for 'emergency' status and may be subject to New Source Performance Standards.