

This is a new permit condition titled, "2D .1111 Subpart ZZZZ, Part 63 (Existing Emergency SI located at an area source Non-commercial, Non-residential or Non-institutional facility)" and linked to 2D .1111. If an existing emergency SI engine at a Commercial/ Resid./ Institutional facility classified as an area source cannot meet the exemption requirements of NESHAP Subpart ZZZZ {§63.6585(f)} then the engine must meet this compliance option/permit condition.

Note to Permit Writer: If an engine commences construction at an area source prior to June 12, 2006 then it is considered existing.

1. 15A NCAC 2D .1111 "National Emission Standards for Hazardous Air Pollutants"- For the XXXXXXXX (ID No. XX), the Permittee shall comply with all applicable provisions, including the maintenance and recordkeeping requirements contained in Environmental Management Commission Standard 15A NCAC 2D .1111, as promulgated in 40 CFR 63, Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)", including Subpart A "General Provisions." The Permittee shall comply with the definition of emergency stationary RICE in 40 CFR 63.6675 and the following stationary RICE provisions.
 - a. Compliance Date - The compliance date is October 19, 2013.
 - b. Maintenance and Work Practice Standards - Pursuant to 40 CFR 63.6603(a), 63.6605, 63.6625(e), (f), (h) and (j), and 63.6640(f) the Permittee shall comply with the following:
 - i. Change the oil and filter every 500 hours of operation or annually, whichever comes first. The Permittee has the option to use an oil analysis program as described in Section c. below in order to extend the specified oil change requirements.
 - ii. Inspect the spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
 - iv. Operate and maintain the engine and control device (if any) according to the manufacturer's emission related written instructions or maintenance plan developed by the Permittee that minimizes emissions from the engine to the extent practicable.
 - v. Install a non-resettable hour meter if one is not already installed.
 - vi. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

- vii. If the engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedules required in Sections b.i., b.ii., and b.iii., above, or if performing the management practice on the required schedules would otherwise pose an unacceptable risk under federal, state or local law, the management practices can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice shall be performed as soon as possible after the emergency has ended or the unacceptable risk has abated. The Permittee shall report any failure to perform the management practice on the schedule required and the federal, state, or local law under which the risk was deemed unacceptable.
- viii. If the Permittee does not operate the engine according to the requirements in Sections A. through C. below, then the engine will not be considered an emergency engine under NESHAP Subpart ZZZZ and must meet all requirements for non-emergency engines.
 - A. There is no time limit on the use in emergency situations.
 - B. The Permittee may operate the engine for any combination of the purposes specified in Sections I through III below for a maximum of 100 hours per calendar year.
 - I. The engine may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission authority or equivalent balancing authority and transmission operator, or the insurance company associated with the engine.

The Permittee may petition the Division of Air Quality (DAQ) Regional Supervisor for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of the engine beyond 100 hours per calendar year.

- II. The engine may operate for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergency or other authorized entity as determined by the Reliability Coordinator has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP- 002-3.

- III. The engine may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

- C. Pursuant to 40 CFR 63.6640(f)(4), the engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in Section b.viii.B above. Except as provided in Sections I and II below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - I. Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for the facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

 - II. On or after May 3, 2014, the 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if ALL of the following conditions are met:
 - 1. The engine is dispatched by the local balancing authority or local transmission or distribution system operator.
 - 2. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - 3. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - 4. The power is provided only to the facility itself or to support the local transmission and distribution system.
 - 5. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing

authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

- ix. At all times the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to DAQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

- c. Oil Analysis Program - Pursuant to 40 CFR 63.6625(j), the Permittee may use an oil analysis program in order to extend the oil change requirements specified in Section b.i. above. The oil analysis must be performed at the same frequency specified for changing the oil. If any of the limits listed below are exceeded, the Permittee shall change the oil within two (2) business days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, then the oil must be changed within two (2) business days or before commencing operation, whichever is later.
 - i. Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; or
 - ii. Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or
 - iii. Water content (by volume) is greater than 0.5%.

If all of the above limits are not exceeded, the Permittee is not required to change the oil before continuing to use the engine.

- d. Recordkeeping - Pursuant to 40 CFR 63.6655(e) and (f), the Permittee shall keep records for at least five (5) years showing:
 - i. The engine was operated and maintained according to the manufacturer's emission related operation and maintenance instructions or the Permittee's maintenance plan which must provide for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
 - ii. If applicable, the parameters that are analyzed as part of the oil analysis program, the results of the analysis, and the oil changes for the engine.
 - iii. The hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are

spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for purposes specified in Sections b.viii.B.II, b.viii.B.III, or b.viii.C. II above, then the Permittee shall keep records of the notification of the emergency situation, and the date, start time and end time of the engine operation for these purposes.

- e. **Reporting** - Pursuant to 40 CFR 63.6650(h), if the engine is greater than 100 HP that operates for the purposes specified in Section b.viii.C.II above, or operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Sections b.viii.B.II or b.viii.B.III above, the Permittee shall submit an annual report to the DAQ Regional Supervisor. The first annual report shall be submitted no later than March 31, 2016 and cover the calendar year 2015. Subsequent annual reports shall be submitted by March 31 of each year and cover the previous calendar year.

The annual report must also be submitted electronically to EPA through the specific NESHAP Subpart ZZZZ reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX). However, if the reporting form specific to NESHAP Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report shall be submitted to EPA at the appropriate address listed in Section 63.13;

EPA Region IV
Director, Air, Pesticides and Toxics Management Division
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-3104

The annual report shall contain the following information:

- i. Company name and address where the engine is located.
- ii. Date of the report and beginning and ending dates of the reporting period.
- iii. Engine site rated horsepower and model year for each engine.
- iv. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
- v. Hours operated for the purposes specified in Sections b.viii.B.II and b.viii.B.III, including the date, start time, and end time for engine operation.
- vi. Number of hours the engine is contractually obligated to be available for the purposes specified in Sections b.viii.B.II and b.viii.B.III.

- vii. Hours spent for operation for the purpose specified in Section b.viii.C.II including the date, start time, and end time for engine operation. The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

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