This is a new permit condition titled, "2D .1111 Subpart ZZZZ, Part 63 (Existing Non-Emergency non-black start CI equal to or less than 300 brake HP at an area source of HAPs)"

Note to Permit Writer: This condition is for existing engines (commenced construction prior to June 12, 2006) at an Area Source.

15A NCAC 2D .1111 "National Emission Standards for Hazardous Air Pollutants"- For the (selected equipment and ID No.), which is considered an existing, non-emergency, non-black start, compression ignition (CI) reciprocating internal combustion engine (RICE) equal to or less than 300 brake horsepower, 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."

a. **Compliance Date –** Pursuant to 40 CFR 63.6595(a)(1), the source(s) shall be in compliance with 40 CFR 63, Subpart ZZZZ by May 3, 2013.

b. **Maintenance and Work Practices** - Pursuant to 40 CFR 63.6603(a), 63.6625(e), (g), (h), and (i), and 63.6640(f) the Permittee shall comply with the following:

   i. Change the oil and filter every 1,000 hours of operation or annually, whichever comes first. The Permittee has the option to utilize an oil analysis program as described in Section c. below in order to extend the specified oil change requirements.

   ii. Inspect the air cleaner 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. 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.

   vi. 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.

vii. Pursuant to 40 CFR 63.6625(g), if an engine is equal to 300 brake horsepower and is not equipped with a closed crankcase ventilation system the Permittee shall:

A. Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted; or

B. Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.

viii. 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 the Permittee 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(i), the Permittee may utilize 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 base number is less than 30 percent of the total base 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), 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.