

# FG{ID} FLEXIBLE GROUP CONDITIONS

Area Source - Existing CI Emergency > 500 bhp

Red text identifies options. Select the option that applies to the source and change the text to black. Delete red text that does not apply and renumber conditions if necessary.

Blue text is guidance or notes on the use of the template. <u>Delete all blue text prior to issuing the final permit or submitting it with a permit application</u>.

This template is for existing emergency CI RICE greater than 500 bhp at an area source as applicable. The RICE is existing if the date of installation is before June 12, 2006.

If this template is being used for an ROP Reopening or Renewal, <u>and</u> the MACT conditions were established in a PTI, the appropriate footnotes which reference enforceability must be added to each applicable condition in the template.

Permit staff, if using in a PTI, change the UARs for R 336.1213(3) to R 336.1205(1)(a) in SC IV.1 and SC VI.2.

# **DESCRIPTION**

**40 CFR Part 63, Subpart ZZZZ** - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at an area source of HAP emissions, existing emergency, compression ignition (CI) RICE greater than 500 brake hp. A RICE is existing if the date of installation is before June 12, 2006. {May add specifics for the affected EU(s).}

Emission Unit: {Site Specific List of Emission Units}

# POLLUTION CONTROL EQUIPMENT

{Enter site specific pollution control equipment or NA}

#### I. EMISSION LIMIT(S)

NA

# II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel in each engine with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. (40 CFR 63.6604(b), 40 CFR 1090.305)

# III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee must comply with the requirements in Item 4 of Table 2d of 40 CFR Part 63, Subpart ZZZZ which apply to each engine in FG{ID} as specified in the following:
  - a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.2:
  - b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
  - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If the emergency engine is being operated during an emergency and it is not possible to shut down the engine to perform the management practice requirements on the schedule required, or if performing the work practice on

the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State or local law has been abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law or which the risk was deemed unacceptable. (40 CFR 63.6603(a), 40 CFR Part 63, Subpart ZZZZ, Table 2d.4)

- 2. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement in SC III.1. The oil analysis must be performed at the same frequency specified for changing the oil in SC III.1. (40 CFR 63.6625(j))
- 3. The permittee shall operate and maintain each engine in FG{ID} and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 63.6605, 40 CFR 63.6625(e), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6.9)
- 4. For each engine in FG{ID}, the permittee shall 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, after which time the emission standards applicable to all times other than startup apply. (40 CFR 63.6625(h))
- 5. The permittee may operate each engine in FG{ID} for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. (40 CFR 63.6640(f)(2))
- 6. Each engine in FG{ID} 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 provided in SC III.5. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. OPTIONAL (staff delete the next sentence and a through e if not applicable) 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: (40 CFR 63.6640(f)(4))
  - a. The engine is dispatched by the local balancing authority or local transmission and distribution operator. (40 CFR 63.6640(f)(4)(ii)(A))
  - b. The dispatch is intended to mitigate local transmission and/or distribution limitations to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. (40 CFR 63.6640(f)(4)(ii)(B))
  - c. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. (40 CFR 63.6640(f)(4)(ii)(C))
  - d. The power is provided only to the facility itself or to support the local transmission and distribution system. (40 CFR 63.6640(f)(4)(ii)(D))
  - e. The permittee 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. (40 CFR 63.6640(f)(4)(ii)(E))

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine in FG{ID} with non-resettable hours meters to track the operating hours. (40 CFR 63.6625(f))

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

Permit staff – Change the above UAR to Rule 201(3) if using in a PTI.

1. If using the oil analysis program, the permittee must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30% of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20% from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 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, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (40 CFR 63.6625(i))

# VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

Permit staff – Change above UAR to Rule 201(3) if using in a PTI.

- 1. For each engine in FG{ID}, the permittee shall keep in a satisfactory manner the following:
  - A copy of each notification and report that was submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted,
  - b. Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment,
  - c. Records of performance tests and performance evaluations,
  - d. Records of all required maintenance performed on the air pollution control and monitoring equipment,
  - e. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(a), 40 CFR 63.6660)

- 2. For each engine in FG{ID}, the permittee shall keep in a satisfactory manner, records to demonstrate continuous compliance with the operation and maintenance of the engine according to the manufacturer's emission-related operation and maintenance instructions; or develop and follow a maintenance plan that provides to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(d), 40 CFR 63.6660, 40 CFR Part 63, Subpart ZZZZ, Table 6.9)
- 3. For each engine in FG{ID}, the permittee shall keep in a satisfactory manner, records of the maintenance conducted to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the developed maintenance plan. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(e), 40 CFR 63.6660)
- 4. The permittee shall monitor and record, the total hours of operation for each engine in FG{ID} on a monthly basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hour meter for each engine in FG{ID} on a calendar year basis, in a manner acceptable to the AQD District Supervisor. 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. The permittee shall keep all records on file and make them available to the department upon request. **OPTIONAL** (only if operating for the purposes specified in SC III.6, a through e) If the engine is used for the purposes specified in SC III.6, the permittee must keep records of the notification of the emergency situation, the date, start time, and end time of engine operation for these purposes. (R 336.1213(3), 40 CFR 63.6655(f), 40 CFR 63.6660)

- 5. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FG{ID}, demonstrating that the fuel meets the requirement of SC II.1. The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. The permittee shall keep all records on file and make them available to the department upon request. (R 336.1213(3), 40 CFR 1090.305)
- 6. The permittee's records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). **(40 CFR 63.6660(a))**
- 7. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5-years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.6660(b))

#### VII. REPORTING

Permit Staff – SC VII.1, 2, and 3 references to Rule 213 are ROP only. Remove before putting into a PTI. Renumber as appropriate.

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be received by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be received by March 15 for the previous calendar year. (R 336.1213(4)(c))

OPTIONAL - For sources with engines that operate for the purposes specified in the "OPTIONAL" portion of SC III.6 use the following:

- 4. For each engine in FG{ID} with a site rating of more than 100 brake HP that operates for the purpose specified in SC III.6, submit an annual report according to the requirements below: (40 CFR 63.6650(h))
  - a. The report must contain the following information: (40 CFR 63.6650(h)(1))
    - 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 rating and model year.
    - iv. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
    - v. Hours spent for operation for the purpose specified in SC III.6, including the date, start time, and end time for engine operation for the purposes specified in SC III.6. The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
    - vi. If there were no deviations from the fuel requirements in SC II.1 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.
    - vii. If there were deviations from the fuel requirements in SC II.1 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.
  - b. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13. (40 CFR 63.6650(h)(3))

See Appendix 8 - Permit Staff: Remove if PTI, since this is ROP only.

#### VIII. STACK/VENT RESTRICTION(S)

# IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ for Stationary Reciprocating Internal Combustion Engines. (40 CFR Part 63, Subparts A and ZZZZ)

# Footnotes:

- <sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
- <sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).