

FG{ID}

FLEXIBLE GROUP CONDITIONS

40 CFR Part 60, Subpart IIII - Non-Remote, Non-Emergency, Compression Ignition (CI) Internal Combustion Engines (ICE) with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 30 liters per cylinder.

This template is for 2007 and later model year non-emergency stationary CI ICE with a maximum engine power of less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 30 liters per cylinder that commence construction after July 11, 2005 and are manufactured after April 1, 2006 that are not fire pumps.

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

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

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.

DESCRIPTION

Compression ignition (CI) internal combustion engines (ICE) with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) subject to 40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines for 2007 and later model year non-emergency engines with a displacement of less than 30 l/cyl constructed after July 11, 2005 and manufactured after April 1, 2006. {May add specifics for the affected EU(s).}

Emission Unit: {Enter Emission Unit names}

POLLUTION CONTROL EQUIPMENT

{Enter pollution control equipment names or NA}

I. EMISSION LIMIT(S)

Emission limits are based on model year and size of the engine. The table below lists one example of an emission standard in 40 CFR 60.4204(b).

40 CFR 60.4204(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in 40 CFR 60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

EXAMPLE: 40 CFR 60.4201(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NMHC	0.19 g/kW-hr	Hourly ^A	Each engine of FG{ID}	SC VI.2	40 CFR 60.4201(a), 40 CFR 60.4204(b) - Table 1 of 40 CFR 1039.101
2. NOx	3.5 g/kW-hr	Hourly ^A	Each engine of FG{ID}	SC VI.2	40 CFR 60.4201(a), 40 CFR 60.4204(b) - Table 1 of 40 CFR 1039.101
3. CO	3.5 g/kW-hr	Hourly ^A	Each engine of FG{ID}	SC VI.2	40 CFR 60.4201(a), 40 CFR 60.4204(b) - Table 1 of 40 CFR 1039.101
4. PM	0.04 g/kW-hr	Hourly ^A	Each engine of FG{ID}	SC VI.2	40 CFR 60.4201(a), 40 CFR 60.4204(b) - Table 1 of 40 CFR 1039.101

^AThese emission limits are for certified engines; if testing becomes required to demonstrate compliance, then the tested values must be compared to the Not to Exceed (NTE) requirements determined through 40 CFR 60.4212(c).

II. MATERIAL LIMIT(S)

- The permittee must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel: 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 60.4207(b), 40 CFR 1090.305)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee must meet the following requirements for each engine in FG{ID}:
 - Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions, **(40 CFR 60.4211(a)(1))**
 - Change only those emission-related settings that are permitted by the manufacturer, and **(40 CFR 60.4211(a)(2))**
 - Meet the requirements as specified in 40 CFR Part 1068, as they apply. **(40 CFR 60.4211(a)(3))**
- If the permittee does not install, configure, operate, and maintain each engine and control device according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate each engine in FG{ID} in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4211(g))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. **(40 CFR 60.4211(c))**

OPTIONAL – Use if engine(s) is/are equipped with a diesel particulate filter.

- For each engine in FG{ID} equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the permittee when the high backpressure limit of the engine is approached. **(40 CFR 60.4209(b))**

V. TESTING/SAMPLING

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 a PTI.

1. If any engine in FG{ID} is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:
 - a. Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after changing emission-related settings in a way that is not permitted by the manufacturer.
 - b. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212.
 - c. **OPTIONAL – Use if engine is greater than 500 HP.** Conduct subsequent performance testing every 8,760 hours of engine operation or every 3 years thereafter, whichever comes first, to demonstrate compliance with the applicable emission standards.

No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.4211(g)(3), 40 CFR 60.4212)

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. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1213(3))
2. The permittee shall keep, in a satisfactory manner, the following records for each engine in FG{ID}:
 - a. For each certified engine: The permittee shall keep records of the manufacturer certification documentation.
 - b. For each uncertified engine: The permittee shall keep records of testing required in SC V.1.The permittee shall keep all records on file and make them available to the Department upon request. (40 CFR 60.4211)
3. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for diesel fuel oil used in FG{ID}, demonstrating that the fuel meets the requirement of 40 CFR 1090.305. 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. (R 336.1213(3), 40 CFR 60.4207(b), 40 CFR 1090.305)

OPTIONAL – Use if engine(s) is/are equipped with a diesel particulate filter.

4. The permittee must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. (40 CFR 60.4214(c))

VII. REPORTING

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))
4. The permittee shall submit a notification specifying whether each engine in FG{ID} will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of the engine and within 30 days of switching the manner of operation. (R 336.1213(3), 40 CFR Part 60, Subpart III)

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

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and IIII, as they apply to each engine in FG{ID}.
(40 CFR Part 60, Subparts A and IIII)

Remove these footnotes if no PTIs are associated with this flexible group.

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).