

FG{ID}
FLEXIBLE GROUP CONDITIONS
Major Source – New Landfill Gas SI > 500 bhp

This template is for new and reconstructed SI RICE greater than 500 bhp fueled with treated landfill gas and used to produce electricity. This flexible group includes the emission units and any subsequent replacements for those units as applicable under R 336.1285(2)(a)(vi).

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.

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

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

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, new and reconstructed spark ignition (SI) RICE greater than 500 bhp and combusts landfill gas equivalent to 10% or more of the gross heat input on an annual basis. Construction or reconstruction of the RICE commenced on or after December 19, 2002. {May add specifics for the affected EU(s).}

This flexible group includes the emission units below and any subsequent replacements for those units as applicable under R 336.1285(2)(a)(vi).

Emission Unit: {Enter Emission Unit names or NA}

POLLUTION CONTROL EQUIPMENT

{Enter pollution control equipment names or NA}

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must operate each engine in FG{ID} in a manner which reasonably minimizes HAP emissions. **(40 CFR 63.6625(c))**
2. At all times, the permittee must operate and maintain any engine in FG{ID} 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 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 the Administrator 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. **(40 CFR 63.6605(b))**

Include this condition if the facility is replacing engines as part of a normal maintenance program at landfill gas-to-energy facilities, {See **Policy AQD-023: Replacement of Engines, Compressors, or Turbines as Part of a Normal Maintenance Program at Landfill Gas-to-Energy Facilities**}. If including this condition and there are other conditions here, it needs to be renumbered to be the last condition in this section. **Also, if including this condition, make sure to use the optional condition in Section VI. Monitoring and Recordkeeping.**

3. The permittee shall submit to the AQD District Supervisor, for review and approval, a malfunction abatement/preventative maintenance plan (PM/MAP) for each engine in FG{ID}. After approval of the PM/MAP by the AQD District Supervisor, the permittee shall not operate each engine in FG{ID} unless the PM/MAP, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum the plan shall include:

- a. Identification of the equipment and, if applicable, air-cleaning device, and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
- b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
- c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
- d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
- e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the PM/MAP to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies. **(R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee must monitor and record the fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. **(40 CFR 63.6625(c))**

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 in a PTI.

NA

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 records in a format acceptable to the AQD District Supervisor and make them available 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. A permittee that is operating an engine in FG{ID} which fires landfill gas equivalent to 10 percent or more of the gross heat input on an annual basis must keep records of the daily fuel usage monitors. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1213(3), 40 CFR 63.6655(c))**
3. 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))**
4. 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))**

5. The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). **(40 CFR 63.6660(c))**

Include this condition if the facility is replacing engines as part of a normal maintenance program at landfill gas-to-energy facilities, {See **Policy AQD-023: Replacement of Engines, Compressors, or Turbines as Part of a Normal Maintenance Program at Landfill Gas-to-Energy Facilities**}. If including this condition and there are other conditions here, it needs to be renumbered to be the last condition in this section. **Also, if including this condition, make sure to use the optional condition in Section III. Process/Operational Restrictions.**

6. The permittee shall maintain the following records for each engine in FG{ID}:
 - a. Engine manufacturer;
 - b. Date engine was manufactured;
 - c. Engine model number and model year;
 - d. Maximum engine power;
 - e. Engine serial number;
 - f. Engine specification sheet;
 - g. Date of initial startup of the engine;
 - h. Date engine was removed from service at this stationary source;
 - i. Date replacement engine was installed at this stationary source;
 - j. Manufacturer's data, specifications, and operating and maintenance procedures for each engine;
 - k. Maintenance activities conducted according to the PM/MAP.

The permittee shall keep the records on file in a format acceptable to the AQD District Supervisor and make them available to the Department upon request. **(R 336.1213(3), R 336.1911)**

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))**
4. The permittee must submit an annual report in accordance with Table 7 of 40 CFR 63, Subpart ZZZZ to the AQD by no later than March 15. The following information shall be included in this annual report: **(40 CFR 63.6650(g))**
 - a. The fuel flow rate of each fuel and the heating values that were used in the calculations. The permittee must demonstrate that the percentage of heat input provided by landfill gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis. **(40 CFR 63.6650(g)(1))**
 - b. The operating limits provided in the permittee's federally enforceable permit, and any deviations from these limits. **(40 CFR 63.6650(g)(2))**
 - c. Any problems or errors suspected from the fuel flow rate meters. **(40 CFR 63.6650(g)(3))**
5. The permittee is required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with 40 CFR 63.6590(b). The notification should include the information in 40 CFR 63.9(b)(2)(i) through (v), and a statement that the stationary RICE has no additional requirements and explain

the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions). **(40 CFR 63.6645(f))**

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 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)**

Remove these footnotes if no PTIs are associated with this source.

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).