



State of Ohio Environmental Protection Agency

Street Address:

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P.O. Box 1049
Columbus, OH 43216-1049

02/26/03

CERTIFIED MAIL

RE: Draft Title V Chapter 3745-77 permit

13-18-53-8151
MM Cuyahoga Energy LLC
Trond Aschehoug
3013 Douglas Bl.
Suite 170
Roseville, CA 95661-0000

Dear Trond Aschehoug:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Cleveland Division of Air Pollution Control within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

If you have any questions or comments concerning this draft Title V permit, please contact Cleveland Division of Air Pollution Control.

Very truly yours,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA (electronically submitted)
File, DAPC PMU
CBAPC



State of Ohio Environmental Protection Agency

DRAFT TITLE V PERMIT

Issue Date: 02/26/03	Effective Date: To be entered upon final issuance	Expiration Date: To be entered upon final issuance
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This document constitutes issuance of a Title V permit for Facility ID: 13-18-53-8151 to:
MM Cuyahoga Energy LLC
Pennsylvania

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

P001 (Engine #1) Engine combusts LFG and drives a generator to produce electricity. Each engine is paired with another engine (2 engines in tandem) to drive one 1.9 Mw generator.	another engine (2 engines in tandem) to drive one 1.9 Mw generator.	P004 (Engine #4) Engine combusts LFG and drives a generator to produce electricity. Each engine is paired with another engine (2 engines in tandem) to drive one 1.9 Mw generator.
P002 (Engine #2) Engine combusts LFG and drives a generator to produce electricity. Each engine is paired with	P003 (Engine #3) Engine combusts LFG and drives a generator to produce electricity. Each engine is paired with another engine (2 engines in tandem) to drive one 1.9 Mw generator.	

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Cleveland Division of Air Pollution Control
(216) 664-2324
02/26/03

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. *State and Federally Enforceable Section*

1. **Monitoring and Related Record Keeping and Reporting Requirements**

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))
- c. The permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))
 - ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**
 - (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These written reports shall satisfy the

requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i), (ii) and (iii))

- (b) Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(iii))

iii. **For monitoring, record keeping, and reporting requirements:**

Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record

keeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))

- iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions unit(s) or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

(Authority for term: OAC rule 3745-77-07(A)(5))

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

(Authority for term: OAC rule 3745-77-07(A)(6))

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit

- revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
 - c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
 - d. This permit does not convey any property rights of any sort, or any exclusive privilege.
 - e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- (Authority for term: OAC rule 3745-77-07(A)(7))*

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

(Authority for term: OAC rule 3745-77-07(A)(8))

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.
(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

(Authority for term: OAC rule 3745-77-07(B))

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

- ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

13. Permit Shield

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging,

but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

(Authority for term: OAC rule 3745-77-07(G))

16. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any

change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)

(Authority for term: OAC rule 3745-77-07(I))

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

18. Insignificant Activities

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

19. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

(Authority for term: OAC rule 3745-77-07(A)(1))

B. State Only Enforceable Section

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

2. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

3. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

4. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

5. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

1. Emission Limitations:

In accordance with OAC rule 3745-31-05(A)(3) (PTI #13-3400), the combined annual emissions from emissions units P001 through P004 shall not exceed the following:

- 1.a Sulfur dioxide (SO₂) emissions shall not exceed 26.44 tons per year.
- 1.b Nitrogen oxides (NO_x) emissions shall not exceed 51.84 tons per year.
- 1.c Carbon monoxide (CO) emissions shall not exceed 138.04 tons per year.
- 1.d Non-methane organic compounds (NMOC) emissions shall not exceed 15.24 tons per year.
- 1.e Particulate emissions (PE) shall not exceed 9.84 tons per year.
- 1.f Compliance with the combined annual emission limitations for emissions units P001 through P004 (specified above) shall be assumed provided compliance is maintained with the pound per hour emission limitations for SO₂, NO_x, CO, NMOC, and PE specified in the terms and conditions for emissions units P001 through P004. The combined annual emission limitations were established in PTI #13-3400 as the summation of the individual annual emission limitations for SO₂, NO_x, CO, NMOC, and PE as specified in the terms and conditions for emissions units P001 through P004. Each annual emission limitation for emissions units P001 through P004 was established by multiplying the pounds per hour emission limitation for SO₂, NO_x, CO, and NMOC by 8760 hrs/yr and dividing by 2000 lbs/ton. The annual emission limitation for PE was established by multiplying the pound per MMBtu emission limitation by the emissions unit's maximum rated heat input capacity (9.06 MMBtu/hr) by 8760 hrs/yr and dividing by 2000 lbs/ton.

2. Operational Restrictions:

The permittee shall operate the internal combustion engine(s) (emissions units P001 through P004) at all times when the landfill gas is routed to the internal combustion engine(s).

- 2.a The total heating value of the landfill gas burned in emissions units P001 through P004, combined, shall not exceed 36.24 MMBtu/hr.
- 2.b Emissions units P001 through P004 shall be designed and operated in such a manner that the requirements of OAC Chapter 3745-76 for municipal solid waste landfill controls are satisfied.
- 2.c In the event that the gas collection system for emissions units P001 through P004 is inoperable, all valves which vent landfill gas to the atmosphere shall be closed within 1 hour after the gas collection system becomes inoperable.

3. Monitoring and/or Record Keeping Requirements:

The permittee shall properly calibrate, operate, and maintain the monitoring equipment associated with emissions units P001 through P004 in accordance with the manufacturer's recommendations, instructions and operating manuals:

- 3.a A Daniels system shall be used to determine the heating value (in MMBtu/scf) of the landfill gas (based on methane content at LHV) at the main fuel inlet to emissions units P001 through P004. The heating value of the landfill gas shall be measured by the Daniels system or may be measured by another heating value monitoring system with prior approval of the Cleveland Division of Air Quality. The heating value of the landfill gas shall be monitored and recorded at least every 60 minutes when any of the internal combustion engines (emissions units P001 through P004) are in operation.
- 3.b A gas flow rate measuring device shall be used that provides a measurement of the total gas flow rate (in standard cubic feet per minute, scfm) to emissions units P001 through P004. The permittee shall record the gas flow rate at least every 15 minutes when any of the internal combustion engines (emissions units P001 through P004) are in operation.
- 3.c If the bypass line valve to emissions units P001 through P004 is closed, the valve shall be held in the closed position with a car-seal or a lock-and-key type configuration, and the closed position of the valve shall be visually inspected on a monthly basis and a record of the seal or closure mechanism shall be made to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.
- 3.d If the gas collection system for emissions units P001 through P004 becomes inoperable, the permittee shall maintain records of the dates and times the gas collection system became inoperable, the dates and times of bypass line valve closure, and records of the maintenance performed to restore the normal operation of the gas collection system.
- 3.e The permittee shall maintain the following records for each hour during the day when landfill gas is routed to any of the internal combustion engines (emissions units P001 through P004):
 - i. the landfill gas flow rate (scfm);
 - ii. the heating value of the landfill gas, in MMBtu/scf; and
 - iii. the total heating value of the landfill gas, in MMBtu/hr, calculated as (i) multiplied by (ii) and by 60 minutes/hr.

4. Reporting Requirements:

The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time when the total heating value of the landfill gas burned in emissions units P001 through P004, combined, exceeded 36.24 MMBtu per hour and actual heating value of the landfill gas for each such hour.

- 4.a The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time when the gas collection system for emissions units P001 through P004 was inoperable and any valve which vents landfill gas to the atmosphere was not closed within 1 hour after the gas collection system became inoperable.

The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

A. State and Federally Enforcable Section (continued)

5. Miscellaneous Requirements:

The landfill site and the gas collection system associated with these 4 internal combustion engines (emissions units P001 through P004) are owned and operated by the Cuyahoga Regional Sanitary Landfill (Ohio EPA premise number 1318247813). A second independent company (MM Cuyahoga Energy LLC) owns and operates the 4 internal combustion engines identified in this Title V permit. The 4 internal combustion engines (2 engines in tandem) are used to drive 2 generators which in turn produce electricity. The engines also serve as the control system for the non-methane organic compound emissions generated by the landfill. As such, the engines are required to be operated in compliance with the control system requirements specified in OAC rule 3745-76-07(B)(2)(c). The applicable operational and performance testing requirements from OAC rule 3745-76-07(B)(2)(c) have been incorporated into this Title V permit through the best available technology determination established pursuant to OAC rule 3745-31-05(A)(3).

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

Z001 crankcase vents;
Z002 1,500-gallon used oil storage tank; and
Z003 1,500-gallon new oil storage tank.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Engine #1 (P001)

Activity Description: Engine combusts LFG and drives a generator to produce electricity. Each engine is paired with another engine (2 engines in tandem) to drive one 1.9 Mw generator.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
9.06 MMBtu/hr Caterpillar internal combustion engine for the burning of landfill gas - Engine #1 - P001	OAC rule 3745-31-05(A)(3) (PTI # 13-3400)	Sulfur dioxide (SO ₂) emissions shall not exceed 1.51 pounds per hour and 6.61 tons per year.
		Nitrogen oxides (NO _x) emissions shall not exceed 2.96 pounds per hour and 12.96 tons per year.
		Carbon monoxide (CO) emissions shall not exceed 7.88 pounds per hour and 34.51 tons per year.
		Non-methane organic compound (NMOC) emissions shall not exceed 0.87 pound per hour and 3.81 tons per year.
		Particulate emissions (PE) shall not exceed 2.46 tons per year.
		See section A.I.2.a below.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B)(5)(b).
		Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.
	Particulate emissions shall not exceed 0.062 lb/MMBtu actual heat input.	
	None, exempt pursuant to OAC rule 3745-18-06(B).	
	See section A.I.2.b below.	
	See section A.I.2.c below.	

2. Additional Terms and Conditions

- 2.a This emissions unit shall reduce NMOC emissions by 98 percent, by weight, or reduce the outlet concentration to less than 20 ppmv (dry basis) as hexane, at 3 percent oxygen.
- 2.b The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 13-3400.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 13-3400.

II. Operational Restrictions

1. This emissions unit shall be operated with a solenoid valve at the inlet to the emissions unit that completely shuts off gas flow to the emissions unit when the emissions unit is not operating.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the internal combustion engine when the emissions unit is in operation. The combustion temperature monitoring device shall have an accuracy of plus or minus 1 percent of the temperature being measured, expressed in degrees Celsius.

The permittee shall maintain records of all 3-hour periods of time during which the average combustion temperature within the internal combustion engine was more than 28 degrees Celsius below the average combustion temperature during the most recent emission test that demonstrated that the emissions unit was in compliance with the emission limitation in section A.I.2.a above.

3. The permittee shall submit an equipment removal/shutdown report within 30 days prior to removal or cessation of operation of this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Cleveland Division of Air Quality) by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the internal combustion engine was more than 28 degrees Celsius below the average combustion temperature during the most recent emission test that demonstrated that the emissions unit was in compliance with the emission limitation in section A.I.2.a above.

The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

3. The permittee shall also submit annual reports that specify the total SO₂, NO_x, CO, NMOC, and PE emissions from this emissions unit for the previous calendar year. The reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2.a of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitations:
SO₂ emissions shall not exceed 1.51 pounds per hour and 6.61 tons per year.

Applicable Compliance Methods:

Compliance with the hourly SO₂ emission limitation may be based on an emission factor of 0.014 lb of SO₂/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

- 1.b Emission Limitations:
NO_x emissions shall not exceed 2.96 pounds per hour and 12.96 tons per year.

Applicable Compliance Methods:

Compliance with the hourly NO_x emission limitation may be based on an emission factor of 0.2 lb of NO_x/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7E.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

V. Testing Requirements (continued)

1.c Emission Limitations:

CO emissions shall not exceed 7.88 pounds per hour and 34.51 tons per year.

Applicable Compliance Methods:

Compliance with the hourly CO emission limitation may be based on an emission factor of 0.87 lb of CO/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

1.d Emission Limitations:

NMOC) emissions shall not exceed 0.87 pound per hour and 3.81 tons per year.

Applicable Compliance Methods:

Compliance with the hourly NMOC emission limitation may be based on an emission factor of 0.073 lb of NMOC/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25C.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

2. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

3. Emission Limitations:

PE shall not exceed 0.062 lb/MMBtu actual heat input and 2.46 tons per year.

Applicable Compliance Methods:

Compliance may be determined by dividing a particulate emission rate of 0.013 pound PE/hr (based on emission testing conducted in May, 1999) by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the lb/MMBtu emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

The annual limitation was established by multiplying the lb/MMBtu emission limitation by the emissions unit's maximum rated heat input capacity (9.06 MMBtu/hr) by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/MMBtu emission limitation.

4. Emission Limitation:

This emissions unit shall reduce NMOC emissions by 98 percent, by weight, or reduce the outlet concentration to less than 20 ppmv (dry basis) as hexane, at 3 percent oxygen.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. the emission testing shall be conducted within 6 months prior to permit expiration;
- b. the emission testing shall be conducted to demonstrate compliance with the NMOC reduction requirement or the outlet concentration limitation;
- c. the following test methods shall be employed: Methods 1 through 4 and 25C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA; and
- d. the test shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Cleveland Division of Air Quality.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland Division of Air Quality. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Cleveland Division of Air Quality's refusal to accept the results of the emission test(s).

Personnel from the Cleveland Division of Air Quality shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland Division of Air Quality within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland Division of Air Quality.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Engine #2 (P002)

Activity Description: Engine combusts LFG and drives a generator to produce electricity. Each engine is paired with another engine (2 engines in tandem) to drive one 1.9 Mw generator.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
9.06 MMBtu/hr Caterpillar internal combustion engine for the burning of landfill gas - Engine #2 - P002	OAC rule 3745-31-05(A)(3) (PTI # 13-3400)	Sulfur dioxide (SO ₂) emissions shall not exceed 1.51 pounds per hour and 6.61 tons per year.
		Nitrogen oxides (NO _x) emissions shall not exceed 2.96 pounds per hour and 12.96 tons per year.
		Carbon monoxide (CO) emissions shall not exceed 7.88 pounds per hour and 34.51 tons per year.
		Non-methane organic compound (NMOC) emissions shall not exceed 0.87 pound per hour and 3.81 tons per year.
		Particulate emissions (PE) shall not exceed 2.46 tons per year.
		See section A.I.2.a below.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B)(5)(b).
		Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.
	Particulate emissions shall not exceed 0.062 lb/MMBtu actual heat input.	
	None, exempt pursuant to OAC rule 3745-18-06(B).	
	See section A.I.2.b below.	
	See section A.I.2.c below.	

2. Additional Terms and Conditions

- 2.a This emissions unit shall reduce NMOC emissions by 98 percent, by weight, or reduce the outlet concentration to less than 20 ppmv (dry basis) as hexane, at 3 percent oxygen.
- 2.b The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 13-3400.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 13-3400.

II. Operational Restrictions

1. This emissions unit shall be operated with a solenoid valve at the inlet to the emissions unit that completely shuts off gas flow to the emissions unit when the emissions unit is not operating.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the internal combustion engine when the emissions unit is in operation. The combustion temperature monitoring device shall have an accuracy of plus or minus 1 percent of the temperature being measured, expressed in degrees Celsius.

The permittee shall maintain records of all 3-hour periods of time during which the average combustion temperature within the internal combustion engine was more than 28 degrees Celsius below the average combustion temperature during the most recent emission test that demonstrated that the emissions unit was in compliance with the emission limitation in section A.I.2.a above.

3. The permittee shall submit an equipment removal/shutdown report within 30 days prior to removal or cessation of operation of this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Cleveland Division of Air Quality) by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the internal combustion engine was more than 28 degrees Celsius below the average combustion temperature during the most recent emission test that demonstrated that the emissions unit was in compliance with the emission limitation in section A.I.2.a above.

The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

3. The permittee shall also submit annual reports that specify the total SO₂, NO_x, CO, NMOC, and PE emissions from this emissions unit for the previous calendar year. The reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2.a of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitations:
SO₂ emissions shall not exceed 1.51 pounds per hour and 6.61 tons per year.

Applicable Compliance Methods:

Compliance with the hourly SO₂ emission limitation may be based on an emission factor of 0.014 lb of SO₂/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

- 1.b Emission Limitations:
NO_x emissions shall not exceed 2.96 pounds per hour and 12.96 tons per year.

Applicable Compliance Methods:

Compliance with the hourly NO_x emission limitation may be based on an emission factor of 0.2 lb of NO_x/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7E.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

V. Testing Requirements (continued)

1.c Emission Limitations:

CO emissions shall not exceed 7.88 pounds per hour and 34.51 tons per year.

Applicable Compliance Methods:

Compliance with the hourly CO emission limitation may be based on an emission factor of 0.87 lb of CO/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

1.d Emission Limitations:

NMOC) emissions shall not exceed 0.87 pound per hour and 3.81 tons per year.

Applicable Compliance Methods:

Compliance with the hourly NMOC emission limitation may be based on an emission factor of 0.073 lb of NMOC/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25C.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

2. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

3. Emission Limitations:

PE shall not exceed 0.062 lb/MMBtu actual heat input and 2.46 tons per year.

Applicable Compliance Methods:

Compliance may be determined by dividing a particulate emission rate of 0.013 pound PE/hr (based on emission testing conducted in May, 1999) by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the lb/MMBtu emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

The annual limitation was established by multiplying the lb/MMBtu emission limitation by the emissions unit's maximum rated heat input capacity (9.06 MMBtu/hr) by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/MMBtu emission limitation.

4. Emission Limitation:

This emissions unit shall reduce NMOC emissions by 98 percent, by weight, or reduce the outlet concentration to less than 20 ppmv (dry basis) as hexane, at 3 percent oxygen.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. the emission testing shall be conducted within 6 months prior to permit expiration;
- b. the emission testing shall be conducted to demonstrate compliance with the NMOC reduction requirement or the outlet concentration limitation;
- c. the following test methods shall be employed: Methods 1 through 4 and 25C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA; and
- d. the test shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Cleveland Division of Air Quality.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland Division of Air Quality. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Cleveland Division of Air Quality's refusal to accept the results of the emission test(s).

Personnel from the Cleveland Division of Air Quality shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland Division of Air Quality within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland Division of Air Quality.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Engine #3 (P003)

Activity Description: Engine combusts LFG and drives a generator to produce electricity. Each engine is paired with another engine (2 engines in tandem) to drive one 1.9 Mw generator.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
9.06 MMBtu/hr Caterpillar internal combustion engine for the burning of landfill gas - Engine #3 - P003	OAC rule 3745-31-05(A)(3) (PTI # 13-3400)	Sulfur dioxide (SO ₂) emissions shall not exceed 1.51 pounds per hour and 6.61 tons per year.
		Nitrogen oxides (NO _x) emissions shall not exceed 2.96 pounds per hour and 12.96 tons per year.
		Carbon monoxide (CO) emissions shall not exceed 7.88 pounds per hour and 34.51 tons per year.
		Non-methane organic compound (NMOC) emissions shall not exceed 0.87 pound per hour and 3.81 tons per year.
		Particulate emissions (PE) shall not exceed 2.46 tons per year.
		See section A.I.2.a below.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B)(5)(b).
		Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.
	Particulate emissions shall not exceed 0.062 lb/MMBtu actual heat input.	
	None, exempt pursuant to OAC rule 3745-18-06(B).	
	See section A.I.2.b below.	
	See section A.I.2.c below.	

2. Additional Terms and Conditions

- 2.a This emissions unit shall reduce NMOC emissions by 98 percent, by weight, or reduce the outlet concentration to less than 20 ppmv (dry basis) as hexane, at 3 percent oxygen.
- 2.b The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 13-3400.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 13-3400.

II. Operational Restrictions

1. This emissions unit shall be operated with a solenoid valve at the inlet to the emissions unit that completely shuts off gas flow to the emissions unit when the emissions unit is not operating.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the internal combustion engine when the emissions unit is in operation. The combustion temperature monitoring device shall have an accuracy of plus or minus 1 percent of the temperature being measured, expressed in degrees Celsius.

The permittee shall maintain records of all 3-hour periods of time during which the average combustion temperature within the internal combustion engine was more than 28 degrees Celsius below the average combustion temperature during the most recent emission test that demonstrated that the emissions unit was in compliance with the emission limitation in section A.I.2.a above.

3. The permittee shall submit an equipment removal/shutdown report within 30 days prior to removal or cessation of operation of this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Cleveland Division of Air Quality) by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the internal combustion engine was more than 28 degrees Celsius below the average combustion temperature during the most recent emission test that demonstrated that the emissions unit was in compliance with the emission limitation in section A.I.2.a above.

The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

3. The permittee shall also submit annual reports that specify the total SO₂, NO_x, CO, NMOC, and PE emissions from this emissions unit for the previous calendar year. The reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2.a of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitations:
SO₂ emissions shall not exceed 1.51 pounds per hour and 6.61 tons per year.

Applicable Compliance Methods:

Compliance with the hourly SO₂ emission limitation may be based on an emission factor of 0.014 lb of SO₂/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

- 1.b Emission Limitations:
NO_x emissions shall not exceed 2.96 pounds per hour and 12.96 tons per year.

Applicable Compliance Methods:

Compliance with the hourly NO_x emission limitation may be based on an emission factor of 0.2 lb of NO_x/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7E.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

V. Testing Requirements (continued)

1.c Emission Limitations:

CO emissions shall not exceed 7.88 pounds per hour and 34.51 tons per year.

Applicable Compliance Methods:

Compliance with the hourly CO emission limitation may be based on an emission factor of 0.87 lb of CO/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

1.d Emission Limitations:

NMOC) emissions shall not exceed 0.87 pound per hour and 3.81 tons per year.

Applicable Compliance Methods:

Compliance with the hourly NMOC emission limitation may be based on an emission factor of 0.073 lb of NMOC/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25C.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

2. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

3. Emission Limitations:

PE shall not exceed 0.062 lb/MMBtu actual heat input and 2.46 tons per year.

Applicable Compliance Methods:

Compliance may be determined by dividing a particulate emission rate of 0.013 pound PE/hr (based on emission testing conducted in May, 1999) by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the lb/MMBtu emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

The annual limitation was established by multiplying the lb/MMBtu emission limitation by the emissions unit's maximum rated heat input capacity (9.06 MMBtu/hr) by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/MMBtu emission limitation.

4. Emission Limitation:

This emissions unit shall reduce NMOC emissions by 98 percent, by weight, or reduce the outlet concentration to less than 20 ppmv (dry basis) as hexane, at 3 percent oxygen.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. the emission testing shall be conducted within 6 months prior to permit expiration;
- b. the emission testing shall be conducted to demonstrate compliance with the NMOC reduction requirement or the outlet concentration limitation;
- c. the following test methods shall be employed: Methods 1 through 4 and 25C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA; and
- d. the test shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Cleveland Division of Air Quality.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland Division of Air Quality. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Cleveland Division of Air Quality's refusal to accept the results of the emission test(s).

Personnel from the Cleveland Division of Air Quality shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland Division of Air Quality within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland Division of Air Quality.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Engine #4 (P004)

Activity Description: Engine combusts LFG and drives a generator to produce electricity. Each engine is paired with another engine (2 engines in tandem) to drive one 1.9 Mw generator.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
9.06 MMBtu/hr Caterpillar internal combustion engine for the burning of landfill gas - Engine #4 - P004	OAC rule 3745-31-05(A)(3) (PTI # 13-3400)	Sulfur dioxide (SO ₂) emissions shall not exceed 1.51 pounds per hour and 6.61 tons per year.
		Nitrogen oxides (NO _x) emissions shall not exceed 2.96 pounds per hour and 12.96 tons per year.
		Carbon monoxide (CO) emissions shall not exceed 7.88 pounds per hour and 34.51 tons per year.
		Non-methane organic compound (NMOC) emissions shall not exceed 0.87 pound per hour and 3.81 tons per year.
		Particulate emissions (PE) shall not exceed 2.46 tons per year.
		See section A.I.2.a below.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B)(5)(b).
		Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.
	Particulate emissions shall not exceed 0.062 lb/MMBtu actual heat input.	
	None, exempt pursuant to OAC rule 3745-18-06(B).	
	See section A.I.2.b below.	
	See section A.I.2.c below.	

2. Additional Terms and Conditions

- 2.a This emissions unit shall reduce NMOC emissions by 98 percent, by weight, or reduce the outlet concentration to less than 20 ppmv (dry basis) as hexane, at 3 percent oxygen.
- 2.b The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 13-3400.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 13-3400.

II. Operational Restrictions

1. This emissions unit shall be operated with a solenoid valve at the inlet to the emissions unit that completely shuts off gas flow to the emissions unit when the emissions unit is not operating.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the internal combustion engine when the emissions unit is in operation. The combustion temperature monitoring device shall have an accuracy of plus or minus 1 percent of the temperature being measured, expressed in degrees Celsius.

The permittee shall maintain records of all 3-hour periods of time during which the average combustion temperature within the internal combustion engine was more than 28 degrees Celsius below the average combustion temperature during the most recent emission test that demonstrated that the emissions unit was in compliance with the emission limitation in section A.I.2.a above.

3. The permittee shall submit an equipment removal/shutdown report within 30 days prior to removal or cessation of operation of this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Cleveland Division of Air Quality) by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the internal combustion engine was more than 28 degrees Celsius below the average combustion temperature during the most recent emission test that demonstrated that the emissions unit was in compliance with the emission limitation in section A.I.2.a above.

The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

3. The permittee shall also submit annual reports that specify the total SO₂, NO_x, CO, NMOC, and PE emissions from this emissions unit for the previous calendar year. The reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2.a of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitations:
SO₂ emissions shall not exceed 1.51 pounds per hour and 6.61 tons per year.

Applicable Compliance Methods:

Compliance with the hourly SO₂ emission limitation may be based on an emission factor of 0.014 lb of SO₂/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

- 1.b Emission Limitations:
NO_x emissions shall not exceed 2.96 pounds per hour and 12.96 tons per year.

Applicable Compliance Methods:

Compliance with the hourly NO_x emission limitation may be based on an emission factor of 0.2 lb of NO_x/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7E.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

V. Testing Requirements (continued)

1.c Emission Limitations:

CO emissions shall not exceed 7.88 pounds per hour and 34.51 tons per year.

Applicable Compliance Methods:

Compliance with the hourly CO emission limitation may be based on an emission factor of 0.87 lb of CO/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

1.d Emission Limitations:

NMOC) emissions shall not exceed 0.87 pound per hour and 3.81 tons per year.

Applicable Compliance Methods:

Compliance with the hourly NMOC emission limitation may be based on an emission factor of 0.073 lb of NMOC/MMBtu (based on emission testing conducted in May, 1999) multiplied by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the hourly emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25C.

The annual limitation was established by multiplying the hourly emission limitation by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the hourly emission limitation.

2. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

3. Emission Limitations:

PE shall not exceed 0.062 lb/MMBtu actual heat input and 2.46 tons per year.

Applicable Compliance Methods:

Compliance may be determined by dividing a particulate emission rate of 0.013 pound PE/hr (based on emission testing conducted in May, 1999) by the maximum rated heat input capacity of the emissions unit (9.06 MMBtu/hr).

If required, compliance with the lb/MMBtu emission limitation shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

The annual limitation was established by multiplying the lb/MMBtu emission limitation by the emissions unit's maximum rated heat input capacity (9.06 MMBtu/hr) by the maximum possible annual operating hours (8760 hrs/yr) and dividing by 2000 lbs/ton. Therefore, compliance with the annual emission limitation shall be assumed provided compliance is maintained with the lb/MMBtu emission limitation.

4. Emission Limitation:

This emissions unit shall reduce NMOC emissions by 98 percent, by weight, or reduce the outlet concentration to less than 20 ppmv (dry basis) as hexane, at 3 percent oxygen.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. the emission testing shall be conducted within 6 months prior to permit expiration;
- b. the emission testing shall be conducted to demonstrate compliance with the NMOC reduction requirement or the outlet concentration limitation;
- c. the following test methods shall be employed: Methods 1 through 4 and 25C of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA; and
- d. the test shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the Cleveland Division of Air Quality.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland Division of Air Quality. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Cleveland Division of Air Quality's refusal to accept the results of the emission test(s).

Personnel from the Cleveland Division of Air Quality shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland Division of Air Quality within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland Division of Air Quality.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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