State of Ohio Environmental Protection Agency

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Certified Mail

10/20/2008

No	TOXIC REVIEW
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No	NESHAPS
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No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Mr. Michael Kotyk
Bellefontaine Gas Producers, LLC
425 South Main St., Suite 201
Ann Arbor, MI 48104

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0546015002
Permit Number: P0103690
Permit Type: Initial Installation
County: Logan

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate ("PTIO") which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully.

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, www.epa.state.oh.us/dapc, from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of $70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Southwest District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page www.epa.state.oh.us/dapc.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-SWDO

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

FINAL

Air Pollution Permit-to-Install and Operate
for
Bellefontaine Gas Producers, LLC

Facility ID: 0546015002
Permit Number: P0103690
Permit Type: Initial Installation
Issued: 10/20/2008
Effective: 10/20/2008
Expiration: 10/20/2018

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Permit-to-Install and Operate
for
Bellefontaine Gas Producers, LLC

Table of Contents

Authorization 1

A. Standard Terms and Conditions 3

1. What does this permit-to-install and operate ("PTIO") allow me to do? 4
2. Who is responsible for complying with this permit? 4
3. What records must I keep under this permit? 4
4. What are my permit fees and when do I pay them? 4
5. When does my PTIO expire, and when do I need to submit my renewal application? 4
6. What happens to this permit if my project is delayed or I do not install or modify my source? 5
7. What reports must I submit under this permit? 5
8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit? 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? 5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? 6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? 6
13. Can I transfer this permit to a new owner or operator? 6
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? 7
15. What happens if a portion of this permit is determined to be invalid? 7

B. Facility-Wide Terms and Conditions 8

C. Emissions Unit Terms and Conditions 10

1. Emissions Unit Group - Bellefontaine Gas Producers: P001, P002, P003, ... 11

Authorization

Facility ID: 0546015002
Application Number(s): A0035610
Permit Number: P0103690
Permit Description: Bellefontaine Gas Producers power generating plant
Permit Type: Initial Installation
Permit Fee: $1,200.00
Issue Date: 10/20/2008
Effective Date: 10/20/2008
Expiration Date: 10/20/2018
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Bellefontaine Gas Producers, LLC
2946 US Route 68 North
Bellefontaine, OH 43311

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southwest District Office
401 East Fifth Street
Dayton, OH 45402
(937)285-6357

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Authorization (continued)

Permit Number: P0103690
Permit Description: Bellefontaine Gas Producers power generating plant

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

Group Name: Bellefontaine Gas Producers

Emissions Unit ID:	**P001**
Company Equipment ID:	Cat. P001
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P002**
Company Equipment ID:	Cat. P002
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P003**
Company Equipment ID:	Cat. P003
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. **What does this permit-to-install and operate ("PTIO") allow me to do?**

   This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. **Who is responsible for complying with this permit?**

   The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

   The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. **What records must I keep under this permit?**

   You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. **What are my permit fees and when do I pay them?**

   There are two fees associated with permitted air contaminant sources in Ohio:

   - PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

     You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

   - Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. **When does my PTIO expire, and when do I need to submit my renewal application?**

   This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Southwest District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the

change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

   a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

      (1) None.

   b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

      (1) None.

2. This facility is subject to 40 CFR Part 60, Subpart JJJJ, New Source Performance Standards: Stationary Spark Ignition Internal Combustion Engines. The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart JJJJ. The permittee shall also comply with all applicable requirements of 40 CFR Part 60, Subpart A (General Provisions) as identified in Table 3 of 40 CFR Part 63, Subpart JJJJ. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 60 Subpart JJJJ and Subpart A. The NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA District office or local air agency.

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group - Bellefontaine Gas Producers: P001, P002, P003,

EU ID	Operations, Property and/or Equipment Description
P001	2233 HP Caterpillar G3520C P001
P002	2233 HP Caterpillar G3520C P002
P003	2233 HP Caterpillar G3520C P003

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) b)(1)j, d)(2), d)(3), d)(4), d)(5), and e)(3).

b) Applicable Emissions Limitations and/or Control Requirements

The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Nitrogen oxides (NOx) emissions shall not exceed 0.60 grams per horse power-hour, 2.95 lbs per hour, and 12.92 tons per year. Carbon monoxide (CO) emissions shall not exceed 3.0 grams per horse power-hour, 14.8 lbs per hour, and 64.82 tons per year. See Sections b)(2)a, d)(6), d)(9), f)(1)a, and f)(2), below
b.	OAC rule 3745-31-05(D) (to avoid the applicability of 40 CFR Part 60 Subpart ZZZZ)	The Hazardous Air Pollutant emissions shall not exceed 9.0 tons per rolling 12-month period for any individual HAP or 24.0 tons per rolling 12-month period for combined HAP's. See Sections b)(2)d, d)(1), and e)(2), below
c.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)b, below.
d.	OAC rule 3745-17-11 (B)(5)(b)	0.062 lb of particulate emissions (PE) per mmBtu actual heat input See Sections f)(1)b, and f)(2), below.
e.	OAC rule 3745-17-07 (A)(1)	Visible PE shall not exceed 20% opacity, as a six minute average, except as provided by rule.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See Sections d)(8), e)(5), and f)(1)d, below.
f.	OAC rule 3745-18-06(G)	0.5 lb Sulfur dioxide (SO2) per mmBtu actual heat input. See Section f)(1)c, and f)(2), below.
g.	OAC rule 3745-110-03(F)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
h.	40 CFR Part 60, Subpart JJJJ	Volatile organic compound (VOC) emissions shall not exceed 1.0 gram per horse power-hour. See Sections c)(6), d)(6), e)(4), and f)(2), below.
i.	40 CFR Part 60, Subpart WWW	See Sections b)(2)c., c)(3), c)(4), c)(5), and f)(2), below
j.	OAC rule 3745-114-01	Ohio Toxic Rule See Sections d)(2), d)(3), d)(4), d)(5), and e)(3), below.

(2) Additional Terms and Conditions

a. The "Best Available Technology" (BAT) control requirement for this emissions unit has been determined to be the use of "lean burn technology". BAT requirements also include compliance with the terms and conditions of this permit.

b. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the SO2, VOC, and PM10 emissions from this air contaminant source since the uncontrolled potential to emit for SO2, VOC, and PM10 are each less than ten tons per year.

The PTE for SO2 for this emissions unit is 5.10 tons per year and was determined by assuming the total sulfur content in the landfill gas is converted to SO2. The sulfur concentration in the landfill gas was determined by the method outlined in AP-42 section 2.4.4.2.

The PTE for VOC for this emissions unit is 3.64 tons per year and was determined based on a relationship between oxygen and hexane in the exhaust gas.

The PTE for PM10 for this emissions unit is 4.47 tons per year and was determined by multiplying manufacturer's maximum heat input of 16.47 mm Btu/hr, particulate emission limit of OAC rule 3745-17-11 (B)(5)(b) (0.062 lb/mmBtu), a maximum operating schedule of 8,760 hr/yr and dividing by 2000 lbs/ton.

c. This emissions unit receives landfill gas from the Cherokee Run Landfill which is subject to the control requirements in 40 CFR Part 60, Subpart WWW. Therefore control requirements under 40 CFR Part 60, Subpart WWW apply to this emissions unit. Emissions units P001, P002, and P003 shall meet the specifications for a control system on an active collection system as required in 40 CFR 60.752, included in this permit.

d. The actual usage of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from all non-insignificant emissions units at this facility shall not exceed 9.0 TPY for any single HAP and 24.0 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

c) Operational Restrictions

(1) This emissions unit shall be designed and maintained in such a manner to burn only landfill gas.

(2) The permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a device at the inlet to the internal combustion engine which completely shuts off gas flow to the internal combustion engine when the internal combustion engine is not operating.

(3) All landfill gas supplied to this facility shall be employed as fuel in emissions units P001, P002, and/or P003. These emissions units shall be operated to comply with 40 CFR 60, Subpart WWW in accordance with the provisions of 40 CFR sections 60.752, 60.755, and 60.756, which are reflected in this permit. No uncontrolled landfill gas shall be vented to the ambient air.

(4) Prior to landfill gas combusted in this emissions unit, the fuel shall be route to a treatment system. The treatment system shall ensure that materials such as moisture, particulate matter and other impurities, which have the potential to adversely affect the combustion, are removed from the fuel. The landfill gas treatment system shall be maintained and operated in such a manner as to not create additional regulated air pollution emissions.

(5) All emissions from any atmospheric vent shall be vented to:

a. An open flare designed and operated in accordance with 40 CFR section 60.18, except as noted in 40 CFR section 60.754(e); or

b. introduced into the flame zone of a generator that will reduced the non-methane organic compound (NMOC) by at least 98 weight-percent or reduce the outlet NMOC concentration to less than 20 ppm by volume dry basis as hexane at 3 percent oxygen.

(6) In accordance with 40 CFR section 60.4243(A)(2)(iii), the permittee shall conducted maintenance in a manner to minimize emissions.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for the HAP(s) emitted from emissions units; P001, P002, and P003:

a. the amount of landfill gas combusted, in millions of cubic feet, (mmcf);

b. the estimated concentration of highest individual HAP emitted, in pounds per million cubic feet, (at present Hydrogen Chloride (HCl) is estimated to have the highest concentration at 11.95 lbs/mmcf*);

c. the estimated highest individual HAP emissions, in tons per month, (the sum of (a) times (b) divided by 2000);

d. the estimated concentration of combined HAP's emitted, in pounds per million cubic feet, (at present combined HAP's concentration is estimated to have the highest concentration at 13.81 lbs/mmcf*);

e. the estimated combined HAP's emissions, in tons per month, (the sum of (a) times (d) divided by 2000);

f. the updated rolling, 12-month summation of highest individual HAP emitted , in tons. This shall be the sum for the current month (c) and the preceding eleven calendar months; and

g. the updated rolling, 12-month summation of combined HAP's emitted , in tons. This shall be the sum for the current month (e) and the preceding eleven calendar months.

* This concentration is based on the application data and may be modified in the future based on stack test results and/or as future emissions data become available.

(2) The permit-to-install (PTI), for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute@, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A@, as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices@; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices@; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or Aworst case@ toxic contaminant(s):

Toxic Contaminant: Hydrogen chloride (HCl)

TLV (mg/m3): 3.0

Maximum Hourly Emission Rate (lbs/hr): 0.64

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.017

MAGLC (ug/m3): 300

The permittee, has demonstrated that emissions of Hydrogen chloride (HCl), from this emissions unit, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the AToxic Air Contaminant Statute@, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(3) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration@, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the AToxic Air Contaminant Statute@ will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(4) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the AToxic Air Contaminant Statute@, ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(5) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(6) In accordance with 40 CFR section 60.4243(A)(2)(iii), the permittee shall maintain the following records:

a. All notifications submitted to comply with this subpart and all documentation supporting any notification.

b. Maintenance conducted on the engine.

c. Documentation that demonstrates that each engine will meet the emission standards and information as required in 40 CFR parts 90 and 1048.

(7) The permittee shall maintain records demonstrating any occurrence when landfill gas is vented directly to the ambient air. These records shall include the following:

a. The date and time of the occurrence;

b. The duration of the occurrence, in hours;

c. The cause of the occurrence; and

d. The proactive and corrective steps taken to minimize the occurrence and to prevent future occurrences.

(8) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack(s) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operational log. If visible emissions are observed, the permittee shall also note the following in the operational log;

a. The color of the emissions;

b. The total duration of any visible emission incident; and

c. Any corrective actions taken to eliminate the visible emissions.

(9) The permittee shall properly install, operate, and maintain a monitor and recorder that determines and records air to fuel ratio when the emissions unit is in operation. The monitoring device and recorder shall be installed, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The acceptable air to fuel ratio operating range for the engines shall be based upon the manufacturer's specifications until such time as required testing is conducted and the upper and/or lower limits of the acceptable air to fuel ratio operating range is established relative to compliance with the CO and NOx emission limits of this permit. Following the required testing, the permittee shall collect and record the following information each day the emission unit is in operation:

a. The time the air to fuel ratio value was recorded;

b. The measured air to fuel ratio value;

c. Any deviations of the acceptable air to fuel ratio value operating range;

d. Any corrective steps taken to reestablish the acceptable air to fuel ratio operating conditions;

e. The time the corrected air to fuel ratio value was recorded; and

f. The corrected and compliant air to fuel ratio value.

These records shall be maintained at the facility for a period of three years.

e) Reporting Requirements

(1) Any breakdown or malfunction resulting in the emission of raw and/or treated landfill gas to the atmosphere shall be reported to the Southwest District Office of the Ohio EPA within one hour after the occurrence, or as soon as reasonably possible, and immediate remedial measures shall be undertaken to correct the problem and prevent further emissions to the atmosphere.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. the facility-wide rolling, 12-month individual HAP emission exceeds 9.0 tons, from all materials employed at this facility;

b. the facility-wide rolling, 12-month combined HAP emission exceeds 24.0 tons, from all materials employed at this facility; and

c. the specified established acceptable air to fuel ratio range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

(3) The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(4) In accordance with 40 CFR section 60.4245(c), the permittee shall submit an initial notification that include the following information:

a. Name and address of the owner or operator;

b. The address of the affected source;

c. Engine information including:

i. Make;

ii. Model;

iii. Engine family;

iv. Serial number;

v. Model year;

vi. Maximum engine power; and

vii. Engine displacement.

d. Emission control equipment; and

e. Fuel used.

(5) The permittee shall submit semiannual written reports that:

a. Identify all days during which any visible PE were observed from any stack serving this emissions unit;

b. Identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and

c. Describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

0.6 grams of NOx/hp-hr, 12.92 tons NOx/yr

14.8 lbs CO/hr, 64.82 tons CO/yr

<u>Applicable Compliance Method</u>:

Compliance with the hourly mass emission limitations shall be demonstrated by the performance testing required in condition f)(2). The annual emission limitations were developed by multiplying the respective hourly emission limitations by the maximum operating schedule of 8760 hours/year, and then dividing by 2000 lbs/ton. Therefore, if compliance is shown with the hourly limitations, compliance with the annual limitations will be assumed.

b. Emission Limitation:

0.062 lb PE/mmBtu actual heat input

Applicable Compliance Method:

The potential to emit* for this emissions unit is 0.062 lb PE/mmBtu and complies with the lb/mmBtu emission limitation. Therefore no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*Potential to emit for this emissions unit was established by the manufacturer's published maximum heat input specifications of 16.47 mmBtu/hr and the particulate emission limit of OAC rule 3745-17-11(B)(5)(b).

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

c. Emission Limitation:

0.5 lb SO2/mmBtu actual heat input

Applicable Compliance Method:

The potential to emit* for this emissions unit is 0.07 lb SO2/mmBtu and complies with the lb/mmBtu emission limitation. Therefore no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

The potential to emit for SO2 was determined assuming the total sulfur content in the landfill gas is converted to SO2. The sulfur concentration in the landfill gas was determined by the method outlined in AP-42 section 2.4.4.2.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 – 4 and 6 of 40 CFR Part 60, Appendix A.

d. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a six-minute average, except as specified by rule

Applicable Compliance Method:

If required, 40 CFR Part 60, Method 9, with opacity readings taken from the stack.

e. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 1.0 grams per horse power-hour.

Applicable Compliance Method:

Compliance with the hourly mass emission limitations shall be demonstrated by the performance testing required in condition f)(2).

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 through 4 and Method 18, 25, 25a or 25c, as applicable, of 40 CFR, Part 60, Appendix A.

(2) 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 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.

b. Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load unless otherwise specified or approved by the Ohio EPA, SWDO.

c. Measure and establish an acceptable air-to-fuel ratio range to allow operational variation while assuring short term compliance;

d. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for; NO_x, CO, VOC, PE, and SO2.

e. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

i. 0.60 grams per horse power-hour of NO_x, Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A;

ii. 3.0 grams per horse power-hour of CO, Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A;

iii. 1.0 grams per horse power-hour of VOC, Methods 1 through 4 and Method 18, 25, 25a or 25c, as applicable, of 40 CFR, Part 60, Appendix A,

iv. 0.062 lb of particulate emissions (PE) per mmBtu actual heat input, Methods 1 - 5 of 40 CFR Part 60, Appendix A;

v. 0.5 lb SO2/mmBtu actual heat input, Methods 1 – 4, and 6 of 40 CFR Part 60, Appendix A; and

vi. including any additional requirements as specified by 40 CFR Part 60, Subpart JJJJ and/or Subpart WWW.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, SWDO. 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 tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA's refusal to accept the results of the emission tests.

g. Personnel from the Ohio EPA 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.

(3) A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, SWDO within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA SWDO.

(4) In accordance with 40 CFR section 60.4243(A)(2)(iii), the permittee shall conducted initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

In accordance with 40 CFR section 60.4245(d), the permittee shall submit a copy of each performance test conducted under 40 CFR section 60.4244 within 60 days after the test has been completed.

g) Miscellaneous Requirements