



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

6/23/2011

Bob Blythe
Napoleon Biogas, LLC
319 First Street
Atlantic, FL 32233

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0335012004
Permit Number: P0108211
Permit Type: Initial Installation
County: Henry

Certified Mail

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, Northwest-Signal. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461.

Sincerely,

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

Cc: U.S. EPA Region 5 Via E-Mail Notification
Ohio EPA-NWDO; Michigan; Indiana; Canada



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

Napoleon Biogas LLC submitted an application for an air permit to install for a biogas production facility at 12329 County Road P-3 in Napoleon, Ohio (Henry County). The proposed facility consists of biogas production equipment (digester tank and biogas cleaning) as well as 2 biogas-fired engines used to power electric generators. A flare will be utilize to control any excess biogas generated.

3. Facility Emissions and Attainment Status:

The facility is potentially a major source for Title V for carbon monoxide (CO) emissions. Henry County is in attainment/unclassifiable for all criteria pollutants.

4. Source Emissions:

POTENTIAL EMISSIONS: Without any restrictions, the facility has a potential to emit greater than 100 tons/yr (TPY) of carbon monoxide which are mainly generated by the two biogas-fired engines at the facility.

RESTRICTING POTENTIAL EMISSIONS: The facility has requested an annual restriction on hours of operations for the biogas-fired engines at the facility.

5. Conclusion:

An operating restriction on the hours of operation for the two biogas-fired engines at the facility will result in potential VOC emissions below Title V applicability thresholds.

6. Please provide additional notes or comments as necessary:

None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
CO	97.39
NOx	39.95
VOC	36.82
PM10	5.21

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install and Operate
Napoleon Biogas, LLC

Issue Date: 6/23/2011

Permit Number: P0108211

Permit Type: Initial Installation

Permit Description: Installation of an anaerobic digestion operation which will utilize biogas generated to power two electrical generators. The operation will utilize biofiltration and a flare for emissions control.

Facility ID: 0335012004

Facility Location: Napoleon Biogas, LLC
12329 County Road P-3,
Napoleon, OH 43545

Facility Description: Sewage Treatment Facilities

The Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio has issued a draft action of an air pollution control, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Robert Teer at Ohio EPA DAPC, Northwest District Office, 347 North Dunbridge Road, Bowling Green, OH 43402 or (419)352-8461. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc

Ohio

**Environmental
Protection Agency**

DRAFT

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Napoleon Biogas, LLC**

Facility ID:	0335012004
Permit Number:	P0108211
Permit Type:	Initial Installation
Issued:	6/23/2011
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance



Division of Air Pollution Control
Permit-to-Install and Operate
for
Napoleon Biogas, 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?..... 7
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. F001, F001 11
2. P001, P001 16
3. P002, P002 25
4. P003, P003 34

Authorization

Facility ID: 0335012004

Application Number(s): A0041992

Permit Number: P0108211

Permit Description: Installation of an anaerobic digestion operation which will utilize biogas generated to power two electrical generators. The operation will utilize biofiltration and a flare for emissions control.

Permit Type: Initial Installation

Permit Fee: \$800.00 *DO NOT send payment at this time, subject to change before final issuance*

Issue Date: 6/23/2011

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

Napoleon Biogas, LLC
12329 County Road P-3
Napoleon, OH 43545

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, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

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

Scott J. Nally
Director



Authorization (continued)

Permit Number: P0108211

Permit Description: Installation of an anaerobic digestion operation which will utilize biogas generated to power two electrical generators. The operation will utilize biofiltration and a flare for emissions control.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	F001
Company Equipment ID:	F001
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P001
Company Equipment ID:	P001
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P002
Company Equipment ID:	P002
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P003
Company Equipment ID:	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. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. 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, Northwest 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 submitting¹ 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 emissions 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.

¹Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

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.

C. Emissions Unit Terms and Conditions



1. F001, F001

Operations, Property and/or Equipment Description:

Roadways and Parking Areas

a) 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).

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

b)(1)b.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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), as effective 11/30/01	0.02 ton of fugitive particulate matter 10 microns or less in size (PM10) per year No visible particulate emissions (PE) except for a period of time not to exceed one minute during any 60-minute observation period Best available control measures that are sufficient enough to minimize or eliminate visible emissions of fugitive dust [see b)(2)h. through b)(2)i.] See b)(2)a.
b.	OAC rule 3745-31-05 (A)(3), as effective 12/01/06	See b)(2)d.
c.	OAC rule 3745-17-07(B)	See b)(2)j.
d.	OAC rule 3745-17-08(B)	See b)(2)k.

- (2) Additional Terms and Conditions
- a. This permit establishes the following best available technology (BAT) requirements in accordance with OAC rule 3745-31-05(A)(3), as effective 11/30/01:
- i. fugitive emission limitation of 0.02 ton of PM10 per year;
 - ii. applying best available control measures (see b)(2)h. through b)(2)k.);
 - iii. no visible PE except for a period of time not to exceed one minute during any 60-minute observation period.
- b. The permittee has satisfied the BAT requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective 11/30/01, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by 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 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then the requirements of OAC rule 3745-31-05(A)(3), effective November 30, 2001 will no longer apply.
- c. The following outlines the requirements contained in this permit that will no longer apply after approval of the 12/01/06 version of OAC rule 3745-31-05:
- i. fugitive emission limitation of 2.69 tons of PM10 per year;
 - ii. applying best available control measures [see b)(2)a.ii.]; and
 - iii. the visible PE restriction not to exceed one minute during any 60-minute observation period [see b)(2)a.iii.]
- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.
- BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10 emissions from this air contaminant source since the uncontrolled potential to emit of PM10 is less than 10 tons per year.
- e. The BAT requirements under OAC rule 3745-31-05(A)(3) are not applicable to the particulate emissions emitted from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as total suspended particulate or particulate matter) are an air contaminant that does not involve an established NAAQS.



- f. The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

Paved Roadways and Parking Areas

all paved roadways and parking areas

- g. The permittee shall employ best/reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permit application, the permittee has committed to treat the paved roadways with water as needed to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- h. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for an unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for the day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- i. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- j. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- k. The facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:

Unpaved Roadways and Parking Areas

Minimum Inspection Frequency

all paved roadways and parking areas

once during each day of operation

- (2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient

for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

- (3) The permittee shall maintain records of the following information:
- a. The date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation.
 - b. The date of each inspection where it was determined by the permittee that it was necessary to implement the control measures.
 - c. The dates the control measures were implemented.
 - d. On a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in d)(3)d. shall be kept separately for the paved roadways and parking areas and for the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.
- (2) The permittee shall additionally identify the following information in the annual PER in accordance with the monitoring requirements in term number d)(3) above:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure that was to be implemented as a result of an inspection was not implemented.

The above information shall be provided as an attachment to the PER. If there were no days and/or instances to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that all inspections were performed by the required frequency, and control measures were properly implemented.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.02 ton of fugitive particulate matter 10 microns or less in size (PM10) per year

Applicable Compliance Method:

The PM10 limitation was determined by multiplying an AP-42 emission factor for unpaved roadways of 0.0021 lb of PM10/VMT [Section 13.2.2 (11/06)] by a maximum of 21,725 vehicle miles traveled per year, a control efficiency of 90% for watering, and dividing by 2000 lbs/ton.

Therefore, provided compliance is shown with the requirements of this permit to apply best available control measures, compliance with the ton per year PM10 limitation shall also be demonstrated.

b. Emission Limitation:

No visible PE from unpaved roadways and parking areas except for a period of time not to exceed three minutes during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

g) Miscellaneous Requirements

(1) None.



2. P001, P001

Operations, Property and/or Equipment Description:

Stationary spark ignition (SI) internal combustion engine (ICE) - Jenbacher Engine (1966 hp)

a) 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).

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

b)(1)c.

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

b)(1)d., b)(2)d., c)(2), d)(2), e)(3), and f)(1)h.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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.	ORC 3704.03(T)	Carbon monoxide (CO) emissions shall not exceed 2.7 grams per brake horsepower hour (g/bhp-hr); Volatile organic compounds (VOC) emissions shall not exceed 1.0 g/bhp-hr Nitrogen oxide (NOx) emissions shall not exceed 1.1 g/bhp-hr
b.	OAC Rule 3745-31-05(A)(3), as effective 11-30-01	Emissions of particulate matter 10 microns or less in size (PM10) shall not exceed 0.1 g/bhp-hr 3.61 tons PM10 per year Visible particulate emissions from any stack serving this emissions unit shall not exceed 10% opacity as a 6-minute average



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)a. and b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 12-01-06	See b)(2)c.
d.	OAC rule 3745-31-05(D)	Emissions of CO from emission units P001 and P002 combined shall not exceed 97.39 tons per rolling 12-month period [see b)(2)d.]
e.	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.062 pound/million Btu actual heat input [see b)(2)e. and b)(2)i.]
f.	OAC rule 3745-17-07(A)(1)	Visible PE shall not exceed 20% opacity as a six minute average except as provided by rule [see b)(2)i.]
g.	OAC rule 3745-18-06(G)	Sulfur dioxide (SO ₂) emissions shall not exceed 0.5 pounds of sulfur dioxide per MMBtu actual heat input [see b)(2)f.]
h.	OAC rule 3745-110-03(F)	See b)(2)g.
i.	40 CFR Part 60, Subpart JJJJ	See b)(2)h.

(2) Additional Terms and Conditions

- a. The requirements of this rule also includes compliance with the requirements established pursuant to OAC rule 3745-31-05(D). It should be noted that the engine emits sulfur dioxide (SO₂). The potential emissions of SO₂ result in negligible emission quantities and therefore have not been addressed through limitations established under OAC rule 3745-31-05(A)(3), as effective 11-30-01.
- b. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by 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 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective November 30, 2001 will no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(D) will remain applicable after the above SIP revisions are approved by U.S. EPA.
- c. This rule applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

BAT requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply emissions of PM10 and sulfur dioxide (SO₂) from this air contaminant source since the potential to emit for PM10 and SO₂ is each less than 10 tons per year. The PTE for PM10 takes into consideration federally enforceable requirements for particulate matter established under OAC rule 3745-17-11(b)(5)(d).

- d. The emissions of CO from emissions units P001 and P002, combined, shall not exceed 97.39 tons per year based on a rolling, 12-month period. The federally enforceable CO limitation is based on an hours of operation restriction [see c)(2)]. A federally enforceable CO limitation is being established for purposes of avoiding Title V applicability.
- e. The potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design) for PE from the generator is less than the allowable emission limitation of 0.310 lb/mmBtu established by OAC rule 3745-17-11(B)(5)(a).
- f. The potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design) for SO₂ from the generator is less than the allowable emission limitation of 0.5 lb/mmBtu established by OAC rule 3745-18-06(G).
- g. The requirements of OAC rule 3745-110-03(F) do not apply because the engine has a power capacity less than 2000 horsepower.
- h. The requirements of 40 CFR Part 60, Subpart JJJJ do not apply because the engine is a lean-burn engine with a power capacity greater than 1350 horsepower.
- i. The visible particulate emission limitation pursuant to OAC rule 3745-17-07(A) and the 0.062 pound/million Btu actual heat input PE limitation pursuant to OAC rule 3745-17-11(B)(5)(b) shall become the enforceable limitations under this permit once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.
- j. All emissions of particulate matter are PM10.

c) Operational Restrictions

- (1) The permittee shall only burn biogas fuel in this emissions unit.
- (2) The maximum annual hours of operation for emissions units P001 and P002, combined, shall not exceed 16,644 hours per rolling 12-month period.

To ensure enforceability during the first 12 calendar months of operation under the provision of this permit, the permittee shall not exceed the operating hours specified in the following table:



Month(s)	Maximum Allowable Cumulative Hours of Operation (for P001 and P002 combined)
1	4,161
1-2	8,322
1-3	12,483
1-12	16,644

After the first 12-months of operation under the provisions of this permit, compliance with the annual hours of operation restriction shall be based upon a rolling, 12-month summation of operating hours.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than biogas fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (2) The permittee shall maintain monthly records of the following information:
 - a. the operating hours for each month; and
 - b. beginning after the first 12 calendar months of operation or the first 12 calendar months, under the provision of this permit, the rolling, 12-month summation of the operating hours.
 - c. also, during the first 12 calendar months of operation or the first 12 calendar months, under the provision of this permit, the permittee shall record the cumulative operating hours for each calendar month.
 - d. the CO emission rate, in tons per month, calculated multiplying the operating hours per month [d)(2)a.] and the hourly CO emission rate determined from testing in f)(2) and dividing by 2000 lbs/ton.
 - e. beginning after the first 12 calendar months of operation or the first 12 calendar months, under the provision of this permit, the rolling, 12-month summation of the CO emissions.
 - f. Also, during the first 12 calendar months of operation or the first 12 calendar months, under the provision of this permit, the permittee shall record the cumulative CO emissions for each calendar month.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling, 12-month limitation on the hours of operation;
 - ii. for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation;
 - iii. all exceedances of the rolling, 12-month emission limitation for CO and, for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit; and
 - iv. all exceedances of the maximum allowable CO cumulative emission levels.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

CO emissions shall not exceed 2.7 g/bhp-hr.

Applicable Compliance Method:

The g/bhp-hr was established in accordance with the engine manufacturer emissions specifications. Compliance with the emission limitation shall be demonstrated by the emissions testing indicated in f)(2).

b. Emissions Limitation:

NOx emissions shall not exceed 1.1 g/bhp-hr.

Applicable Compliance Method:

The g/bhp-hr was established in accordance with the engine manufacturer emissions specifications. Compliance with the emission limitation shall be demonstrated by the emissions testing indicated in f)(2).

c. Emissions Limitation:

VOC emissions shall not exceed 1.0 g/hp-hr.

Applicable Compliance Method:

The g/bhp-hr was established in accordance with the engine manufacturer emissions specifications. Compliance with the emission limitation shall be demonstrated by the emissions testing indicated in f)(2).

d. Emissions Limitations:

PM10 emissions shall not exceed 0.1 g/bhp-hr and 3.61 tons per year

Applicable Compliance Method:

The g/bhp-hr was established in accordance with the engine manufacturer emissions specifications. Compliance with the emission limitation shall be demonstrated by the emissions testing indicated in f)(2).

The annual emissions limitation was developed by multiplying the g/bhp-hr by a maximum operating schedule of 8760 hours of operation, a conversion factor of lb/454 g and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the short term emission limitation, compliance with the annual limitation shall also be demonstrated.

Emissions Limitation:

PE shall not exceed 0.062 pound/million Btu actual heat input.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with OAC rule 3745-17-03(B)(10).

e. Emissions Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 10% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with Test Method 9 as set forth in [Appendix on Test Methods] in 40 CFR, Part 60 ([Standards of Performance for New Stationary Sources]).

f. Emissions Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with OAC rule 3745-17-03(B)(1).

g. Emissions Limitation:

SO₂ emissions shall not exceed 0.5 pounds of sulfur dioxide per MMBtu actual heat input.

Applicable Compliance Method:

The potential emissions of SO₂ from the engine are less than the allowable emission rate established under OAC rule 3745-18-06(G). Compliance with the allowable emission limitation shall be demonstrated by the emissions testing indicated in f)(2).

h. Emissions Limitation:

Emissions of CO from emission units P001 and P002 combined shall not exceed 97.39 tons per rolling, 12-month period

Applicable Compliance Method:

The rolling Compliance shall be demonstrated by the monitoring and recordkeeping requirements in d)(2).

(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 180 days after initial startup of the emissions unit.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable emission limitations for CO, NOx, and VOC. The permittee shall also test for SO2 emissions.
- c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

CO	Method 10	40 CFR Part 60, Appendix A
NOx	Method 7	40 CFR Part 60, Appendix A
SO2	Method 6	40 CFR Part 60, Appendix A
VOC	Methods 18 and 25 or 25A	40 CFR Part 60, Appendix A

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

- d. The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission tests.
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, 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.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the



appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

- h. Future testing requirements shall be conducted in accordance with applicable rules, policies, etc. (i.e. Engineering Guide #16, OAC rule 3745-15-04, etc.) Testing time frame(s) specified may be amended or waived for cause upon prior request of, and written approval of, the Ohio EPA Northwest District Office.

g) **Miscellaneous Requirements**

- (1) None.



3. P002, P002

Operations, Property and/or Equipment Description:

Stationary spark ignition (SI) internal combustion engine (ICE) - Jenbacher Engine (1966 hp)

a) 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).

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

b)(1)c.

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

b)(1)d., b)(2)d., c)(2), d)(2), e)(3), and f)(1)h.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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.	ORC 3704.03(T)	Carbon monoxide (CO) emissions shall not exceed 2.7 grams per brake horsepower hour (g/bhp-hr); Volatile organic compounds (VOC) emissions shall not exceed 1.0 g/bhp-hr Nitrogen oxide (NOx) emissions shall not exceed 1.1 g/bhp-hr
b.	OAC Rule 3745-31-05(A)(3), as effective 11-30-01	Emissions of particulate matter 10 microns or less in size (PM10) shall not exceed 0.1 g/bhp-hr 3.61 tons PM10 per year Visible particulate emissions from any stack serving this emissions unit shall not exceed 10% opacity as a 6-minute average



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)a. and b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 12-01-06	See b)(2)c.
d.	OAC rule 3745-31-05(D)	Emissions of CO from emission units P001 and P002 combined shall not exceed 97.39 tons per rolling 12-month period [see b)(2)d.]
e.	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.062 pound/million Btu actual heat input [see b)(2)e. and b)(2)i.]
f.	OAC rule 3745-17-07(A)(1)	Visible PE shall not exceed 20% opacity as a six minute average except as provided by rule [see b)(2)i.]
g.	OAC rule 3745-18-06(G)	Sulfur dioxide (SO ₂) emissions shall not exceed 0.5 pounds of sulfur dioxide per MMBtu actual heat input [see b)(2)f.]
h.	OAC rule 3745-110-03(F)	See b)(2)g.
i.	40 CFR Part 60, Subpart JJJJ	See b)(2)h.

(2) Additional Terms and Conditions

- a. The requirements of this rule also includes compliance with the requirements established pursuant to OAC rule 3745-31-05(D). It should be noted that the engine emits sulfur dioxide (SO₂). The potential emissions of SO₂ result in negligible emission quantities and therefore have not been addressed through limitations established under OAC rule 3745-31-05(A)(3), as effective 11-30-01.
- b. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by 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 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective November 30, 2001 will no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(D) will remain applicable after the above SIP revisions are approved by U.S. EPA.
- c. This rule applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

BAT requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply emissions of PM10 and sulfur dioxide (SO₂) from this air contaminant source since the potential to emit for PM10 and SO₂ is each less than 10 tons per year. The PTE for PM10 takes into consideration federally enforceable requirements for particulate matter established under OAC rule 3745-17-11(b)(5)(d).

- d. The emissions of CO from emissions units P001 and P002, combined, shall not exceed 97.39 tons per year based on a rolling, 12-month period. The federally enforceable CO limitation is based on an hours of operation restriction [see c)(2)]. A federally enforceable CO limitation is being established for purposes of avoiding Title V applicability.
- e. The potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design) for PE from the generator is less than the allowable emission limitation of 0.310 lb/mmBtu established by OAC rule 3745-17-11(B)(5)(a).
- f. The potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design) for SO₂ from the generator is less than the allowable emission limitation of 0.5 lb/mmBtu established by OAC rule 3745-18-06(G).
- g. The requirements of OAC rule 3745-110-03(F) do not apply because the engine has a power capacity less than 2000 horsepower.
- h. The requirements of 40 CFR Part 60, Subpart JJJJ do not apply because the engine is a lean-burn engine with a power capacity greater than 1350 horsepower.
- i. The visible particulate emission limitation pursuant to OAC rule 3745-17-07(A) and the 0.062 pound/million Btu actual heat input PE limitation pursuant to OAC rule 3745-17-11(B)(5)(b) shall become the enforceable limitations under this permit once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.
- j. All emissions of particulate matter are PM10.

c) Operational Restrictions

- (1) The permittee shall only burn biogas fuel in this emissions unit.
- (2) The maximum annual hours of operation for emissions units P001 and P002, combined, shall not exceed 16,644 hours per rolling 12-month period.

To ensure enforceability during the first 12 calendar months of operation under the provision of this permit, the permittee shall not exceed the operating hours specified in the following table:



Month(s)	Maximum Allowable Cumulative Hours of Operation (for P001 and P002 combined)
1	4,161
1-2	8,322
1-3	12,483
1-12	16,644

After the first 12-months of operation under the provisions of this permit, compliance with the annual hours of operation restriction shall be based upon a rolling, 12-month summation of operating hours.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than biogas fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (2) The permittee shall maintain monthly records of the following information:
 - a. the operating hours for each month; and
 - b. beginning after the first 12 calendar months of operation or the first 12 calendar months, under the provision of this permit, the rolling, 12-month summation of the operating hours.
 - c. also, during the first 12 calendar months of operation or the first 12 calendar months, under the provision of this permit, the permittee shall record the cumulative operating hours for each calendar month.
 - d. the CO emission rate, in tons per month, calculated multiplying the operating hours per month [d)(2)a.] and the hourly CO emission rate determined from testing in f)(2) and dividing by 2000 lbs/ton.
 - e. beginning after the first 12 calendar months of operation or the first 12 calendar months, under the provision of this permit, the rolling, 12-month summation of the CO emissions.
 - f. Also, during the first 12 calendar months of operation or the first 12 calendar months, under the provision of this permit, the permittee shall record the cumulative CO emissions for each calendar month.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling, 12-month limitation on the hours of operation;
 - ii. for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation;
 - iii. all exceedances of the rolling, 12-month emission limitation for CO and, for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit; and
 - iv. all exceedances of the maximum allowable CO cumulative emission levels.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

CO emissions shall not exceed 2.7 g/bhp-hr.

Applicable Compliance Method:

The g/bhp-hr was established in accordance with the engine manufacturer emissions specifications. Compliance with the emission limitation shall be demonstrated by the emissions testing indicated in f)(2).

b. Emissions Limitation:

NOx emissions shall not exceed 1.1 g/bhp-hr.

Applicable Compliance Method:

The g/bhp-hr was established in accordance with the engine manufacturer emissions specifications. Compliance with the emission limitation shall be demonstrated by the emissions testing indicated in f)(2).

c. Emissions Limitation:

VOC emissions shall not exceed 1.0 g/hp-hr.

Applicable Compliance Method:

The g/bhp-hr was established in accordance with the engine manufacturer emissions specifications. Compliance with the emission limitation shall be demonstrated by the emissions testing indicated in f)(2).

d. Emissions Limitations:

PM10 emissions shall not exceed 0.1 g/bhp-hr and 3.61 tons per year

Applicable Compliance Method:

The g/bhp-hr was established in accordance with the engine manufacturer emissions specifications. Compliance with the emission limitation shall be demonstrated by the emissions testing indicated in f)(2).

The annual emissions limitation was developed by multiplying the g/bhp-hr by a maximum operating schedule of 8760 hours of operation, a conversion factor of lb/454 g and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the short term emission limitation, compliance with the annual limitation shall also be demonstrated.

Emissions Limitation:

PE shall not exceed 0.062 pound/million Btu actual heat input.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with OAC rule 3745-17-03(B)(10).

e. Emissions Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 10% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with Test Method 9 as set forth in [Appendix on Test Methods] in 40 CFR, Part 60 ([Standards of Performance for New Stationary Sources]).

f. Emissions Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with OAC rule 3745-17-03(B)(1).

g. Emissions Limitation:

SO₂ emissions shall not exceed 0.5 pounds of sulfur dioxide per MMBtu actual heat input.

Applicable Compliance Method:

The potential emissions of SO₂ from the engine are less than the allowable emission rate established under OAC rule 3745-18-06(G). Compliance with the allowable emission limitation shall be demonstrated by the emissions testing indicated in f)(2).

h. Emissions Limitation:

Emissions of CO from emission units P001 and P002 combined shall not exceed 97.39 tons per rolling 12-month period

Applicable Compliance Method:

The rolling Compliance shall be demonstrated by the monitoring and recordkeeping requirements in d)(2).



(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 180 days after initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable emission limitations for CO, NOx, and VOC. The permittee shall also test for SO2 emissions.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

Table with 4 columns: Pollutant, Method, and Reference. Rows include CO (Method 10, 40 CFR Part 60, Appendix A), NOx (Method 7, 40 CFR Part 60, Appendix A), SO2 (Method 6, 40 CFR Part 60, Appendix A), and VOC (Methods 18 and 25 or 25A, 40 CFR Part 60, Appendix A).

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

d. The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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.

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, 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.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.



- h. Future testing requirements shall be conducted in accordance with applicable rules, policies, etc. (i.e. Engineering Guide #16, OAC rule 3745-15-04, etc.) Testing time frame(s) specified may be amended or waived for cause upon prior request of, and written approval of, the Ohio EPA Northwest District Office.
- g) Miscellaneous Requirements
 - (1) None.



4. P003, P003

Operations, Property and/or Equipment Description:

Anaerobic Digester System (includes solid and liquid reception tanks and bins, anaerobic digestion tanks, pasteurization, dewatering, and biogas collection) with flare.

a) 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).

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

b)(1)a., b)(1)c., b)(1)g., b)(1)h., b)(2)a., d)(2), and d)(3).

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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
<u>Material Handling and Processing</u>		
a.	OAC rule 3745-31-05(F) [voluntary restriction to control odors]	See b)(2)a.
<u>Process Flare</u>		
b.	OAC rule 3745-31-05(A)(3), as effective 11-30-01	Emissions of sulfur dioxide (SO2) shall not exceed 2.98 pounds per hour and 0.75 tons per year; Emissions of carbon monoxide (CO) shall not exceed 200 pounds per mmscf of biogas flared and 1.20 tons per year;



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Emissions of nitrogen oxide (NOx) shall not exceed 23 pounds per mmscf of biogas flared and 0.14 ton per year; See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 12-01-06	See b)(2)c.
d.	OAC rule 3745-17-11(B)	See b)(2)d.
e.	OAC rule 3745-17-07(A)	See b)(2)e.
f.	OAC rule 3745-18-06(E)(2)	The sulfur dioxide (SO ₂) emissions limitation specified by this rule is less stringent than the voluntary restriction established pursuant to OAC rule 3745-31-05(A)(3) in b)(1)b.
Biofilter		
g.	OAC rule 3745-31-05(E) [State-only enforceable restriction to ensure compliance with ORC 3704.03(F)(4)(b) (Toxic Air Contaminant Statute)]	See d)(3).
h.	OAC rule 3745-31-05(F) [Voluntary restriction to control odors]	See b)(2)a.

(2) Additional Terms and Conditions

- a. Permit to install and operate P0108211 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of controlling odors from material handling and processing:
 - i. Daily cleaning of the processing building load-in and load-out areas to minimize the presence of residual feedstock and digestate;
 - ii. Installation and operation of a biofilter to control emissions of odors from material handling and processing operations;
 - iii. The direction of air flow through all processing building openings during normal operations shall be into the building and vented at all times through a closed vent system exhausted through a biofilter;
 - iv. Processing building openings during the load-in of solid feedstock and load-out of digestate shall be minimized;

- v. Processing building air shall be vented at all times during normal operation through a closed vent system exhausted through a biofilter;
 - vi. Headspace from storage tanks, including liquid feedstock buffer tanks, pasteurization tanks and belt press filtrate holding tank shall be vented through a closed-vent system exhausted through a biofilter.
- b. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by 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 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective November 30, 2001 will no longer apply.
- c. This rule applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.
- BAT requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the following emissions from this air contaminant source:
- i. emissions of CO since the annual emission rate is less than 10 tons per year taking into account the restriction on the flaring hours;
 - ii. emissions of SO₂ since the annual emission rate is less than 10 tons per year taking into account the restriction on flaring hours and the hydrogen sulfide (H₂S) content restriction of the biogas gas being flared;
 - iii. emissions of NO_x, volatile organic compounds (VOC), and particulate matter 10 microns or less in size (PM₁₀) since the potential to emit for each is less than 10 tons per year.
- d. The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01(B)(17).
- e. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- f. Emissions from P003 shall be vented to the flare during any instance during which biogas is present in the feedstock equilibrium tank, primary digester, or dual purpose tank and emissions unit P001 and/or P002 is not firing biogas.

- c) Operational Restrictions
- (1) A pilot flame shall be maintained at all times in the flare's pilot light burner.
 - (2) The operation of this emissions unit is limited to 500 hours annually.
 - (3) Biogas combusted in the flare shall not exceed a hydrogen sulfide (H₂S) concentration of 500 parts per million on a volume basis (ppmv).
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain the following records on a daily basis:
 - a. all periods of time during which there was no pilot flame or the flare was inoperable and biogas was present in the feedstock equilibrium tank, primary digester, or dual purpose tank and emissions unit B001 is not operating;
 - b. all periods of time that the voluntary restrictions in b)(2)a. are not employed or followed;
 - c. the average sulfur concentration (as H₂S) in ppmv of the biogas combusted in the flare; and
 - d. the hours of operations of this emissions unit.
 - (2) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year so long as the permittee complies with the voluntary restrictions in b)(2)a and the monitoring and recordkeeping requirements in d)(3).

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install and operate prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.
 - (3) The permittee shall submit an operation and maintenance plan (or "plan") for biofilter operation to Ohio EPA, Northwest District Office for approval within sixty (60) days of startup of emissions unit P003. This plan shall be implemented and followed immediately upon startup of the emissions unit and, at a minimum, include the following information:
 - a. a description of the biofilter, including materials of construction and key operating parameter value(s) or range(s);
 - b. a description of how the biofilter will be operated and maintained, including a schedule for routine biofilter maintenance and material replacement, equipment specifications of the biofilter odorous air blower, and dimensions and location of the biofilter;

- c. a description of how biofilter key operating parameters will be monitored and corrective actions performed if any key operating parameter(s) fall outside its (their) expected value(s) or range(s);
- d. a description of any periodic sampling or testing performed on the biofilter or biofilter emissions for odor-causing compounds;
- e. a description of how biofilter emissions will be monitored for odor-causing compounds at the biofilter and at the facility fenceline;
- f. a description of how odor-causing compound emissions from the biofilter, detected at the facility fenceline, will be minimized or eliminated; and
- g. a description of how biofilter malfunctions, including emissions of odor-causing compounds detected at the facility fenceline, will be reported to Northwest District Office.

Until such time as Ohio EPA, Northwest District Office (NWDO) approves the plan, the original plan shall be implemented and followed as submitted. If the submitted plan is not acceptable, the facility shall continue to implement the submitted plan and submit any necessary changes or revisions until it is approved by NWDO.

After initial approval of the plan, any changes or revisions shall be submitted to NWDO for approval prior to implementing the change or revision. Until such time as any changes or revisions to the plan are approved, the facility shall continue to comply with the existing, approved plan.

Upon request, the facility shall submit an updated and augmented plan if Ohio EPA determines that the current plan is not adequate for controlling emissions of odor-causing compounds. This updated plan shall be submitted within thirty (30) days of receiving the request, or such time as requested by the permittee and approved by Ohio EPA. If the submitted augmented plan is not acceptable, the facility shall continue to implement the submitted augmented plan and submit any necessary changes or revisions until the plan is approved by NWDO.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations:

SO₂ shall not exceed 2.98 pounds per hour and 0.75 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the short-term and annual emissions limitation through the monitoring and recordkeeping in d)(1) and the following equation:

$$\text{SO}_2 \text{ lb/hr} = F * (\text{H}_2\text{S ppmv} / 1,000,000) * 0.088 \text{ lb H}_2\text{S/cubic feet H}_2\text{S} * 1.88 \text{ lb SO}_2/\text{lb H}_2\text{S}$$

Where:

F = 36,000 cubic feet per hour (maximum flare exhaust volume)

H₂S ppmv = average concentration of H₂S in biogas, from d)(1)

The annual limitation was developed by multiplying the hourly emissions rate by a maximum annual operating schedule of 500 hours and dividing by 2000 lbs/ton. Therefore, compliance with the annual emissions limitation shall be demonstrated by the monitoring and recordkeeping requirements.

If required, sulfur dioxide emissions shall be determined according to Test Methods 1 - 4, and 6 as set forth in 40 CFR, Part 60 Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Northwest District Office.

b. Emissions Limitations:

Emissions of CO shall not exceed 200 pounds per mmscf of biogas flared and 1.20 tons per year

Applicable Compliance Method:

The lb/mmscf limitation is based on the flare manufacturer's engineering data derived from flare sampling.

Compliance with the annual emission limitations may be demonstrated by multiplying the pound CO/mmscf, the maximum biogas flaring rate, and maximum operating schedule of 500 hours/year and then dividing by 2,000 pounds/ton.

c. Emissions Limitations:

Emissions of NO_x shall not exceed 23 pounds per mmscf of biogas flared and 0.14 ton per year;

Applicable Compliance Method:

The lb/mmscf limitation is based on the flare manufacturer's engineering data derived from flare sampling.

Compliance with the annual emission limitations may be demonstrated by multiplying the pound NOx/mmscf, the maximum biogas flaring rate, and maximum operating schedule of 500 hours/year and then dividing by 2,000 pounds/ton.

d. Emissions Limitations:

Emissions of NOx shall not exceed 23 pounds per mmscf of biogas flared and 0.14 ton per year;

Applicable Compliance Method:

The lb/mmscf limitation is based on the flare manufacturer's engineering data derived from flare sampling.

Compliance with the annual emission limitations may be demonstrated by multiplying the pound NOx/mmscf, the maximum biogas flaring rate, and maximum operating schedule of 500 hours/year and then dividing by 2,000 pounds/ton.

g) Miscellaneous Requirements

- (1) If required, the permittee shall confirm, through the applicable methods and procedures specified in 40 CFR Part 60.18, that the flare's exit velocity and the net heating value of the biogas conform to the maximum design values specified in the permit application for this emissions unit.