Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

10/3/2011

Certified Mail

| | |
|---|---|
| No | TOXIC REVIEW |
| No | PSD |
| No | SYNTHETIC MINOR TO AVOID MAJOR NSR |
| No | CEMS |
| No | MACT/GACT |
| No | NSPS |
| No | NESHAPS |
| No | NETTING |
| No | MAJOR NON-ATTAINMENT |
| No | MODELING SUBMITTED |
| No | MAJOR GHG |
| No | SYNTHETIC MINOR TO AVOID MAJOR GHG |

C. Mark Miller
Columbus Southerly Wastewater Treatment Plant
910 Dublin Road
Rm 4164
Columbus, OH 43215

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0125040420
Permit Number: P0108255
Permit Type: Administrative Modification
County: Franklin

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Central District Office. 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.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA
Ohio EPA-CDO

Ohio | Environmental Protection Agency

# FINAL

# Division of Air Pollution Control
# Permit-to-Install
for
Columbus Southerly Wastewater Treatment Plant

| | |
|---|---|
| Facility ID: | 0125040420 |
| Permit Number: | P0108255 |
| Permit Type: | Administrative Modification |
| Issued: | 10/3/2011 |
| Effective: | 10/3/2011 |

Ohio Environmental Protection Agency

**Division of Air Pollution Control**
**Permit-to-Install**
for
Columbus Southerly Wastewater Treatment Plant

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# Authorization

Facility ID: 0125040420
Facility Description: Sewerage systems
Application Number(s): M0001288
Permit Number: P0108255
Permit Description: Administrative modification of PTI No. 01-01305 issued January 12, 2006.
Permit Type: Administrative Modification
Permit Fee: $900.00
Issue Date: 10/3/2011
Effective Date: 10/3/2011

This document constitutes issuance to:

Columbus Southerly Wastewater Treatment Plant
6977 South High Street
Box 95C, Rt#3
Lockbourne, OH 43137-9702

of a Permit-to-Install 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, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049
(614)728-3778

The above named entity is hereby granted a Permit-to-Install for the 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 emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

# Authorization (continued)

Permit Number: P0108255
Permit Description: Administrative modification of PTI No. 01-01305 issued January 12, 2006.

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

**Group Name: Acid Gas Digesters**

| | |
|---|---|
| **Emissions Unit ID:** | **B027** |
| Company Equipment ID: | Acid-phase Digester 1 |
| Superseded Permit Number: | 01-01305 |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **B028** |
| Company Equipment ID: | Acid-phase Digester 2 |
| Superseded Permit Number: | 01-01305 |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **B029** |
| Company Equipment ID: | Acid-phase Digester 3 |
| Superseded Permit Number: | 01-01305 |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **B030** |
| Company Equipment ID: | Mesophilic Digester 1 |
| Superseded Permit Number: | 01-01305 |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **B031** |
| Company Equipment ID: | Mesophilic Digester 2 |
| Superseded Permit Number: | 01-01305 |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **B032** |
| Company Equipment ID: | Mesophilic Digester 3 |
| Superseded Permit Number: | 01-01305 |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **B033** |
| Company Equipment ID: | Mesophilic Digester 4 |
| Superseded Permit Number: | 01-01305 |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **B034** |
| Company Equipment ID: | Mesophilic Digester 5 |
| Superseded Permit Number: | 01-01305 |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **B035** |
| Company Equipment ID: | Mesophilic Digester 6 |
| Superseded Permit Number: | 01-01305 |
| General Permit Category and Type: | Not Applicable |

# A. Standard Terms and Conditions

## 1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements

(3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A.9., Reporting Requirements

(5) Standard Term and Condition A.10., Applicability

(6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A.14., Public Disclosure

(8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A.16., Fees

(10) Standard Term and Condition A.17., Permit Transfers

## 2. Severability Clause

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

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

## 3. General Requirements

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

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

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

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Central District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emissionlimitations, operationalrestrictions,

andcontroldeviceoperatingparameterlimitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Central District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, andreportingrequirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Central District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Central District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

**6. Compliance Requirements**

a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

d) The permittee shall submit progress reports to the Ohio EPA DAPC, Central District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

## 7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

## 8. Air Pollution Nuisance

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

## 9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Central District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Central District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a

quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**10. Applicability**

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

**11. Construction of New Sources(s) and Authorization to Install**

a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., 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) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as “permanently shut down” in Ohio EPA’s “Air Services” 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).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., 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). All

records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

**12. Permit-To-Operate Application**

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

**13. Construction Compliance Certification**

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

**14. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations**

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

## 16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

## 17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the “Owner/Contact Change” functionality in Air Services once the transfer is legally completed. The change must be submitted through Air Services within thirty days of the ownership transfer date.

## 18. Risk Management Plans

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

## 19. Title IV Provisions

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

# B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

# C. Emissions Unit Terms and Conditions

## 1. Emissions Unit Group -Acid Gas Digesters: B027,B028,B029,B030,B031,B032,B033,B034,B035,

| EU ID | Operations, Property and/or Equipment Description |
|---|---|
| B027 | Acid Gas Digester number 1 controlled by a flare |
| B028 | Acid Gas Digester number 2 controlled by a flare |
| B029 | Acid Gas Digester number 3 controlled by a flare |
| B030 | Gas DigesterNumber 1 controlled by a flare |
| B031 | Gas Digester Number 2 controlled by a flare |
| B032 | Gas Digester Number 3 controlled by a flare |
| B033 | Gas Digester Number 4 controlled by a flare |
| B034 | Gas Digester Number 5 controlled by a flare |
| B035 | Gas Digester Number 6 controlled by a flare |

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) 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) | For emissions units B027 through B035, emissions shall not exceed:<br><br>14.78 lbs/hr of carbon monoxide (CO).<br><br>7.2 lbs/hr of nitrogen oxide(NOx).<br><br>12.5 lbs/hr of sulfur dioxide ($SO_2$).<br><br>1.7 lbs/hr of particulate emissions (PE).<br><br>0.38 lb/hr of volatile organic compounds (VOC) emissions shall not exceed.<br><br>See b)(1)c. below.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D) and 3745-17-07(A). |
| b. | OAC rule 3745-31-05(D)<br>(Synthetic Minor to avoid NSR) | CO emissions from emissions units B027-B035 shall not exceed 51.74 tons per |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | | rolling, 12-month period.<br><br>NOx emissions from emissions units B027-B035 shall not exceed 25.2 tons per rolling, 12-month period.<br><br>$SO_2$ emissions from emissions units B027-B035 shall not exceed 43.75 tons per rolling, 12-month period.<br><br>PE from emissions units B027-B035 shall not exceed 5.95 tons per rolling, 12-month period.<br><br>VOC emissions from emissions units B027-B035 shall not exceed 1.34 tons per rolling, 12-month period. |
| c. | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule. |
| d. | OAC rule 3745-17-11 | See a)(2)a. below |
| e. | OAC rule 3745-18-06 | See a)(2)b. below. |

(2) Additional Terms and Conditions

a. The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, pursuant to OAC rule 3745-17-11(A)(2)(b)(i), Table I of OAC rule 3745-17-11 does not apply because the process weight rate cannot be ascertained "Process weight" is defined in OAC rule 3745-17-01(B)(14).

b. The requirements of OAC rule 3745-18-06 do not apply to this emissions unit pursuant to OAC rule 3745-18-06(C).

c. The hourly allowable emission limitations for this emissions unit were established to reflect the hourly potential to emit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

c) Operational Restrictions

(1) The maximum annual digester gas production rate from emissions units B027-B035 shall not exceed 700,000,000 standard cubic feet (SCF) per year, based upon a rolling, 12-month summation of the production rates.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. The digester gas production for each month, in scf;

b. The digester gas flared for each month, in scf

c. CO, NOx, $SO_2$, PE, and VOC emissions;

d. The rolling, 12-month summation of the CO, NOx, $SO_2$, PE, and VOC emissions; and

e. The rolling, 12-month summation of the digester gas production;

[OAC rule 3745 31 05(D)] [OAC rule 3745 77 07(C)(1)]

e) Reporting Requirements

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

a. All exceedances of the rolling, 12-month digester gas production; and

b. All exceedances of the rolling, 12-month CO, NOx, $SO_2$, PE, and VOC emissions limitations.

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)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)]

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. <u>Emission Limitation</u>

14.78 lbs/hr of carbon monoxide (CO).

<u>Applicable Compliance Method</u>

Compliance with the allowable mass emission rate for carbon monoxide may be determined by multiplying an emission factor of 147.84 lbs of carbon monoxide per million cubic feet of digester gas by the maximum hourly gas production of 100,000 standard cubic feet of digester gas per hour. This emission factor is provided by Varec, the manufacturer of the Westech EB244 enclosed burner and represents an engineering safety factor adjustment of 1.5.

b. Emission Limitation

7.2 lbs/hr of nitrogen oxide (NOx).

Applicable Compliance Method

Compliance with the allowable mass emission rate for NOx may be determined by multiplying an emission factor of 72.0 lbs of NOx per million cubic feet of digester gas by the maximum hourly gas production of 100,000 standard cubic feet of digester gas per hour. This emission factor is provided by Varec, the manufacturer of the Westech EB244 Enclosed burner and represents an engineering safety factor adjustment of 1.5.

c. Emission Limitation

12.5 lbs/hr of sulfur dioxide ($SO_2$).

Applicable Compliance Method

Compliance with the allowable mass emission rate for sulfur dioxide may be determined by multiplying an emission factor of 125 lbs of sulfur dioxide per million cubic feet of digester gas by the maximum hourly gas production of 100,000 standard cubic feet of digester gas per hour. The maximum hourly gas production includes all sour gas production from the acid-phase digesters and sweet gas production from the meso-phase digesters. The emission factor is based on a combined digester gas $H_2S$ content of 750 ppm and 100% stoichiometric conversion of $H_2S$ in the digester gas stream to $SO_2$. The combined digester gas content of 750 ppm is based on operating data from the facility associated with worst-case flaring of both sweet and sour gas during the gas wasting operation.*

(*Gas wasting operation occurs when the sweet gas production exceeds consumption by downstream digester gas boilers and incinerators and excess sweet gas is flared along with all produced sour gas. During normal operation, digester gas composed primarily of sour gas (>750 ppm) is flared at a volumetric flow rate significantly lower than 100,000 scfh. Hourly SO2 emission rates for normal operation are less than 12.5 lb/hr).

d. Emission Limitation

Volatile Organic Compound (VOC) emissions shall not exceed 0.38 lb/hr.

Applicable Compliance Method

Compliance with the allowable mass emission rate for VOC may be determined by multiplying an emission factor of 3.84 lbs of VOC per million cubic feet of digester gas by the maximum hourly gas production of 100,000 standard cubic feet of digester gas per hour. This emission factor is provided by Varec, the manufacturer of the Westech EB244 Enclosed burner and represents an engineering safety factor adjustment of 1.5.

e. Emission Limitation

Particulate emissions (PE) shall not exceed 1.7 lbs/hr.

Applicable Compliance Method

Compliance with the allowable mass emission rate for particulate emissions may be determined by multiplying an emission factor of 17 lbs of particulate emissions per million cubic feet of digester gas by the maximum hourly gas production of 100,000 standard cubic feet of digester gas per hour. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 2.4, Table 2.4-5(11/98).

f. Emission Limitation

CO emissions from emissions units B027-B035 shall not exceed 51.74 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual limitations shall be based upon the records maintained in section d)(1)(b) and the emission calculation methodology referenced in f)(1)a.

g. Emission Limitation

VOC emissions from emissions units B027-B035 shall not exceed 1.34 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual limitations shall be based upon the records maintained in section d)(1)(b)and the emission calculation methodology referenced in f)(1)d.

h. Emission Limitation

$SO_2$ emissions from emissions units B027-B035 shall not exceed 43.75 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual limitations shall be based upon the records maintained in section d)(1)(b) and the emission calculation methodology referenced in f)(1)c. An emission factor of 550 lbs of sulfur dioxide per million cubic feet of digester gas may be used during normal operation corresponding to flaring of digester gas composed primarily of sour gas.

i. Emission Limitation

NOx emissions from emissions units B027-B035 shall not exceed 25.2 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual limitations shall be based upon the records maintained in section d)(1)(b)and the emission calculation methodology referenced in f)(1)b.

j. Emission Limitation

PE from emissions units B027-B035 shall not exceed 5.95 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual limitations shall be based upon the records maintained in section d)(1)(b) and the emission calculation methodology referenced in f)(1)e.

k. Emission Limitation

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

Applicable Compliance Method

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

g) Miscellaneous Requirements

(1) 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. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit-to-installprior 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.