



6/27/2014

Genevieve Damico *Via E-Mail Notification*  
United States Environmental Protection Agency  
Mail Code: AR-18J  
77 West Jackson Blvd.  
Chicago, IL 60604-3507

RE: PROPOSED AIR POLLUTION TITLE V PERMIT  
Facility Name: Mill Creek WWTP  
Facility ID: 1431070944  
Permit Type: Renewal  
Permit Number: P0098265

Dear Ms. Damico:

A proposed OAC Chapter 3745-77 Title V permit for the referenced facility has been issued for review by U.S. EPA. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. If U.S. EPA does not object to this proposed permit, the permit will be processed for issuance as a final action not less than 45 days from the date of this letter. Please contact me at (614) 644-3631 by the end of the 45 day review period if you wish to object to the proposed permit.

Sincerely,

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

Cc: Southwest Ohio Air Quality Agency





**PROPOSED**

**Division of Air Pollution Control  
Title V Permit  
for  
Mill Creek WWTP**

Facility ID:	1431070944
Permit Number:	P0098265
Permit Type:	Renewal
Issued:	6/27/2014
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance





**Division of Air Pollution Control**  
**Title V Permit**  
for  
Mill Creek WWTP

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**Proposed Title V Permit**  
Mill Creek WWTP  
**Permit Number:** P0098265  
**Facility ID:** 1431070944

**Effective Date:** To be entered upon final issuance

## Authorization

Facility ID: 1431070944  
Facility Description: Metropolitan Sewer District of Greater Cincinnati waste water treatment plant  
Application Number(s): A0029928, A0029929, A0050219  
Permit Number: P0098265  
Permit Description: Renewal Title V operating permit for municipal wastewater treatment plant, includes fluidized bed sludge incinerators, boilers, and emergency generator.  
Permit Type: Renewal  
Issue Date: 6/27/2014  
Effective Date: To be entered upon final issuance  
Expiration Date: To be entered upon final issuance  
Superseded Permit Number: P0098263

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

Mill Creek WWTP  
1600 Gest Street  
Cincinnati, OH 45204-2096

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Southwest Ohio Air Quality Agency  
250 William Howard Taft Rd.  
Cincinnati, OH 45219  
(513)946-7777

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Southwest Ohio Air Quality Agency. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler  
Director



**Proposed Title V Permit**  
Mill Creek WWTP  
**Permit Number:** P0098265  
**Facility ID:** 1431070944  
**Effective Date:** To be entered upon final issuance

## **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. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
  - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
  - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements
  - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
  - (5) Standard Term and Condition A. 30.

*(Authority for term: ORC 3704.036(A))*

## **2. 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 (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), 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.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*

- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*



- c) The permittee shall submit required reports in the following manner:
- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any submitted scheduled maintenancerequests, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

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

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:



Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Southwest Ohio Air Quality Agency. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

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

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Southwest Ohio Air Quality Agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally



enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

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

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))*

- (4) Each written report shall be signed by a Responsible Official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

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

- (5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Southwest Ohio Air Quality Agency unless otherwise specified.

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

### **3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.



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

#### **4. Risk Management Plans**

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

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

#### **5. Title IV Provisions**

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

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

#### **6. Severability Clause**

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

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

#### **7. General Requirements**

- a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit except as provided pursuant to A.16 below.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.



- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
  - (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
  - (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
  - (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

*(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))*

## **8. Fees**

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

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

## **9. Marketable Permit Programs**

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

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



## **10. Reasonably Anticipated Operating Scenarios**

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

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

## **11. Reopening for Cause**

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

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

*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

## **12. Federal and State Enforceability**

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

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

## **13. Compliance Requirements**

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a Responsible



Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - (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 paragraph (E) of OAC rule 3745-77-03.
  - (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.
- c) The permittee shall submit progress reports to the Southwest Ohio Air Quality Agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - (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.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the Southwest Ohio Air Quality Agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
  - (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - (2) Compliance certifications shall include the following:
    - a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.



- b. The permittee's current compliance status.
  - c. Whether compliance was continuous or intermittent consistent with A.13.d.2.a above.
  - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.
  - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
- (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

#### **14. Permit Shield**

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

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

#### **15. Operational Flexibility**

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

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



## **16. Emergencies**

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

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

## **17. Off-Permit Changes**

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

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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

## **18. Compliance Method Requirements**

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

*(This term is provided for informational purposes only.)*



**19. Insignificant Activities or Emissions Levels**

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

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

**20. Permit to Install Requirement**

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

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

**21. Air Pollution Nuisance**

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

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

**22. Permanent Shutdown of an Emissions Unit**

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the Responsible 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 Responsible Official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that 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 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

Unless otherwise exempted, no emissions unit identified in this permit that has been certified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-01)*

**23. Title VI Provisions**

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:



- a) Persons operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

*(Authority for term: OAC rule 3745-77-01(H)(11))*

**24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the Southwest Ohio Air Quality Agency.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Southwest Ohio Air Quality Agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, 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.)

**25. Records Retention Requirements Under State Law Only**

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.

**26. Inspections and Information Requests**

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



whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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

**27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements**

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

**28. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Southwest Ohio Air Quality Agency must be notified in writing of any transfer of this permit.

*(Authority for term: OAC rule 3745-77-01(C))*

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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 by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potential to emit; or
- c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.



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### **30. Submitting Documents Required by this Permit**

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Southwest Ohio Air Quality Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.



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## **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.
2. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit-to-install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, 3745-21, and 3745-31, and/or 40 CFR Part 60 or 63:

B012	9.25 MMBtu/hr gas/oil-fired boilers (3)
B017	8 MMBtu/hr oil-fired boiler
B019	1.9 MMBtu/hr natural gas-fired boiler (PTI 14-709, 1/9/1985)
B020	1.9 MMBtu/hr natural gas-fired boiler (PTI 14-709, 1/9/1985)
B023	1.5 MMBtu/hr natural gas-fired boiler, thickener building
B024	3.34 MMBtu/hr oil-fired boiler, RAS building
B025	5.23 MMBtu/hr oil-fired boiler
B026	1.8 MMBtu/hr natural gas-fired boiler
B027	5.7 MMBtu/hr natural gas-fired boiler (PTI 14-3165, 12/8/1993)
B028	5.7 MMBtu/hr natural gas-fired boiler (PTI 14-3165, 12/8/1993)
P005	150 kW Kohler Emergency Generator (PBR11062)
T001	6,500 gallon polymer storage tank (PTI 14-2271, 7/24/1991)
T002	6,500 gallon polymer storage tank (PTI 14-2271, 7/24/1991)
T004	5,000 gallon fuel oil storage tank (PTI 14-2271, 7/24/1991)

3. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subparts A and DDDDD, National Emission Standards for Hazardous Air Pollutants (NESHAP) Industrial, Commercial, and Institutional Boilers and Process Heaters: B012, B017, B019, B020, B021, B022, B023, B024, B025, B026, B027, and B028. The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

(Authority for term: 40 CFR Part 63)



4. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines: P004 and P005. The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

(Authority for term: 40 CFR Part 63)

5. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subparts A and IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (NSPS): P005. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

(Authority for term: 40 CFR Part 60)

6. The following emissions units contained in this permit are subject to 40 CFR Part 61, Subparts A and E, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Mercury: N008, N009, and N010. The complete NESHAP requirements, including the NESHAP General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

(Authority for term: 40 CFR Part 61)

7. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subparts A and O, Standards of Performance for Sewage Treatment Plants (NSPS): N008, N009, and N010. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

a) (Authority for term: 40 CFR Part 60)

b)

8. The Ohio EPA has determined that this facility is subject to the CAA Section 129 emission guidelines or new source standards for sewage sludge incinerators (SSI) that were published in the March 21, 2011 Federal Register, and codified under 40 CFR Part 60, Subpart MMMM (EG) and 40 CFR Part 60, Subpart LLLL (NSPS). The EG compliance timetable requires that every facility not already Title V shall submit a Title V application by March 21, 2014. A control plan for all facilities is due on that same date, and final compliance must occur no later than March 21, 2016. It is anticipated that Ohio will not promulgate rules regarding these standards. Instead, Ohio EPA will use its existing Title V authority to enforce the U.S. EPA's Federal Plan (FP), when published. The FP was due by March 21, 2014, however, U.S. EPA has not yet published the FP. Please be advised that all requirements associated with 40 CFR MMMM (EG) and 40 CFR LLLL (NSPS) are in effect and shall be enforced by U.S. EPA. Upon promulgation of the FP, the permittee shall comply with the requirements for modification of this permit to incorporate applicable federal rules. The complete requirements of this rule may be accessed via the Internet from the Electronic code of Federal Regulations (e-CFR) website <http://www.ecfr.gov/> or by contacting the appropriate Ohio EPA District Office or Local Air Agency.



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(Authority for term: 40 CFR Part 60)

9. The Southwest Ohio Air Quality Agency has approved the Compliance Assurance Monitoring (CAM) plan submitted by the permittee, pursuant to 40 CFR Part 64, for emissions units N008, N009, and N010. The permittee shall comply with the provisions of the plan (as specified in Part C - Terms and Conditions for Emissions Units) for the aforementioned emissions units.

(Authority for term: 40 CFR Part 64)



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## **C. Emissions Unit Terms and Conditions**



**1. P004, Emergency diesel generator No. 1**

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

600 kW, 900 hp (2.138 MMBtu/hr) emergency diesel generator

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (PTI 14-3644, issued 2/1/1995)	Nitrogen oxides (NO <sub>x</sub> ) emissions shall not exceed 4.41 pounds per MMBtu.  Carbon monoxide (CO) emissions shall not exceed 0.95 pound per MMBtu.  Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 0.29 pound per MMBtu.  Organic compound (OC) emissions shall not exceed 0.35 pound per MMBtu.  Particulate emissions (PE) and particulate matter 10 microns and less in diameter (PM <sub>10</sub> ) emissions shall not exceed 0.241 pound per MMBtu. The PE and PM <sub>10</sub> emission limitations established under this rule are less stringent than the emission limitations established under OAC rule 3745-17-11(B)(5)(b). The permittee shall comply with all applicable emission limitations (including any less stringent emission limitation).  See c)(1) and c)(2).  The requirements of this rule include compliance with the requirements of OAC rule 3745-17-07(A)(1) and OAC rule



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		3745-31-05(D).
b.	<p>OAC rule 3745-31-05(D)</p> <p>Federally Enforceable Restrictions to Avoid Nonattainment New Source Review</p>	<p>NOx emissions shall not exceed 9.429 tons per year (TPY) as a rolling 12-month summation.</p> <p>CO emissions shall not exceed 2.031 TPY as a rolling 12-month summation.</p> <p>SO<sub>2</sub> emissions shall not exceed 0.62 TPY as a rolling 12-month summation.</p> <p>PE/PM<sub>10</sub> emissions shall not exceed 0.515 TPY as a rolling 12-month summation.</p> <p>OC emissions shall not exceed 0.748 TPY as a rolling 12-month summation.</p> <p>See c)(3).</p>
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
d.	OAC rule 3745-17-11(B)(5)(b)	PE shall not exceed 0.062 lb/MMBtu of actual heat input for a stationary large internal combustion engine.
e.	OAC rule 3745-18-06(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	<p>40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580-6675)</p> <p>National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)</p> <p>[In accordance with 40 CFR 63.6590(a)(1)(i) and 63.6675, this emissions unit is an existing emergency stationary RICE &gt;500 hp subject to the applicable requirements specified in this section.]</p>	<p>Pursuant to 63.6600(c), this emissions unit is not required to comply with the emission limitations established in Table 2c or the operating limitations established in Table 2b of this subpart.</p> <p>See c)(4).</p>



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(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The quality of diesel fuel burned in this emissions unit shall have a combination of heat and sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.29lb of SO<sub>2</sub>/MMBtu of actual heat input.

(Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

(2) The permittee shall burn only diesel fuel in this emissions unit.

(Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

(3) The maximum annual operating hours for this emissions unit shall not exceed 2,000 hours, based upon a rolling, 12-month summation of the operating hours.

(Authority for term: OAC rules 3745-77-07(A)(1), 3745-31-05(D), and 3745-31-05(A)(3))

(4) The permittee shall comply with the applicable operating restrictions required under 40 CFR Part 63, Subpart ZZZZ, including the following sections:

63.6604	diesel fuel shall comply with 40 CFR 80.510(b) for non-road diesel fuel
63.6605(a) and (b)	general duty to minimize emissions
63.6640(f)(1) – (f)(3)	operating restrictions for emergency engines during periods of emergency and non-emergency use

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ)

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the diesel fuel burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below:

a. Alternative 1:

For each shipment of diesel fuel received for burning in this emissions unit, the permittee shall collect or require the diesel fuel supplier to collect a representative grab sample of diesel fuel and maintain records of the total quantity of diesel fuel received, the permittee's or diesel fuel supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same



supplier's batch, and the quality of the diesel fuel for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of diesel fuel that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel diesel fuel is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the diesel fuel burned in this emissions unit. A representative grab sample of diesel fuel does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of diesel fuel burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

(Authority for term: OAC rules 3745-18-04, 3745-77-07(C)(1), and 3745-31-05(A)(3))

- (2) For each day during which the permittee burns a fuel other than diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (3) The permittee shall maintain daily records of the operating hours for this emissions unit. These records need only be kept when the emissions unit is in operation.

(Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

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

- a. the operating hours for each month; and
- b. the rolling, 12-month summation of the operating hours.

(Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(D) and 3745-31-05(A)(3))

- (5) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-3644, issued February 1,



1995: d)(1) - d)(4). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall notify the Southwest Ohio Air Quality Agency in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from d)(1). The notification shall include a copy of such record and shall be sent to the Southwest Ohio Air Quality Agency within 45 days after the deviation occurs.

(Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other diesel was burned in this emissions unit. Each report shall be submitted to the Southwest Ohio Air Quality Agency within 30 days after the deviation occurs.

(Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month restriction on the hours of operation for this emissions unit.

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

(Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(D), and 3745-31-05(A)(3))

- (4) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 63, Subpart ZZZZ, including the following sections:

63.6650(h)	submission of annual reports
63.6650(h)(1) – (h)(3)	content of annual reports

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart ZZZZ)

- (5) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-3644, issued February 1, 1995: e)(1) - e)(4). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.



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 Limitations:

NO<sub>x</sub> emissions shall not exceed 4.41 pounds per MMBtu.

CO emissions shall not exceed 0.95 pound per MMBtu.

PE and PM<sub>10</sub> emissions shall not exceed 0.241 pound per MMBtu.

OC emissions shall not exceed 0.35 pound per MMBtu.

Applicable Compliance Methods:

The NO<sub>x</sub>, CO, and OC emission rates were established in PTI 14-3644 to represent the potential to emit for this emissions unit based upon emission factors found in AP-42, Fifth Edition, Section 3.3 Diesel Industrial Engines, Table 3.3-1 (revised 10/96). If required, compliance with the NO<sub>x</sub>, CO, and OC emission limitations shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, and Methods 7, 10, and 25, respectively.

The PE/PM<sub>10</sub> emission rates were established in PTI 14-3644 as provided by the permittee in the application for PTI 14-3644, issued 2/1/1995. OAC rule 3745-17-11(B)(5)(b) was subsequently promulgated in 1997 with a more stringent emission standard and compliance shall be demonstrated as specified in f)(1)e. below.

(Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

b. Emission Limitation:

SO<sub>2</sub> emissions shall not exceed 0.29 pound per MMBtu.

Applicable Compliance Method:

The SO<sub>2</sub> emission rate in lb/MMBtu represents the potential to emit for this emissions unit as found in AP-42, Fifth Edition, Section 3.3 Diesel Industrial Engines, Table 3.3-1 (revised 10/96). Compliance with the lb/MMBtu emission limitation shall be demonstrated by documenting that the sulfur content of the diesel fuel received meets the limitation according to the record keeping requirements in d)(1).

If required, compliance with the SO<sub>2</sub> emission limitation shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, and Method 6.



(Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3), and 3745-18-04)

c. Emission Limitations:

NO<sub>x</sub> emissions shall not exceed 9.429 TPY as a rolling 12-month summation.

CO emissions shall not exceed 2.031 TPY as a rolling 12-month summation.

SO<sub>2</sub> emissions shall not exceed 0.62 TPY as a rolling 12-month summation.

PE/PM<sub>10</sub> emissions shall not exceed 0.515 TPY as a rolling 12-month summation.

OC emissions shall not exceed 0.748 TPY as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the annual emission limitations shall be determined by multiplying the lb/MMBtu emission rate for each pollutant by the maximum heat input rating of 2.138 MMBtu/hour and by the operating hours of the emissions unit as documented in d)(4), then multiplying by 1 ton/2000 pounds.

(Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3), and 3745-31-05(D))

d. Emission Limitation:

Visible emissions shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

Compliance with the visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

No visible emissions observations are specifically required to demonstrate compliance with this emission limitation but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

(Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3), and 3745-17-03(B)(1)(a))

e. Emission Limitation:

PE shall not exceed 0.062 lb/MMBtu of actual heat input for a stationary large internal combustion engine.



Applicable Compliance Method:

Compliance with the PE rate, in lb/MMBtu, may be demonstrated by the emission factor for total filterable particulate as found in AP-42, Fifth Edition, Section 3.4 Large Stationary Diesel Engines, Table 3.4-2 (revised 10/96). If required, compliance with the PE limitation shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, and Method 5.

(Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-11(B)(5)(b))

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install 14-3644, issued February 1, 1995: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) None.



**2. Emissions Unit Group -Digester Gas Boilers: B021 and B022**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
B021	25.1 MMBtu/hr natural gas-fired boilers
B022	25.1 MMBtu/hr natural gas-fired boilers

- 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:
- (2) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (PTI P0116652, issued 5/6/2014)	See b)(2)a. and c)(1).  The requirements of this rule includes compliance with the requirements of OAC rules 3745-17-07(A)(1), 3745-17-10(B)(1), and 3745-18-06(A).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as specified by rule.
c.	OAC rule 3745-17-10(B)(1)	PE shall not exceed 0.020 lb/MMBtu of actual heat input.
d.	OAC rule 3745-18-06(A)	See b)(2)b.
e.	40 CFR Part 63, Subpart DDDDD (40 CFR Part 63.7480-7575)  National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters  [In accordance with 40 CFR 63.7499 and 63.7575, these emissions units are existing boilers designed to burn gas 1 fuel (natural gas) subject to the work practices specified in this section.]	Table 3 to 40 CFR Part 63, Subpart DDDDD – Work Practice Standards [40 CFR 63.7500]. See c)(2).  Pursuant to 40 CFR 63.7495(b), the permittee shall comply with this subpart no later than January 31, 2016, except as provided in 63.6(i).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	40 CFR Part 63.1-15 (40 CFR 63.7565)	Table 10 to 40 CFR Part 63, Subpart DDDDD – Applicability of General Provisions (Subpart A) to Subpart DDDDD shows which parts of the General Provisions in 40 CFR Part 63.1-15 apply.

(2) Additional Terms and Conditions

- a. No applicable emission limitations or control measures were established under BAT for natural gas combustion in the Permits to Install for these emissions units.
- b. The emissions units are exempt from the emission limitations in paragraph (D) of OAC rule 3745-18-06 and from OAC rules 3745-18-07 to 3745-18-94 during anycalendar day in which natural gas is the only fuel burned.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in these emissions units.

(Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(A)(1))

- (2) The permittee shall comply with the applicable work practices required under 40 CFR Part 63, Subpart DDDDD, including the following sections:

63.7500, 63.7515(d), 63.7540, and Table 3 to Subpart DDDDD	annual tune-up requirements
63.7500 and Table 3 to Subpart DDDDD	one-time energy assessment requirements
63.7500(a)(3)	general duty to minimize emissions

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart DDDDD)

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in these emissions units.

(Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))



**Effective Date:** To be entered upon final issuance

- (2) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63, Subpart DDDDD, including the following sections:

63.7555	required overall records to be maintained
63.7560	record format and retention requirements

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart DDDDD)

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install P0116652, issued May 6, 2014: d)(1) - d)(2). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in the emissions units. Each report shall be submitted to the Southwest Ohio Air Quality Agency within 30 days after the deviation occurs.

(Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (2) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 63, Subpart DDDDD, including the following sections:

63.7530(d)-(g) and 63.7545	Notification of Compliance Status requirements
63.7550 and Table 9 to Subpart DDDDD	content and submission of compliance reports

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart DDDDD)

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install P0116652, issued May 6, 2014: e)(1) - e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.



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:

Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as specified by rule.

Applicable Compliance Method:

Compliance with the visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

No visible emissions observations are specifically required to demonstrate compliance with this emission limitation but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

(Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3), and 3745-17-03(B)(1)(a))

b. Emission Limitation:

PE shall not exceed 0.020 lb/MMBtu of actual heat input.

Applicable Compliance Methods:

When burning natural gas, compliance may be determined by multiplying the maximum natural gas usage rate of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs of filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

(Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3), and 3745-17-10(B))

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install P0116652, issued May 6, 2014: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.



**Proposed Title V Permit**

Mill Creek WWTP

**Permit Number:** P0098265

**Facility ID:** 1431070944

**Effective Date:** To be entered upon final issuance

g) Miscellaneous Requirements

(1) None.



**3. Emissions Unit Group -F.B. Sludge Incinerators: N008, N009, and N010**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
N008	4 dry ton per hour fluidized bed sewage sludge incinerator No. 1
N009	4 dry ton per hour fluidized bed sewage sludge incinerator No. 2
N010	4 dry ton per hour fluidized bed sewage sludge incinerator No. 3

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

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

	<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
a.	OAC rule 3745-31-05(A)(3)  (PTI P0115155, issued 9/27/2013)	SO <sub>2</sub> emissions shall not exceed 4.8 lbs/hour and 115.2 lbs/day.  Volatile Organic Compound (VOC) emissions shall not exceed 86.4 lbs/day.  NO <sub>x</sub> emissions shall not exceed 240.0 lbs/day.  CO emissions shall not exceed 163.2 lbs/day.  See b)(2)b., b)(2)f., c)(3), c)(4), and c)(6).  The requirements of this rule also include compliance with the requirements of 40 CFR Part 60 Subpart O, 40 CFR Part 61 Subparts E, and OAC rule 3745-31-05(D), except for lead emissions.
b.	40 CFR Part 60, Subpart O (60.150 – 60.156)  Standards of Performance for Sewage Treatment Plants (NSPS)	Visible particulate emissions shall not exceed 20 percent opacity.  Particulate matter (PM) emissions shall not exceed 1.30 lb/ton of dry sewage sludge input.



**Effective Date:** To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	40 CFR Part 61, Subpart E (61.50 – 61.56)  National Emission Standard for Mercury (NESHAP)	Mercury (Hg) emissions from the sewage sludge incinerator plant shall not exceed 7.1 lbs of mercury per 24-hour period.
d.	OAC rule 3745-31-05(D)  Federally Enforceable Limitations to Avoid Nonattainment New Source Review and Prevention of Significant Deterioration	See b)(2)a. and c)(2).
e.	OAC rule 3745-17-07	The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to 40 CFR Part 60 Subpart O.
f.	OAC rule 3745-17-09	The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01.  See c)(1).  Once b)(2)h. is implemented, this emissions unit will be subject to the following limitation: PE shall not exceed 0.10 pound per one hundred pounds of liquid, semi-solid or solid refuse and salvageable material charged having a capacity equal to or greater than one hundred pounds per hour.
g.	OAC rule 3745-18-06(E)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
h.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	PE shall not exceed 1.6 lbs/hour, 0.40 lb/ton of dry sewage sludge input and 7 tons per year.  PM <sub>10</sub> emissions shall not exceed 38.4 lbs/day and 7 tons per year.  See b)(2)h.
i.	OAC paragraph 3745-31-05(C), as effective 12/01/06	Lead emissions shall not exceed 3.68 lbs/day and 0.67 ton/year for N008, N009, and N010 combined.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)g.
j.	40 CFR Part 64 (40 CFR 64.1-10)  Compliance Assurance Monitoring (CAM)	See b)(2)i., d)(1), d)(15) – d)(17), e)(1), e)(11), and f)(2).
k.	40 CFR Part 60, Subpart M (40 CFR 60.5000-5250)	Table 1: Model Rule – Increments of Progress and Compliance Schedules for Existing Sewage Sludge Incineration Units  Table 2: Model Rule - Emission Limits and Standards for Existing Fluidized Bed Sewage Sludge Incineration Units  Table 4: Model Rule – Operating Parameters for Existing Sewage Sludge Incineration Units  Pursuant to 40 CFR 60.5035, the permittee shall comply with this subpart no later than March 21, 2016.  See b)(2)m. and Section B.8.

(3) Additional Terms and Conditions

- a. The total, combined mass emissions from emissions units N008, N009 and N010, as a 12-month rolling average, shall not exceed the following:
  - PE 16.5 tons/year;
  - PM<sub>10</sub> 16.5 tons/year;
  - SO<sub>2</sub> 49.5 tons/year;
  - VOC 37.2 tons/year;
  - NOx 103.2 tons/year;
  - CO 70.13 tons/year; and
  - Lead 0.67 ton/year.
- b. The total, combined mass emission from emissions units N008, N009, and N010 shall not exceed 1.29 tons/year of mercury.



- c. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of venturi and impingement tray scrubbers and compliance with throughput limitations, visible emission limitations and all mass emission limitations.
- d. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
- e. The application and enforcement of the provisions of the National Emissions Standards for Hazardous Air Pollutants (NESHAP), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 61, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 61 are also federally enforceable.
- f. The monthly average concentration of carbon monoxide in the exit gas from this emissions unit, corrected for zero percent moisture and to seven percent oxygen, shall not exceed 100 parts per million on a volumetric basis.
- g. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the lead emissions from this air contaminant source since the calculated annual emission rate for lead emissions is less than 10 tons per year taking into account both the following federally enforceable limitation and voluntary restriction (including the use of any applicable air pollution control equipment) as proposed by the permittee:
  - i. 40 CFR Part 503; and
  - ii. venturi and impingement tray scrubbers.

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.

Permit to install P0115155 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 avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. The use of venture and impingement tray scrubbers.
- h. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) 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, these emission limitations/control measures no longer apply.

- i. At all times, the permittee shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
- j. The permittee shall maintain a written quality assurance/quality control plan for the continuous CO monitoring system, designed to ensure continuous valid and representative readings of CO emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), 40 CFR 60.13, and 40 CFR Part 60, Appendix F)

- k. The permittee shall maintain a written quality assurance/quality control plan for the continuous SO<sub>2</sub> monitoring system, designed to ensure continuous valid and representative readings of SO<sub>2</sub> emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO<sub>2</sub> monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.13, and 40 CFR Part 60, Appendix F)

- l. Each continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), 40 CFR 60.2, and 40 CFR Part 60, Appendix F)



- m. Unless otherwise specified in the U.S. EPA's Federal Plan when published:
- i. The permittee shall comply with the increments of progress requirements specified in Table 1 to Subpart M MMM and 60.5085-5125. The permittee submitted a Final Control Plan on March 13, 2014, pursuant to the requirements of 60.5085 and 60.5110.
  - ii. The permittee shall comply with the emission standards for PE, hydrogen chloride, CO, dioxin/furans, Hg, NO<sub>x</sub>, SO<sub>2</sub>, cadmium, lead, and visible fugitive emissions specified in Table 2 to Subpart M MMM.
  - iii. The permittee shall comply with the operating limitations and associated monitoring and record keeping requirements specified in Table 4 to Subpart M MMM unless continuous emissions monitoring systems or continuous automated sampling systems are employed pursuant to 60.5190.
  - iv. The permittee shall comply with the operator training and qualification requirements specified in 40 CFR 60.5130-5160.
  - v. The permittee shall comply with the initial compliance requirements, continuous compliance requirements, and performance testing, monitoring, and calibration requirements specified in 40 CFR 60.5185-5225.
  - vi. The permittee shall comply with the recordkeeping and reporting requirements specified in Table 6 to Subpart M MMM and 60.5230-5235.

The emission limitations in 40 CFR Part 60, Subpart M MMM may be more stringent than the emission limitations established for these emissions units in b)(1) above. The permittee shall comply with all applicable emission limitations (including any less stringent emission limitation) after the compliance date of this rule.

Pursuant to 60.5050, alternatives to emission standards, operating limits, monitoring, record keeping, reporting, testing, and other requirements specified in "i." through "vi." above must be approved by U.S. EPA.

Prior to the compliance date of 40 CFR Part 60, Subpart M MMM, the permittee may request revisions to the operational restrictions, monitoring, record keeping, and reporting requirements listed below and established in Permit to Install (PTI) P0115155, issued 9/27/2013, for these emissions units in order to demonstrate compliance the requirements of Subpart M MMM and/or any U.S. EPA-approved alternatives. Any approved revisions to the PTI may be incorporated into this permit by means of a minor permit modification.

c) Operational Restrictions

- (1) The incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.



(Authority for term: OAC rules 3745-77-07(A)(1), OAC rule 3745-31-05(A)(3), and 3745-17-09)

- (2) The total combined dry sludge feed to emissions units N008, N009 and N010 shall not exceed 82,500 tons per year, based upon a rolling, 365 day summation of the daily dry sludge feed.

These emissions units have been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 365 day summation of the dry sludge feed rate upon issuance of this permit.

(Authority for term: OAC rules 3745-77-07(A)(1), 3745-31-05(A)(3), and 3745-31-05(D))

- (3) The permittee shall operate each emissions unit in such a manner such that the daily mean operating combustion temperature for the sewage sludge incinerator shall not exceed the performance test combustion temperature by more than 20 percent.

(Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

- (4) Sewage sludge shall not be fired in each emissions unit if it is likely to adversely affect a threatened or endangered species listed under section 4 of the Endangered Species Act or its designated critical habitat.

(Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

- (5) Municipal solid waste shall not be fired in the emissions units.

(Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3))

- (6) The permittee shall maintain a caustic injection system to ensure compliance with the SO<sub>2</sub> emission limitations contained in this permit. The caustic injection system shall be employed when the SO<sub>2</sub> emissions recorded in d)(12) exceed 90% of the allowable SO<sub>2</sub> emission limitation of 4.8 lbs/hr (4.3 lbs/hr SO<sub>2</sub>). The caustic shall be added to the scrubber at a rate sufficient to demonstrate compliance with the lbs/hr emission limitation.

In accordance with PTI P0115155, the permittee may conduct a 12-month SO<sub>2</sub> emission study. Should the permittee demonstrate the ability to maintain continuous compliance with the SO<sub>2</sub> emission limitation without the requirement to utilize the caustic injection system, the caustic addition system specified in this section may be removed from service after the requirements of e)(12) have been satisfied.

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

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall properly calibrate, maintain and operate a monitoring device that continuously measures and records the pressure drop of the gas flow through the wet scrubbing device while each emissions unit is in operation. This device shall be certified by the manufacturer to be accurate within plus or minus 1 inch water gauge and shall be calibrated on an annual basis in accordance with the manufacturer's instructions. The



permittee shall collect and record the following information and maintain in its files for a period of not less than five (5) years:

- a. a continuous record of the pressure drop of the gas flow through the scrubber and the 15 minute average of the pressure drop;
- b. records of the downtimes for the monitoring equipment when each emissions unit is in operation;
- c. records of monitoring equipment calibration checks; and
- d. records of pressure drop readings that were not at least 70 percent of the average pressure drop recorded during the most recent stack test which demonstrated the emissions unit to be in compliance shall be maintained.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), 40 CFR Part 60, Subpart O, and 40 CFR Part 64)

- (2) The permittee shall properly calibrate, maintain and operate a monitoring device that continuously measures and records the oxygen content of the incinerator exhaust gas while each emissions unit is in operation. The oxygen monitor located upstream of any rabble shaft cooling air inlet into the incinerator exhaust gas stream, fan, ambient air damper or any other source of dilution air. The oxygen monitoring device shall be certified by the manufacturer to have a relative accuracy of plus or minus 5 percent over its operating range and shall be calibrated according to the methods prescribed by the manufacturer at least once each 24-hour operating period. The permittee shall collect and record the following information and maintain in its files for a period of not less than five (5) years:

- a. a continuous record of the oxygen content of the exhaust gas.
- b. records of the downtimes for the monitoring equipment when each emissions unit is in operation;
- c. records of monitoring equipment calibration checks; and
- d. records of the average oxygen content in the incinerator exhaust gas for each period of one-hour duration or more that the oxygen content of the incinerator exhaust gas exceeds the average oxygen content measured during the most recent performance test which demonstrated the emissions unit to be in compliance by more than 3 percent and when the throughput is greater than or equal to 90% of the average compliance test value.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 60, Subpart O)

- (3) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous carbon monoxide (CO) monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a, as appropriate. The



letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), 40 CFR 60.13, and 40 CFR Part 60, Appendix B)

- (4) The permittee shall calibrate, maintain and operate equipment to continuously monitor and record CO emissions in the exit gas from each emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60. The permittee shall maintain records of data obtained by the continuous CO monitoring system for a period of five years including, but not limited to:
- a. emissions of CO in parts per million on an instantaneous (one-minute) basis;
  - b. emissions of CO in all units of the applicable standard(s) in the appropriate averaging period;
  - c. results of quarterly cylinder gas audits;
  - d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
  - e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
  - f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;
  - g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;
  - h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; as well as,
  - i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

(Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (5) The permittee shall calibrate, maintain, and operate a flow measuring device which can be used to determine the mass of sludge charged to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of plus or minus 5 percent over its operating range.

The permittee shall collect and record the following information and maintain in its files for a period of not less than five (5) years:

- a. the daily total tons of dry sludge fed to emissions units N008, N009 and N010; and



b. the rolling, 365-day summation of the sludge charge rates.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), OAC rule 3745-31-05(D), and 40 CFR Part 60, Subpart O)

(6) The permittee shall calibrate, maintain and operate an instrument that continuously measures and records information used to determine the moisture content in the sewage sludge incinerator stack exit gas for this sewage sludge incinerator.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

(7) The permittee shall calibrate, maintain and operate continuous temperature measuring devices to measure and record temperatures in the bed and outlet of the fluidized bed incinerator. Each temperature measuring device shall be certified by the manufacturer to have an accuracy of plus or minus 5 percent over its operating range. The permittee shall record operation of a sewage sludge incinerator when the daily mean operating combustion temperature for the fluidized bed incinerator exceeds the performance test combustion temperature by more than 20 percent.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 60, Subpart O)

(8) The frequency of monitoring for lead in sewage sludge fed to a sewage sludge incinerator shall be once per month (12 times per year.) After the sewage sludge has been monitored for two years, the Ohio EPA may reduce the frequency of monitoring for lead.

(Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(C))

(9) The permittee shall develop the following information and retain that information for a period of five years:

- a. the concentration of lead in the sewage sludge fed to the sewage sludge incinerator;
- b. information that indicates the requirements in the National Emission Standard for mercury in Subpart E of 40 CFR Part 61 are met;
- c. the daily mean operating combustion temperatures for the sewage sludge incinerator;
- d. values for the air pollution control device operating parameters;
- e. the oxygen concentration and information used to measure moisture content in the exit gas from the sewage sludge incinerator stack;
- f. the sewage sludge feed rate;
- g. the stack height for the sewage sludge incinerator;



- h. the dispersion factor for the site where the sewage sludge incinerator is located; and
- i. the control efficiency for lead for each sewage sludge incinerator.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), OAC rule 3745-31-05(C), 40 CFR Part 60, Subpart O, and 40 CFR Part 61 Subpart E)

- (10) All the sources for which mercury emissions exceed 3.5 lbs per 24-hour period based upon initial emission testing conducted pursuant to 40 CFR Part 61, Subpart E, shall monitor mercury emissions at intervals of at least once per year by use of Method 105 of Appendix B or the procedures specified in 40 CFR Part 61.53(d). The results of monitoring shall be reported and retained according to 40 CFR Part 61.53(d)(5) and (6) or 40 CFR Part 61.54(f) and (g).

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 61 Subpart E)

- (11) The permittee shall provide access to the sludge charged so that a well-mixed representative grab sample of the sludge can be obtained.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 60 Subpart O)

- (12) The permittee shall install, operate, and maintain equipment to continuously monitor and record SO<sub>2</sub> emissions from each emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO<sub>2</sub> monitoring system including, but not limited to:

- a. emissions of SO<sub>2</sub> in parts per million on an instantaneous (one-minute) basis;
- b. emissions of SO<sub>2</sub> in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;
- c. results of quarterly cylinder gas audits;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of each emissions unit, continuous SO<sub>2</sub> monitoring system, and control equipment;
- g. the date, time, and hours of operation of each emissions unit without the control equipment and/or the continuous SO<sub>2</sub> monitoring system;



- h. the date, time, and hours of operation of each emissions unit during any malfunction of the control equipment and/or the continuous SO<sub>2</sub> monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60.13, and 40 CFR Part 60, Appendices B & F)

- (13) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous SO<sub>2</sub> monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. The letter(s)/document(s) of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60.13, and 40 CFR Part 60, Appendix B)

- (14) The permittee shall collect and record the following information regarding the caustic injection system:
  - a. the time and date the caustic injection system was employed to maintain compliance with the lbs/hr SO<sub>2</sub> emission limitation as specified in c)(6);
  - b. the caustic injection feed rate when employed; and
  - c. any times the hourly SO<sub>2</sub> emission limitations were exceeded and the caustic addition system was not employed.

As provided for in c)(6), should the permittee discontinue the use of the caustic injection system, the information required in to be kept in d)(14) shall no longer be required. The requirement to discontinue collecting this data shall terminate upon written approval by the Southwest Ohio Air Quality Agency as specified in e)(10).

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

- (15) The CAM plan for the emissions units has been developed for particulate emissions from the fluidized bed incinerators. The CAM performance indicator for particulate is the pressure drop across the wet scrubbers as measured and recorded by the monitoring equipment and the associated record keeping requirements specified in d)(1).

When the monitored value for pressure drop is outside of the range specified in d)(1), corrective action (including, but not limited to, an evaluation of the emissions unit and scrubber) will be required.

Upon detecting an excursion of the scrubber pressure drop range, the permittee shall restore operation of the emissions unit (including the control device) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include



minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64)

- (16) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring under 40 CFR Part 64 did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the appropriate Ohio EPA District Office or local air agency and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. Approved revisions to the monitoring will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64)

- (17) If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64)

- (18) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install P0115155, issued September 27, 2013: d)(1) - d)(17). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) This facility shall submit semi-annual deviation reports which provide records of the operating conditions of the fluidized bed incinerator for each calendar day when:
- a. the total pressure drop across the scrubber system was not at least 70 percent of the average pressure drop recorded during the most recent performance test for any fifteen minute period.



- b. the oxygen content of incinerator exhaust gas exceeds the average oxygen content measured during the most recent performance test by more than three (3) percent for any 1-hour period and when sludge throughput is greater than or equal to 90% of the average compliance test value.

These semi-annual reports shall be submitted by January 30 and July 30 of each year and shall cover the previous six calendar months (January through June and July through December, respectively).

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), 40 CFR Part 60, Subpart O, and 40 CFR Part 64)

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 365 day total combined dry sludge feed limitation for emissions units N008, N009 and N010; and,
  - b. all exceedances of the rolling, 12-month emission limitations for PE, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC, CO and Lead for emissions units N008, N009 and N010, combined, as specified in b)(2)a.

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

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3) and OAC rule 3745-31-05(D))

- (3) The permittee shall comply with the following quarterly reporting requirements for each emissions unit and its continuous CO monitoring system:
  - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Southwest Ohio Air Quality Agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.
  - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following, unless previously submitted or not applicable for the prior quarter:



- i. the facility name and address;
- ii. the exceedance report as detailed in (a) above;
- iii. the total CO emissions for the calendar quarter (tons);
- iv. the total operating time (hours) of the emissions unit;
- v. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;
- vi. the monthly average carbon monoxide concentration in the exit gas;
- vii. results and dates of quarterly cylinder gas audits;
- viii. results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- ix. the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;
- x. the date, time, and duration of any/each malfunction\* of the continuous CO monitoring system, emissions unit, and/or control equipment;
- xi. the date, time, and duration of any downtime\* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and
- xii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(x) and (xi).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

\* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall submit an annual report to the Southwest Ohio Air Quality Agency that provides the information required in d)(9) by February 15 of each year. This report should cover the previous calendar years operation.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 60, Subpart O)

- (5) Pursuant to the NSPS and NESHAP, the source owner-operator is hereby advised of the requirement to report the following at the appropriate times:



- a. construction date (no later than 30 days after such date);
- b. actual start-up date (within 15 days after such date); and
- c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Southwest Ohio Air Quality Agency

250 William Howard Taft Road

Cincinnati, Ohio 45219

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60, Subpart O, and 40 CFR Part 61, Subpart E)

- (6) If the average particulate matter emission rate exceeds 0.75 lb of PE per ton of dry sludge input, the permittee shall submit the reports required as specified in 40 CFR Part 60.155(a) (1)(ii) and (b).

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3754-31-05(A)(3), and 40 CFR Part 60, Subpart O)

- (7) The permittee shall submit an annual statement that, to the best of its knowledge, the sewage sludge processed in each emissions unit does not contain any "beryllium containing waste". As the basis for this statement, the permittee shall annually review the latest version of the Ohio Toxic Release Inventory to confirm that there is no facility located within the permittee's service area that reported a release of beryllium or beryllium containing compounds and discharged its wastewater to this facility. If the facility receives sludge from outside its service area then it shall review the Ohio Toxic Release Inventory for the service area for that wastewater facility they are receiving the sludge from.

(Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

- (8) The permittee shall comply with the following quarterly reporting requirements for each emissions unit and its continuous SO<sub>2</sub> monitoring system:

- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Southwest Ohio Air Quality Agency, documenting all instances of SO<sub>2</sub> emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).



- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following, unless previously submitted or not applicable for the prior quarter:
- i. the facility name and address;
  - ii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
  - iii. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
  - iv. the total operating time (hours) of the emissions unit;
  - v. the total operating time of the continuous SO<sub>2</sub> monitoring system while the emissions unit was in operation;
  - vi. results and date of quarterly cylinder gas audits;
  - vii. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
  - viii. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO<sub>2</sub> monitor out-of-control and the compliant results following any corrective actions;
  - ix. the date, time, and duration of any/each malfunction\*\* of the continuous SO<sub>2</sub> monitoring system, emissions unit, and/or control equipment;
  - x. the date, time, and duration of any downtime\*\* of the continuous SO<sub>2</sub> monitoring system and/or control equipment while the emissions unit was in operation; and
  - xi. the reason (if known) and the corrective actions taken (if any) for each event in (b)(ix) and (x).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

\* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

\*\* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit.

(Authority for term: OAC rules 3745-77-07(C)(1))



- (9) The permittee shall submit quarterly reports containing the following information:
- a. the time and date the caustic injection system was employed to maintain compliance with the lbs/hr SO<sub>2</sub> emission limitation as specified in c)(6);
  - b. the caustic injection feed rate when employed; and
  - c. any times the hourly SO<sub>2</sub> emission limitations were exceeded and the caustic addition system was not employed.

As provided for in c)(6), should the permittee discontinue the use of the caustic injection system, the report required to be submitted in e)(9) shall terminate. The requirement to discontinue submitting this report shall terminate upon written approval by the Southwest Ohio Air Quality Agency as specified in e)(10).

(Authority for term: OAC rules 3745-77-07(C)(1))

- (10) Per c)(6), the permittee may conduct a 12-month evaluation of the scrubber/caustic injection system to determine its ability to maintain compliance with the lbs/hr SO<sub>2</sub> emission limitation. Should the permittee wish to discontinue the requirement to maintain a caustic injection system, the permittee shall send a written report to the Southwest Ohio Air Quality Agency detailing why the caustic injection system is no longer required. At a minimum this report shall summarize the information collected and recorded in d)(14) for the 12-month study period. The Southwest Ohio Air Quality Agency will determine if the caustic injection system can be removed from service after the review of this report and provide a written response to the request.

(Authority for term: OAC rules 3745-77-07(C)(1))

- (11) If the permittee is required under 40 CFR Part 64.8 and d)(17) of this permit to develop a QIP, the permittee shall submit quarterly reports that contain a description of the actions taken to implement a QIP during the reporting period. Upon completion of a QIP, the permittee shall include documentation that the implementation of the plan has been completed and reduced the likelihood of excursions.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64)

- (12) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install P0115155, issued September 27, 2013: e)(1) - e)(11). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

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 Limitations:



PE shall not exceed 1.6 lbs/hour, 0.40 lb/ton of dry sewage sludge, and 7 tons per year from each emissions unit. PE from emissions units N008, N009 and N010 combined shall not exceed 16.5 TPY.

Particulate matter (PM) emissions shall not exceed 1.30 lb/ton of dry sewage sludge input.

**Applicable Compliance Methods:**

The emission limitation of 1.6 lbs/hour of PE specified in b) is based upon the emission factor from the PTI application number 14-05837 submitted April 24, 2006 of 0.40 lb of PE/ton of dry sludge input, multiplied by the maximum sludge feed rate of 4 tons per hour.

Compliance with the hourly PE limitation and the PE limitation in terms of lb/ton of dry sewage sludge processed shall be demonstrated by emissions testing conducted pursuant to f)(2).

The emission limitation of 7 TPY of PE was calculated based upon the potential to emit using above the pounds per hour limitation.

The emission limitation of 16.5 TPY of PE was calculated by multiplying the emission factor from the PTI application number 14-05837 submitted April 24, 2006 of 0.40 lb of PE/ton of dry sludge input by the maximum allowable cumulative sludge feed rate of 82,500 tons per year and dividing by 2000 lbs/ton.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3) and OAC rule 3745-31-05(D))

**b. Emission Limitations:**

PM<sub>10</sub> emissions shall not exceed 38.4 lbs/day and 7 TPY of PM<sub>10</sub> from this emissions unit. PM<sub>10</sub> emissions from emissions units N008, N009 and N010 combined shall not exceed 16.5 TPY.

**Applicable Compliance Methods:**

The emission limitation of 38.4 lbs/day of PM<sub>10</sub> specified in b) was calculated by multiplying the emission factor from the PTI application number 14-05837 submitted April 24, 2006 of 0.40 lb of PM<sub>10</sub>/ton of dry sludge input by the maximum sludge feed rate of 96 tons per day. PM<sub>10</sub> is assumed equivalent to PE.

The emission limitation of 7 TPY of PM<sub>10</sub> was calculated based upon the potential to emit using above the pounds per day limitation.

The emission limitation of 16.5 TPY of PM<sub>10</sub> was calculated by multiplying the emission factor from the PTI application number 14-05837 submitted April 24, 2006 of 0.40 lb of PM<sub>10</sub>/ton of dry sludge input by the maximum allowable cumulative sludge feed rate of 82,500 tons per year and dividing by 2000 lbs/ton.



(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3) and OAC rule 3745-31-05(D))

c. Emission Limitations:

SO<sub>2</sub> emissions shall not exceed 4.8 lbs/hour and 115.2 lbs/day from this emissions unit. SO<sub>2</sub> emissions from emissions units N008, N009 and N010 combined shall not exceed 49.5 TPY.

Applicable Compliance Methods:

Ongoing compliance with the SO<sub>2</sub> emission limitations contained in this permit, 40 CFR Part 60 and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60. Compliance with the lbs/day and TPY emission limitations may be demonstrated by the summation of the hourly SO<sub>2</sub> emissions over the appropriate time frame.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3) and OAC rule 3745-31-05(D))

d. Emission Limitations:

CO emissions shall not exceed 163.2 lbs/day from this emissions unit. CO emissions from emissions units N008, N009 and N010 combined shall not exceed 70.13 TPY.

The monthly average concentration of carbon monoxide in the exit gas from this emissions unit, corrected for zero percent moisture and to seven percent oxygen, shall not exceed 100 parts per million on a volumetric basis.

Applicable Compliance Methods:

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60. Compliance with the TPY emission limitations may be demonstrated by the summation of the hourly CO emissions over the appropriate time frame.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), OAC rule 3745-31-05(D), 40 CFR 60.13, and 40 CFR Part 60, Appendices B & F)

e. Emission Limitations:



NOx emissions shall not exceed 240.0 lbs/day from this emissions unit. NOx emissions from emissions units N008, N009 and N010 combined shall not exceed 103.2 TPY.

**Applicable Compliance Methods:**

The emission limitation of 240.0 lbs/day of NOx specified in b) was calculated by multiplying the emission factor from the PTI application number 14-05837 submitted April 24, 2006 of 2.50 lbs of NOx/ton of dry sludge input by the maximum sludge feed rate of 96 tons per day.

Compliance with the daily NOx limitation and the NOx limitation in terms of lb/ton of dry sewage sludge processed shall be demonstrated by emissions testing conducted pursuant to f)(2).

The emission limitation of 103.2 TPY of NOx was calculated by multiplying the emission factor from the PTI application number 14-05837 submitted April 24, 2006 of 2.50 lbs of NOx/ton of dry sludge input by the maximum allowable cumulative sludge feed rate of 82,500 tons per year and dividing by 2000 lbs/ton.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3) and OAC rule 3745-31-05(D))

f. **Emission Limitations:**

VOC emissions shall not exceed 86.4 lbs/day from this emissions unit. VOC emissions from emissions units N008, N009 and N010 combined shall not exceed 37.2 TPY.

**Applicable Compliance Methods:**

The emission limitation of 86.4 lbs/day of VOC specified in b) was calculated by multiplying the emission factor from the PTI application number 14-05837 submitted April 24, 2006 of 0.90 lb of VOC/ton of dry sludge input by the maximum sludge feed rate of 96 tons per day.

If required, compliance with the VOC emission limitation and the VOC limitation in terms of lb/ton of dry sewage sludge processed shall be demonstrated using Methods 1 through 4 and 25a in 40 CFR 60, Appendix A.

The emission limitation of 37.2 TPY of VOC was calculated by multiplying the emission factor from the PTI application number 14-05837 submitted April 24, 2006 of 0.90 lb of VOC/ton of dry sludge input by the maximum allowable cumulative sludge feed rate of 82,500 tons per year and dividing by 2000 lbs/ton.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3) and OAC rule 3745-31-05(D))

g. **Emission Limitations:**



Lead emissions from emissions units N008, N009 and N010 combined shall not exceed 3.68 lbs/day and 0.67 TPY.

Applicable Compliance Method:

The emission limitation of 0.67 TPY lead was calculated by multiplying the daily emission rate of 3.68 lbs/day of lead, which was derived from the methodology in 40 CFR Part 503.43 Subpart E and submitted with the PTI application number 14-05837 on April 24, 2006, by 365 days per year plant operation and dividing by 2000 lbs/ton.

(Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(C))

h. Emission Limitations:

Mercury emissions from emissions units N008, N009 and N010 combined shall not exceed 7.1 lbs/day and 1.29 TPY.

Applicable Compliance Methods:

The emission limitation of 7.1 lbs/day of mercury specified in b) was based on 40 CFR 61.52(b), Subpart E. The emission limitation is applicable as facility-wide limitations.

Ongoing compliance with the mercury emission limitations contained in this permit, 40 CFR Part 60 and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit in d)(9) and d)(10).

The emission limitation of 1.29 TPY of mercury was calculated by multiplying the allowable daily emission rate of 7.1 lbs/day of mercury by 365 days per year and dividing by 2000 lbs/ton.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), OAC rule 3745-31-05(D), and 40 CFR Part 61 Subpart E)

i. Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity.

Applicable Compliance Method:

Compliance with the visible particulate emission limitation specified in 40 CFR 60.152 shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in 40 CFR 60.11.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart O)

- (2) The permittee shall conduct, or have conducted, emission testing for each emissions unit in accordance with the following requirements:



- a. The emission testing shall be conducted as follows:
  - i. for emissions unit N008, within 12 months after issuance of this permit (following the effective date for the Title V permit);
  - ii. for emissions unit N009, between 24 and 36 months after issuance of this permit (following the effective date for the Title V permit); and
  - iii. for emissions unit N010, within 6 months prior to permit expiration (following the effective date for the Title V permit).
- b. The emission testing shall be conducted to demonstrate compliance with the following:
  - i. allowable mass emission rate for PE, in lbs/hour, and the PE limitations in terms of lb/ton of dry sludge input; and
  - ii. the NO<sub>x</sub> limitation in terms of lb/ton of dry sludge input which is the basis for the NO<sub>x</sub> emission limitation, in lbs/day.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Methods 1 through 4, and Method 5 of 40 CFR Part 60, Appendix A, including the procedures specified in 40 CFR Part 60, Subpart O, and the conditions in f)(3) through f)(5) below.

Methods 1 through 4, and Method 7 of 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 test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- e. During the test, the permittee shall monitor and record the scrubber operating parameters, including the pressure drop across the scrubber, in inches of water, as required in 40 CFR 64.7.
- f. 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 test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

- g. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- h. 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 test(s). 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.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), 40 CFR Part 60 Subpart O, and 40 CFR Part 64)

- (3) As specified in 40 CFR 60.8, each performance test shall consist of at least three separate runs at the same operating conditions.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 60 Subpart O)

- (4) All continuous monitoring systems and monitoring devices shall be operational, and calibrated prior to conducting performance tests.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 60 Subpart O)

- (5) The performance test shall be conducted under representative sewage sludge incinerator conditions at the highest expected sewage sludge feed rate within the design capacity of the sewage sludge incinerator.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 60 Subpart O)

- (6) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install P0115155, issued September 27, 2013: f(1) - f(5). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

- g) Miscellaneous Requirements



- (1) Pursuant to PTI P0115155, the following is a summary of the netting emissions in tons per year (TPY).

Pollutant	Potential emissions allowable limits in tpy	Baseline emissions for existing incinerators in tpy	Project net emissions, in tpy	Major NSR significant emission rate in tpy
PE	16.5	8.75	7.75	25
PM <sub>10</sub>	16.5	9.46	7.04	15
SO <sub>2</sub>	49.5	13.23	36.3	40
NO <sub>x</sub>	103.13	64.03	39.1	40
CO	70.13	512.51	-442.4	100
VOC	37.13	14.05	23.1	40
Lead	0.67	0.075	0.595	0.6

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3) and OAC rule 3745-31-05(D))

- (2) The permittee has permanently shut down emissions units N001, N002, N003, N004, N006, and N007.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and OAC rule 3745-31-05(D))