



11/19/2014

Certified Mail

Robin Halperin
Southerly Wastewater Treatment Center
3900 Euclid Ave
Cleveland, OH 44115

Facility ID: 1318172479
Permit Number: P0117585
County: Cuyahoga

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT
Permit Type: Off-Permit Change

Dear Permit Holder:

Enclosed is a final Ohio Environmental Protection Agency (EPA) Air Pollution Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

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

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions regarding this permit, please contact the Cleveland Division of Air Quality as indicated on page one of your permit.

Sincerely,



Erica R. Engel-Ishida, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Cleveland Division of Air Quality



FINAL

**Division of Air Pollution Control
Title V Permit
for
Southerly Wastewater Treatment Center**

Facility ID:	1318172479
Permit Number:	P0117585
Permit Type:	Off-Permit Change
Issued:	11/19/2014
Effective:	11/19/2014
Expiration:	4/15/2019



Division of Air Pollution Control
Title V Permit
for
Southerly Wastewater Treatment Center

Table of Contents

Authorization	1
A. Standard Terms and Conditions	2
1. Federally Enforceable Standard Terms and Conditions	3
2. Monitoring and Related Record Keeping and Reporting Requirements.....	3
3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance.....	6
4. Risk Management Plans	7
5. Title IV Provisions	7
6. Severability Clause	7
7. General Requirements	7
8. Fees.....	8
9. Marketable Permit Programs.....	8
10. Reasonably Anticipated Operating Scenarios	9
11. Reopening for Cause	9
12. Federal and State Enforceability	9
13. Compliance Requirements	9
14. Permit Shield	11
15. Operational Flexibility.....	11
16. Emergencies.....	12
17. Off-Permit Changes	12
18. Compliance Method Requirements	12
19. Insignificant Activities or Emissions Levels.....	13
20. Permit to Install Requirement.....	13
21. Air Pollution Nuisance	13
22. Permanent Shutdown of an Emissions Unit	13
23. Title VI Provisions	13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only	14
25. Records Retention Requirements Under State Law Only.....	14
26. Inspections and Information Requests	14
27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements.....	15
28. Permit Transfers	15



29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations	15
30. Submitting Documents Required by this Permit	16
B. Facility-Wide Terms and Conditions.....	17
C. Emissions Unit Terms and Conditions	21
1. B002, Boiler # 2	22
2. B003, Boiler # 3	26
3. Emissions Unit Group -Emergency Electrical Generators: B004, B005, B006, B007, B008, B009	31
4. Emissions Unit Group -Multiple Hearth Incinerators: N005, N006, N007, N008.....	40
5. Emissions Unit Group -Fluidized Bed Incinerators: N009, N010, N011	48



Final Title V Permit
Southerly Wastewater Treatment Center
Permit Number: P0117585
Facility ID: 1318172479
Effective Date: 11/19/2014

Authorization

Facility ID: 1318172479
Facility Description: Northeast Ohio Regional Sewer District POTW.
Application Number(s): A0050833
Permit Number: P0117585
Permit Description: Title V Off Permit Change to include the three (3) new fluidized bed incinerators N009 - N011 controlled by Venturi and Impingement scrubbers. This permit combines the most recent Title V permit (P0095323 issued final on 4/15/2014) and the most recent PTI (P0117161 issued 8/6/2014).
Permit Type: Off-Permit Change
Issue Date: 11/19/2014
Effective Date: 11/19/2014
Expiration Date: 4/15/2019
Superseded Permit Number: P0095323

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

Southerly Wastewater Treatment Center
6000 Canal Road
Cuyahoga Heights, OH 44125

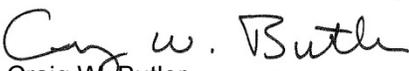
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Cleveland Division of Air Quality
2nd Floor
75 Erieview Plaza
Cleveland, OH 44114
(216)664-2297

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 Cleveland Division of Air Quality. 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



Final Title V Permit
Southerly Wastewater Treatment Center
Permit Number: P0117585
Facility ID: 1318172479
Effective Date: 11/19/2014

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 Cleveland Division of Air Quality. 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 Cleveland Division of Air Quality 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 Cleveland Division of Air Quality 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 Cleveland Division of Air Quality 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 Cleveland Division of Air Quality) 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 Cleveland Division of Air Quality 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 Cleveland Division of Air Quality 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 Cleveland Division of Air Quality.
- 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 Cleveland Division of Air Quality. 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 Cleveland Division of Air Quality 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 Cleveland Division of Air Quality 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.



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 Cleveland Division of Air Quality, 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.



Final Title V Permit
Southerly Wastewater Treatment Center
Permit Number: P0117585
Facility ID: 1318172479
Effective Date: 11/19/2014

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 emissions units contained in this permit are subject to 40 CFR Part 60, Subpart Dc, Standards of Performance for New Stationary Sources for Small Industrial-Commercial-Institutional Steam Generating Units: B003. The complete NSPS requirements, including the Subpart A General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website at <http://www.ecfr.gov> or by contacting the Cleveland Division of Air Quality (Cleveland DAQ).

The permittee must comply with all applicable requirements of 40 CFR Part 60, Subpart Dc. The permittee shall also comply with all the applicable requirements of 40 CFR Part 60, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 60, Subpart Dc and 40 CFR Part 60, Subpart A.

[Authority for Term: 40 CFR Part 60, Subpart Dc]

3. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines: B004, B005, B006, B007, B008, and B009. The complete NESHAP requirements, including the Subpart A General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website at <http://www.ecfr.gov> or by contacting the Cleveland Division of Air Quality (Cleveland DAQ).

The permittee must comply with all applicable requirements of 40 CFR Part 63, Subpart ZZZZ. The permittee shall also comply with all the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 8 of 40 CFR Part 63, Subpart ZZZZ. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63, Subpart ZZZZ and 40 CFR Part 63, Subpart A.

[Authority for Term: 40 CFR Part 63, Subpart ZZZZ]

4. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart MMMM, Standards of Performance for New Stationary Sources – Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units: N005, N006, N007, N008, N009, N010, and N011. The complete NSPS requirements, including the Subpart A General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website at <http://www.ecfr.gov> or by contacting the Cleveland Division of Air Quality (Cleveland DAQ).

The permittee must comply with all applicable requirements of 40 CFR Part 60, Subpart MMMM. The permittee shall also comply with all the applicable requirements of 40 CFR Part 60, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by March 21, 2016.

[Authority for Term: 40 CFR Part 60, Subpart MMMM]

5. The following emissions units contained in this permit are subject to 40 CFR Part 61, Subpart E, National Emissions Standards for Hazardous Air Pollutants for Mercury: N005, N006, N007, N008, N009, N010, and N011. The complete NESHAP requirements, including the Subpart A General



Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website at <http://www.ecfr.gov> or by contacting the Cleveland Division of Air Quality (Cleveland DAQ).

The permittee must comply with all applicable requirements of 40 CFR Part 61, Subpart E. The permittee shall also comply with all the applicable requirements of 40 CFR Part 61, Subpart A (General Provisions). Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 61, Subpart E and 40 CFR Part 61, Subpart A.

[Authority for Term: 40 CFR Part 61, Subpart E]

6. The air permit-to-install (PTI) 13-04701 was issued on 10/14/2008 and modified PTI P0117161 issued on 8/06/2014 that covers the Sludge incinerator Project at the Northeast Ohio Regional Sewer District's Southerly Wastewater Treatment Center facility (Southerly) which involves replacement of its four multi-hearth sewage sludge incinerators (Ohio EPA emissions units 1318172479 N005, N006, N007 and N008) with three fluidized bed incinerators (N009, N010 and N011).

Southerly Wastewater Treatment Center (Southerly) is classified as a major stationary source under the federal Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR) regulations. It was determined that the new incinerators fall under the definition of "replacement units" according to OAC rule 3745-31-01(GGGGG). Therefore, the actual-to-projected-actual "significant emissions" applicability test for existing emissions units described in OAC rule 3745-31-01(JJJ)(4)(a) was used. It was determined that this project will not cause a significant increase of any regulated NSR pollutant and is not considered a "major modification". See the issued PTIs for the results of this "test".

The Incinerator Replacement Project for Southerly Wastewater Treatment Center is not subject to major NSR as there is no significant emission increases of any criteria pollutants.

[Authority for Term: PTI P0117161]

7. There will be a period of transition after the start up of the new fluidized bed incinerators and prior to the existing multiple hearth incinerators going offline. This time will be used for bringing the new fluidized bed incinerators up to normal operating conditions and will be referred to as the shakedown period. The permittee has agreed that the shakedown period for each incinerator shall not exceed 180 operating days after initial start up. At the end of the shakedown period for each individual new fluidized bed incinerator, the status will be changed to operational.

[Authority for Term: PTI P0117161]

8. The new fluidized bed incinerators will combust chemically conditioned sewage sludge (biosolids) plus skimmings, while the existing multiple hearth incinerators are only capable of combusting thermally conditioned biosolids. As a result:
 - a) the facility's new dewatering, chemical conditioning and conveyance systems will have to be in continuous operation before biosolids can be fed to the new fluidized bed incinerators and initial start-up can commence; and



- b) there will be a period of time when thermally conditioned biosolids are being burned in a multiple hearth incinerator(s) and chemically conditioned biosolids are being burned in a fluidized bed incinerator(s).

[Authority for Term: PTI P0117161]

- 9. The permittee has agreed to the following decommissioning schedule. Note: Once a multiple hearth incinerator goes offline, it will only be brought back online if the fluidized bed incinerator replacing it runs into unanticipated problems. The multiple hearth incinerator and the fluidized bed replacing it shall not operate simultaneously after the end of the 180-operating day shakedown period.
 - a) The permittee shall take one multiple hearth incinerator offline after the first fluidized bed incinerator has become operational, which is only after a reasonable shakedown period not to exceed 180 operating days.
 - b) The permittee shall take the second multiple hearth incinerator offline after the second fluidized bed incinerator has become operational, which is only after a reasonable shakedown period not to exceed 180 operating days.
 - c) The permittee shall take the last two multiple hearth incinerators offline after the third fluidized bed incinerator has become operational, which is only after a reasonable shakedown period not to exceed 180 operating days.
 - d) The permittee shall commence permanent decommissioning of the multiple hearth incinerators no later than one year after the 3-unit fluidized bed incinerator system becomes fully operational and has passed all compliance tests required by the permit-to-install.

[Authority for Term: PTI P0117161]



C. Emissions Unit Terms and Conditions



1. B002, Boiler # 2

Operations, Property and/or Equipment Description:

69 MMBtu/hr Babcock & Wilcox natural gas fired Boiler (Package Boiler) to produce steam for process and heating equipped with lox NOx burners

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 13-460 issued on 8/14/1979 and modified on 3/20/1981	Particulate emissions shall not exceed 0.03 gr/dscf. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07 and 3745-17-10(B)(1).
b.	OAC rule 3745-31-05(A)(3) PTI 13-2375 issued on 6/3/1992	NOx emissions shall not exceed 0.15 lb/MMBtu of actual heat input. See b)(2)b. and c)(2) below.
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from stack shall not exceed 20 percent opacity, as a six-minute average, except as provided by rule.
d.	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb of particulate per MMBtu of actual heat input.
e.	OAC rule 3745-18-06(A)	Fuel burning equipment are exempt from this rule during any calendar day in which natural gas is the only fuel burned. See b)(2)a. below.



(2) Additional Terms and Conditions

- a. OAC rule 3745-18-06(A) does not establish sulfur dioxide emission limitations for this emissions unit when burning only natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions: a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet. Because the natural gas being burned in this emissions unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).
- b. This emissions unit shall be equipped with low NOx burners.

c) Operational Restrictions

- (1) The permittee shall only burn natural gas in this emissions unit.

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

- (2) The maximum heat input from emissions units B002 and B003 combined shall not exceed 93 MMBtu/hr as a daily average.

If the permittee operates emissions units B002 and B003 at a heat input rate that exceeds the combined maximum heat input limitation for these units, such an exceedance shall be treated as a single exceedance of the combined limitation for B002 and B003 and not as two separate exceedances.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI #13-2375]

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 this emissions unit.

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

- (2) The permittee shall maintain daily records of the following information for B002 and B003 combined:

- a. the amount of natural gas burned (ft³/day);
- b. the number of hours of operation (hours/day);
- c. the total daily heat input (MMBtu/day) calculated by multiplying the natural gas usage in cubic feet/day by the assumed heat content of natural gas (1000 Btu/ft³) and by 0.000001 MMBtu/Btu; and



- d. the average hourly heat input (MMBtu/hr) calculated by dividing the value from d)(2)c. (MMBtu/day) above by d)(2)b. (hours/day).

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

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 this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

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

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify each exceedance of the combined heat input limitation for emission units B002 and B003. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Section A. Standard Terms and Conditions.

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

- (3) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

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

f) Testing Requirements

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

- a. Emissions Limitation:
Particulate emissions shall not exceed 0.03 gr/dscf.

Applicable Compliance Method:

If required, compliance shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-460]

- b. Emissions Limitation:
NOx emissions shall not exceed 0.15 lb/MMBtu of actual heat input

Applicable Compliance Method:

Compliance may be demonstrated by dividing the emission factor for natural gas combustion (127 lbs of NOx/MMft³, based on emission test performed in 1997) by the conversion factor (1000 MMBtu/MMft³).

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



c. Emissions Limitation:

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

Applicable Compliance Method:

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-460]

d. Emissions Limitation:

Particulate emissions shall not exceed 0.020 lb of particulate per MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be demonstrated by dividing the AP-42, Table 1.4-2 (7/98) emission factor for natural gas combustion (1.9 lbs of particulate/mmcf) by the conversion factor (1000 MMBtu/mmcf).

If required, compliance shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

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

- (2) Compliance with the heat input limitation in c)(2) shall be based on the record keeping in d)(2).

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

g) Miscellaneous Requirements

- (1) This emissions unit was installed in June 1979.



2. B003, Boiler # 3

Operations, Property and/or Equipment Description:

92.88 MMBtu/Hr Nebraska natural gas fired boiler to produce steam for process and space heating equipped with low NOx burners

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 13-2375 issued on 06/03/1992 and modified on 2/18/1993	NOx emissions shall not exceed 0.15 lb of NOx/MMBtu of actual heat input and 61.02 tons/yr. Particulate emissions shall not exceed 8.14 tons/yr. Visible particulate emissions shall not exceed 5 percent opacity, as a six-minute average, except for one six-minute period every hour. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-10(B)(1) and 40 CFR Part 60 Subpart Dc. See b)(2)a. and c)(2) below.
b.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb of particulate/MMBtu of actual heat input.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-18-06(A)	Fuel burning equipment are exempt from this rule during any calendar day in which natural gas is the only fuel burned. See b)(2)b. below.
e.	40 CFR Part 60 , Subpart Dc [In accordance with 40 CFR this emissions unit is a small industrial-commercial-institutional steam generating unit subject to the emission limitations/control measures specified in this section.]	See B.2. above and d)(2) below.
f.	40 CFR 60.1-19	Subpart A – General Provisions in 40 CFR 60.1-19.

(2) Additional Terms and Conditions

- a. This emissions unit shall be equipped with low NOx burners.
- b. OAC rule 3745-18-06(A) does not establish sulfur dioxide emission limitations for this emissions unit when burning only natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions: a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet. Because the natural gas being burned in this emissions unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.
[Authority for term: OAC rule 3745-77-07(A)(1)]
- (2) The maximum heat input from emissions units B002 and B003 combined shall not exceed 93 MMBtu/hr as a daily average.



If the permittee operates emissions units B002 and B003 at a heat input rate that exceeds the combined maximum heat input limitation for these units, such an exceedance shall be treated as a single exceedance of the combined limitation for B002 and B003 and not as two separate exceedances.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI #13-2375]

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 this emissions unit.

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

- (2) The permittee shall maintain daily records of the following information for B002 and B003 combined:
 - a. the amount of natural gas burned (ft³/day);
 - b. the number of hours of operation (hours/day);
 - c. the total daily heat input (MMBtu/day) calculated by multiplying the natural gas usage in cubic feet/day by the assumed heat content of natural gas (1000 Btu/ft³) and by 0.000001 MMBtu/Btu; and
 - d. the average hourly heat input (MMBtu/hr) calculated by dividing the value from d)(2)c. (MMBtu/day) above by d)(2)b. (hours/day).

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

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 this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

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

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify each exceedance of the combined heat input limitation for emission units B002 and B003. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Section A. Standard Terms and Conditions.

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

- (3) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

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



f) Testing Requirements

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

a. Emissions Limitation:

NOx emissions shall not exceed 0.15 lb per MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be demonstrated by dividing the emission factor for natural gas combustion (127 lbs of NOx/MMcf, based on emission test performed in 1997) by the conversion factor (1000 MMBtu/MMcf).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-2375]

b. Emissions Limitation:

NOx emissions shall not exceed 61.02 tons/yr

Applicable Compliance Method:

The ton/year limit was established by multiplying 0.15 lbNOx/MMBtu by the maximum capacity of the boiler (92.88 MMBtu/hr) then multiply by 8760 hours/year and divide by 2000 lbs/ton. Therefore, provided compliance is demonstrated with the lb/MMBtu limitation, compliance will also be demonstrated with the ton/year limit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-2375]

c. Emissions Limitation:

Particulate emissions shall not exceed 8.14 tons/year

Applicable Compliance Method:

The ton/year limit was established by multiplying 0.020 lb PE/MMBtu by the maximum capacity of the boiler (92.88 MMBtu/hr) then multiply by 8760 hours/year and divide by 2000 lbs/ton. Therefore, provided compliance is demonstrated with the lb/MMBtu limitation, compliance will also be demonstrated with the ton/year limit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-2375]

d. Emissions Limitation:

Visible particulate emissions from the stack shall not exceed 5 percent opacity as a six-minute average, except for one six-minute period every hour.



Applicable Compliance Method:

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-2375]

e. Emissions Limitation:

Particulate emissions shall not exceed 0.020 lb per MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be demonstrated by dividing the AP-42, Table 1.4-2 (7/98) emission factor for natural gas combustion (1.9 lbs of particulate/MMcf) by the conversion factor (1000 MMBtu/MMcf).

If required, compliance shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-2375]

- (2) Compliance with the heat input limitation in c)(2) shall be based on the record keeping in d)(2).

g) Miscellaneous Requirements

- (1) This emissions unit was installed in December 1991.



3. Emissions Unit Group -Emergency Electrical Generators: B004, B005, B006, B007, B008, B009

EU ID	Operations, Property and/or Equipment Description
B004	2000 kW No. 2 oil, low-sulfur fuel driven emergency electrical generator No. 1
B005	2000 kW No. 2 oil, low-sulfur fuel driven emergency electrical generator No. 2
B006	2000 kW No. 2 oil, low-sulfur fuel driven emergency electrical generator No. 3
B007	2000 kW No. 2 oil, low-sulfur fuel driven emergency electrical generator No. 4
B008	2000 kW No. 2 oil, low-sulfur fuel driven emergency electrical generator No. 5
B009	2000 kW No. 2 oil, low-sulfur fuel driven emergency electrical generator No. 6

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 13-04742 issued on 8/22/2008	0.72 lb/hour of PE/PM ₁₀ emissions 35.25 lbs/hour and 25 tons/year of NOx emissions 3.58 lbs/hour of CO emissions 0.67 lb/hour of OC emissions 9.97 lbs/hour of SO ₂ emissions
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)(5)(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).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-18-06(G)	0.5 pound of sulfur dioxide per MMBtu actual heat input.
e.	OAC rule 3745-31-05(D) Synthetic Minor to avoid PSD and Nonattainment NSR.	See b)(2)a., b)(2)b., and c)(2) below.
f.	40 CFR Part 63 Subpart ZZZZ (40 CFR 63.6580 to 63.6675) In accordance with 40 CFR 63.6585, this emissions unit is a stationary internal combustion engine (ICE) subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines.	The existing emergency stationary compression ignition (CI) reciprocating internal combustion engine (RICE), located at an area source for hazardous air pollutants (HAPs), shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ.
g.	40 CFR 63.6603 Table 2d #4 to Subpart ZZZZ	Must comply with the maintenance / operational requirements from the NESHAP for existing area source CI emergency RICE.

(2) Additional Terms and Conditions

- a. The total, combined mass emissions from emissions units B004, B005, B006, B007, B008 and B009, as a 12-month rolling average, shall not exceed the following:
- PE/PM₁₀ 0.75 ton/year
 - NOx 36.91 tons/year
 - CO 3.75 tons/year
 - OC 0.70 ton/year
 - SO₂ 10.44 tons/year
- b. The total NOx emissions for each individual emissions unit (generator) shall not exceed 25 tons/year.



- c. The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Tables from Part 63, Subpart ZZZZ	Compliance requirements in Table 2d #4; continuous compliance in Table 6 #9; general provision from Subpart A in Table 8.
40 CFR 63.6603	Maintain compliance with operational limitations in Table 2d #4 (inspection and maintenance requirements) to Part 63 Subpart ZZZZ.
40 CFR 63.6665	Meet all of the general provisions of Subpart A, from Sections 63.1 through 63.15, that apply to the CI RICE, as identified in Table 8 to Subpart ZZZZ.
40 CFR 63.6675	The RICE shall meet the definition of an emergency stationary RICE in order to be considered an emergency engine and subject to the requirements for an emergency RICE.

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

c) Operational Restrictions

- (1) The permittee shall use only diesel fuel with a sulfur content of not more than 0.5% by weight in the engine and generator.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI #13-04742]

- (2) The maximum cumulative annual operating hours for B004-B009 shall not exceed 2094 hrs/yr, based upon a rolling, 12-month summation of the operating hours.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI #13-04742]

- (3) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

40 CFR 63.6605	General duty to minimize emissions, with good air pollution control practices for minimizing emissions; and compliance required at all times.
40 CFR 63.6625(e)	Operate & maintain RICE according to mfg. instructions and develop a facility maintenance plan for the RICE that meets the requirements of Subpart ZZZZ Table 2d #4.
40 CFR 63.6625(f)	Install a non-resettable hour meter by compliance date.
40 CFR 63.6625(h)	Minimize idle and startup time, not to exceed 30 minutes.



40 CFR 63.6625(i)	Oil analysis program, option to extend the oil change frequency.
40 CFR 63.6640(f)	The emergency RICE is limited to 100 hours/year for maintenance checks and readiness testing and may be operated up to 50 hours/year in non-emergency situations which are counted towards the 100 hours provided for maintenance and testing. The 50 hours per year cannot be used for peak shaving or to generate income to supply power to an electric grid, but can include a maximum of 15 hours/year as part of a demand response program if the regional transmission organization determines there are emergency conditions.

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

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
 - a. the operating hours for each individual emissions unit (generator) each month;
 - b. the cumulative operating hours of B004-B009 each month;
 - c. the rolling, 12-month summation of the operating hours for each individual emissions unit (generator); and
 - d. the rolling, 12-month summation of the cumulative operating hours for B004-B009.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-04742]

- (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. The permittee shall also maintain documentation on the sulfur content of all fuels received.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-04742]

- (3) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

40 CFR 63.6635	Except for monitor malfunctions, associated repairs, and required quality assurance activities, must continuously monitor that the RICE is operating. Must use all valid data (not recorded during malfunctions, repairs, or required quality assurance or control activities) in calculations used to report emissions or operating levels.
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40 CFR 63.6655(f)	Maintain records of the hours of operation in emergency operations, non-emergency operations, and in maintenance checks and readiness testing, as recorded through the non-resettable hour meter. If the RICE is used for demand response, records of the notification of the emergency and the time of operation, as part of the demand response, is to be maintained.
40 CFR 63.6655(a)	Keep records of: 1. each notification and report submitted to comply with Subpart ZZZZ; 2. the occurrence and duration of each malfunction of the RICE; and 3. corrective actions taken during each period of malfunction to minimize emissions and restore normal operations.
40 CFR 63.6640(a) and 40 CFR 63.6655(d)	Keep the records required in #9 of Table 6 to Subpart ZZZZ to demonstrate continuous compliance.
40 CFR 63.6655(e)	Records of maintenance and inspections conducted in order to demonstrate compliance with Table 2d and to demonstrate that the RICE was operated and maintained according to the facility's maintenance plan.
40 CFR 63.6625(h)	Maintain a record of each idle and/or startup time that exceeded 30 minutes.
40 CFR 63.6660	Records readily available and retained for at least 5 years after the date of occurrence or date of report according to 63.10(b)(1).

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

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) which identify all exceedances of the rolling, 12-month limitation on the hours of operation. These reports shall be submitted within 30 days after the deviation occurs. The reports shall identify:
 - a. the probable cause of such deviations; and
 - b. any corrective actions or preventative measures which have been or will be taken to remedy the deviations; or
 - c. if no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-04742]



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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-04742]

- (3) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

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

- (4) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

40 CFR 63.6640(b);	Submit a report of each instance in which the operational requirements in Table 2d were not met.
40 CFR 63.6640(e)	Submit in the deviation (excursion) report each instance in which the applicable requirements in Table 8 to Subpart ZZZZ, the general provisions from Subpart A, were not met.
40 CFR 63.6640(f)	Submit any deviation from the requirements for emergency RICE identified in 40 CFR 63.6640(f) in the deviation (excursion) report.

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

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in 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 percent opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance with the above visible emission limitation shall be determined through performance testing using Method 9 of 40 CFR, Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-04742]

- b. Emission Limitation:
 0.72 lb PE/PM₁₀ per hour



Applicable Compliance Method:

If required, compliance shall be determined by performing a stack test using Methods 1-5 and 201 or 201a of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-04742]

- c. Emission Limitation:
35.25 lbs/hour of NO_x emissions

Applicable Compliance Method:

If required, compliance shall be determined by performing a stack test using Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-04742]

- d. Emission Limitation:
25 tons/year of NO_x emissions

Applicable Compliance Method:

The tons/year limitation was developed by multiplying the lb/hour by the operating schedule of 1418 hours/year for this emissions unit, and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation as long as the permittee does not exceed 1418 hours of operation annually for each individual emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-04742]

- e. Emission Limitation:
3.58 lbs/hour of CO emissions

Applicable Compliance Method:

If required, compliance shall be determined by performing a stack test using Methods 1-4, and 10 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-04742]

- f. Emission Limitation:
0.67 lb/hour of OC emissions

Applicable Compliance Method:

If required, compliance shall be determined by performing a stack test using Methods 1-4, and 25 or 25a of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-04742]



- g. Emission Limitation:
0.5 pound of sulfur dioxide per MMBtu actual heat input and 9.97 lbs/hr of SO₂ emissions.

Applicable Compliance Method:

If required, compliance shall be determined by performing a stack test using Methods 1-4, and 6, 6A, 6B or 6C as specified in 40 CFR Part 60, Appendix A and 40 CFR 60.46.

Compliance with the lb/MM Btu limitation may be determined in accordance with OAC rule 3745-18-04(F)(2) as follows:

$$ER = [(1 \times 10^6) / H] \times D \times S \times 1.974$$

where:

ER = the emission rate in pounds of sulfur dioxide per MM Btu;

H = the heat content of the liquid fuel in Btu per gallon;

D = the density of the liquid fuel in pounds per gallon; and

S = the decimal fraction of sulfur in the liquid fuel.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-04742]

- h. Emission Limitation:
0.75 ton/year of PE/PM₁₀ emissions from units B004-B009 combined per rolling, 12-month period;

36.91 tons/year of NO_x emissions from units B004-B009 combined per rolling, 12-month period;

3.75 tons/year of CO emissions from units B004-B009 combined per rolling, 12-month period;

0.70 ton/year of OC emissions from units B004-B009 combined per rolling, 12-month period; and

10.44 tons/year of SO₂ emissions from units B004-B009 combined per rolling, 12-month period.

Applicable Compliance Method:

The tons/year limitations were developed by multiplying the lb/hour by the maximum operating schedule of 2094 combined hours/year, and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitation as long as the permittee does not exceed 2094 hours of operation annually.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI #13-04742]



g) Miscellaneous Requirements

- (1) Emissions units B004-B007 and B009 were installed in June 2006. Emissions unit B008 was installed in June 2007.



4. Emissions Unit Group -Multiple Hearth Incinerators: N005, N006, N007, N008

EU ID	Operations, Property and/or Equipment Description
N005	Multiple Hearth Incinerator # 1, 3.6 dry sludge tons/hour (rated capacity) equipped with a venturi/impingement scrubber.
N006	Multiple Hearth Incinerator # 2, 3.6 dry sludge tons/hour (rated capacity) equipped with a venturi/impingement scrubber.
N007	Multiple Hearth Incinerator # 3, 3.6 dry sludge tons/hour (rated capacity) equipped with a venturi/impingement scrubber.
N008	Multiple Hearth Incinerator # 4, 3.6 dry sludge tons/hour (rated capacity) equipped with a venturi/impingement scrubber.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A) PTI 13-324 issued on 4/5/1978	The requirements of this rule include compliance with the requirements of 40 CFR Part 61, Subpart E and OAC rule 3745-17-07(A) and OAC rule 3745-17-09.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emission from the stack shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-09(B)	Particulate emission shall not exceed 0.10 pound per one hundred pounds of dry material charged.
d.	OAC rule 3745-17-09(C)	These emissions units shall be designed, operated, and maintained so as to prevent the emission of objectionable odors.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	40 CFR Part 60, Subpart M, Table 3 [In accordance with 40 CFR these emissions units are existing sewage sludge incineration units and are subject to the emission limitations/control measures specified in this section.]	See b)(2)c., c)(5), d)(4), e)(6), f)(1)c., and f)(2) below. See B.4. above.
f.	40 CFR Part 61, Subpart E [In accordance with 40 CFR these emissions units incinerate or dry wastewater treatment plant sludge and are subject to the emission limitations/control measures specified in this section.]	Mercury emissions shall not exceed 3200 grams per 24-hour period. See B.5. above.
g.	40 CFR 61.01-19	Subpart A – General Provisions in 40 CFR 61.01-19.
h.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See c)(1) through c)(4), and d)(1) below. The CAM requirements shall apply until the permittee achieves full compliance with 40 CFR Part 60, Subpart M.

(2) Additional Terms and Conditions

- a. There are no applicable SO₂ emission limitations under OAC chapter 3745-18 for these emissions units.
- b. These emissions units are not subject to the Beryllium NESHAP, 40 CFR Part 61 Subpart C, because the sewage sludge processed in these emissions units does not contain any “beryllium containing waste”. As defined in 40 CFR 61.31(g), “beryllium containing waste” means material contaminated with beryllium and/or beryllium compounds used or generated during any process or operation performed by a source subject to this subpart (40 CFR Part 61 Subpart C). See e)(3) below.
- c. The permittee shall comply with the applicable emission limits and standards required under 40 CFR Part 60, Subpart M including the following sections:



60.5035	Final compliance date: March 21, 2016
60.5165; and 60.5180 through 60.5181	Emission limits, and emission standards requirements
Table 3 to Subpart M MMM of Part 60	Emission limits and standards

c) Operational Restrictions

- (1) The pressure drop across the venturi/impingement scrubber shall be continuously maintained within the range of 10 to 30 inches of water at all times while the emission unit is in operation. Compliance with this operational restriction shall be based on a daily average. The time encompassing the startup and shutdown of the incinerator shall not be counted towards this daily average.

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

- (2) The venturi/impingement scrubber water flow rate shall be continuously maintained within the range of 250 to 800 gallons per minute. Compliance with this operational restriction shall be based on daily average of the gallons per minute flow rate. The time period encompassing the startup and shutdown of the incinerator shall not be counted towards this daily average.

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

- (3) The permittee shall minimize emissions when the pressure exceeds safe levels and/or when critical equipment fails by stopping the biosolids feed to the incinerators when the cap on the emergency relief stack opens.

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

- (4) The permittee shall inspect the seal around each of the emergency relief stack caps on an annual basis.

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

- (5) The permittee shall comply with the applicable operational restrictions and requirements under 40 CFR Part 60, Subpart M MMM, including the following sections:

60.5130 through 60.5160	Operator training and qualification
60.5170; 60.5175; and 60.5180	Operating limits and requirements



60.5190	Establish operating limits
Table 4 to Subpart M of Part 60	Operating parameters

[Authority for Term: 40 CFR Part 60, Subpart M]

d) Monitoring and/or Recordkeeping Requirements

- (1) The CAM plan for these emissions units have been developed for particulate emissions. The CAM performance indicators for particulate emission are: the pressure drop across the venturi/impingement scrubber, the venturi/ impingement scrubber water flow rate, periods of time when the cap on the emergency relief stack is open and biosolids are being fed to the incinerator, and an annual inspection of the cap seal on each emergency relief stack.

The CAM performance indicator range as measured by the venturi/impingement scrubber pressure drop is specified in c)(1). When the pressure drop readings are outside of the indicator range specified in c)(1), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

The CAM performance indicator range as measure by the venturi/ impingement scrubber water flow rate is specified in c)(2). When the pressure drop readings are outside of the indicator range specified in c)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

The CAM performance indicator, periods of time when the cap on the emergency relief stack is open and biosolids are being fed to the incinerator, is specified in c)(3). In the event the pressure exceeds safe levels and/or when critical equipment fails, the permittee shall verify that the emergency relief stack cap is properly closed before restarting the biosolids feed to the incinerator.

The CAM performance indicator, annual inspection of the seal around the cap on each emergency relief stack is specified in c)(4). The permittee shall record the dates and observations made during the annual inspection of each of the emergency relief stack caps.

Upon detecting an excursion of any of the particulate emission indicator ranges listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) 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.



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]

- (2) The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the venturi/impingement scrubber and the venturi/impingement scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer’s recommendations, instructions and operating manuals.

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

- (3) The permittee shall collect and record the following information each day:
 - a. the average hourly pressure drop across the venturi/impingement scrubber, in inches of water;
 - b. the average hourly venturi/impingement scrubber water flow rate, in gallons per minute; and
 - c. the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emission unit was in operation.

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

- (4) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR Part 60, Subpart M, including the following sections:

60.5160	Site-specific documentation
60.5185	Demonstrate initial compliance with emission limits
60.5195	Initial air pollution control device inspection
60.5200	Site-specific monitoring plan
60.5205	Continuous compliance with emission limits
60.5210	Demonstrate continuous compliance with operating limits
60.5215	Annual air pollution control device inspections
60.5225	Monitoring and calibration requirements
60.5230	Required records

[Authority for Term: 40 CFR Part 60, Subpart M]



e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the ranges specified in c)(1) and c)(2):

- a. the pressure drop across the venturi/impingement scrubber; and
- b. the venturi/impingement scrubber water flow rate.

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

(2) The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Section A. Standard Terms and Conditions.

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

(3) The permittee shall submit an annual statement that, to the best of its knowledge, the sewage sludge processed in these emissions units 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.

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

(4) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

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

(5) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

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

(6) The permittee shall comply with the applicable reporting requirements under 40 CFR Part 60, Subpart M, including the following sections:

60.5085 through 60.5125	Increments of progress
60.5235	Required reports



Table 1 to Subpart M of Part 60	Increments of progress and compliance schedules
Table 6 to Subpart M of Part 60	Summary of reporting requirements

[Authority for Term: 40 CFR Part 60, Subpart M]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in 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 percent opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:
 Compliance with the above visible emission limitation shall be determined through visible emissions observations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

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

b. Emission Limitation:
 Particulate emissions shall not exceed 0.1 pound per 100 pounds of any material charged.

Applicable Compliance Method:
 Compliance with the above particulate emission limitation shall be determined by test methods performed in accordance with 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-01(B)(12).

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

c. Emission Limitation:
 Emission limitations from Table 3 of 40 CFR Part 60 Subpart M

Applicable Compliance Method:
 Compliance shall be determined in accordance with f)(2) below.

d. Emission Limitation:
 Mercury emissions shall not exceed 3200 grams per 24-hour period.



Applicable Compliance Method:

The permittee shall conduct, or have conducted, sludge analyses in accordance with the following requirements:

- i. the sludge analysis shall be conducted annually;
- ii. the sludge analysis shall be conducted to demonstrate compliance with the allowable mass emission rate for mercury of 3200 grams per 24-hour period.
- iii. the following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: 40 CFR, §61.54. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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

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

- (2) The permittee shall comply with the applicable testing requirements under 40 CFR Part 60, Subpart M, including the following sections:

60.5185	Demonstrate initial compliance with emission limits and standards
60.5205	Demonstrate continuous compliance with emission limits and standards
60.5220	Performance testing, monitoring, and calibration requirements

[Authority for Term: 40 CFR Part 60, Subpart M]

g) Miscellaneous Requirements

- (1) These emissions units were installed in June 1965.



5. Emissions Unit Group -Fluidized Bed Incinerators: N009, N010, N011

EU ID	Operations, Property and/or Equipment Description
N009	100 dry tons per day fluidized bed incinerator No. 1; equipped with Venturi and Impingement scrubbers
N010	100 dry tons per day fluidized bed incinerator No. 2; equipped with Venturi and Impingement scrubbers
N011	100 dry tons per day fluidized bed incinerator No. 3; equipped with Venturi and Impingement scrubbers

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) g)(1).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 13-04701 issued on 10/14/2008 and PTI Admin Mod P0117161 issued on 8/6/2014	Particulate/PM ₁₀ emissions shall not exceed 1.67 lbs/hour. Sulfur Dioxide (SO ₂) emissions shall not exceed 7.08 lbs/hour. Volatile Organic Compound (VOC) emissions shall not exceed 2.92 lbs/hour. Nitrogen Oxides (NO _x) emissions shall not exceed 15.63 lbs/hour. Carbon Monoxide (CO) emissions shall not exceed 7.08 lbs/hour. See b)(2)a., b)(2)d., b)(2)g., and c)(4). The requirements of this rule also include compliance with the requirements of 40 CFR Part 60 Subpart O, 40 CFR Part 61 Subpart E, OAC rule 3745-21-08(B) and OAC rule 3745-31-05(D), except for lead emissions.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-17-07 (A)(1)	The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitations established pursuant to 40 CFR Part 60 Subpart O.
c.	OAC rule 3745-17-09	The particulate emission limitation specified by this rule is less stringent than the particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See c)(1).
d.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)e.
e.	OAC rule 3745-31-05(D)	See b)(2)a., c)(2), and c)(4).
f.	OAC rule 3745-31-10(A)(1) "Future Projected Actual" emissions	See b)(2)f.
g.	40 Code of Federal Regulations (CFR) Part 60, Subpart O, New Source Performance Standards (NSPS)	Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average. The particulate emission limitation specified by this rule is less stringent than the particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
h.	40 CFR Part 60, Subpart M, Table 2 [In accordance with 40 CFR these emissions units are existing sewage sludge incineration units and are subject to the emission limitations/control measures specified in this section.]	See b)(2)i., c)(8), d)(14), e)(11), f)(1)n., f)(7), and f)(8) below. See B.4. above.
i.	40 CFR Part 61 Subpart E, (NESHAP)	Mercury (HG) emissions from the sewage sludge incinerator plant shall not exceed 7.1 lbs of mercury per 24-hour period.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
j.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See c)(4), c)(5), d)(2), d)(8), and d)(15) below. The CAM requirements shall apply until the permittee achieves full compliance with 40 CFR Part 60, Subpart M.

(2) Additional Terms and Conditions

- a. The total, combined mass emissions from emissions units N009, N010 and N011, as a 12-month rolling summation, shall not exceed the following:

PE 16.88 tons/year;

PM₁₀ 16.88 tons/year;

PM_{2.5} 13.37 tons/year;

SO₂ 70.16 tons/year;

VOC 29.16 tons/year;

NO_x 159.69 tons/year;

CO 74.33 tons/year;

Lead 0.41 ton/year; and

Mercury 1.29 tons/year.

The permittee has proposed these federally enforceable emission limitations based on the total combined dry sludge feed rate and natural gas combustion amount to ensure that future projected actual emissions will not cause an increase above the major modification thresholds. See c)(2) below.

- b. 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.
- c. 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.



- d. 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.
- e. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE/PM₁₀, PM_{2.5} and lead emissions from this air contaminant source since the calculated annual emission rate for these pollutants are each less than 10 tons per year taking into account the following federally enforceable limitation and voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee:
 - i. venturi and impingement tray scrubbers.

However, the permittee has voluntarily accepted a BAT limit for PE/PM₁₀ and PM_{2.5} for the purpose of avoiding PSD, NNSR, and satisfying Ohio EPA's minor source air dispersion modeling requirement.

- f. The permittee has proposed that the amount of emissions increase, which is the difference between the future projected actual emissions and current actual emissions, as a result of this project will be less than 40 tons NO_x/year, less than 40 tons SO₂/year and less than 15 tons PM₁₀/year. In accordance with OAC rule 3745-31-10(A)(3), the permittee will have to maintain records for a period of 5 years after achieving normal operations of the fluidized bed incinerators (N009-N011) that demonstrate that the amount of actual emissions increase stays below the major modification thresholds.
- g. 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.

- h. This emissions unit is not subject to the beryllium NESHAP (40 CFR Part 61, Subpart C) because the sewage sludge processed in this emissions unit does not contain any "beryllium containing waste". As defined in 40 CFR 61.31(g), "beryllium containing waste" means material contaminated with beryllium and/or beryllium compounds used or generated during any process or operation performed by a source subject to this subpart (40 CFR Part 61, Subpart C). See e)(12).
- i. The permittee shall comply with the applicable emission limits and standards required under 40 CFR Part 60, Subpart MMMM including the following sections:



60.5035	Final compliance date: March 21, 2016
60.5165; and 61.5180 through 60.5181	Emission limits, and emission standards requirements
Table 2 to Subpart MMMM of Part 60	Emission limits and standards

c) Operational Restrictions

- (1) The incinerator, 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 3745-17-09 and PTI P0117161]

- (2) The total combined emissions from N009, N010, and N011 shall not exceed the following limitations, based upon a rolling, 12-month summation:

$$[(\text{Amount dry sludge feed tons/yr}) \times (0.40 \text{ lb PE/dry ton}) + (\text{Amount NG MMCF/yr}) \times (7.6 \text{ lbs PE/MMCF})] \times \text{ton}/2000 \text{ lbs} \leq 16.88 \text{ tons PE/yr}$$

$$[(\text{Amount dry sludge feed tons/yr}) \times (0.40 \text{ lb PM}_{10}/\text{dry ton}) + (\text{Amount NG MMCF/yr}) \times (7.6 \text{ lbs PM}_{10}/\text{MMCF})] \times \text{ton}/2000 \text{ lbs} \leq 16.88 \text{ tons PM}_{10}/\text{yr}$$

$$[(\text{Amount dry sludge feed tons/yr}) \times (0.32 \text{ lb PM}_{2.5}/\text{dry ton}) + (\text{Amount NG MMCF/yr}) \times (6.2 \text{ lbs PM}_{2.5}/\text{MMCF})] \times \text{ton}/2000 \text{ lbs} \leq 13.37 \text{ tons PM}_{2.5}/\text{yr}$$

$$[(\text{Amount dry sludge feed tons/yr}) \times (1.7 \text{ lbs SO}_2/\text{dry ton}) + (\text{Amount NG MMCF/yr}) \times (0.60 \text{ lb SO}_2/\text{MMCF})] \times \text{ton}/2000 \text{ lbs} \leq 70.16 \text{ tons SO}_2/\text{yr}$$

$$[(\text{Amount dry sludge feed tons/yr}) \times (0.70 \text{ lb VOC/dry ton}) + (\text{Amount NG MMCF/yr}) \times (5.5 \text{ lbs VOC/MMCF})] \times \text{ton}/2000 \text{ lbs} \leq 29.16 \text{ tons VOC/yr}$$

$$[(\text{Amount dry sludge feed tons/yr}) \times (3.75 \text{ lbs NO}_x/\text{dry ton}) + (\text{Amount NG MMCF/yr}) \times (100 \text{ lbs NO}_x/\text{MMCF})] \times \text{ton}/2000 \text{ lbs} \leq 159.69 \text{ tons NO}_x/\text{yr}$$

$$[(\text{Amount dry sludge feed tons/yr}) \times (1.7 \text{ lbs CO/dry ton}) + (\text{Amount NG MMCF/yr}) \times (84 \text{ lbs CO/MMCF})] \times \text{ton}/2000 \text{ lbs} \leq 74.33 \text{ tons CO/yr}$$

$$[(\text{Amount dry sludge feed tons/yr}) \times (0.01 \text{ lb lead/dry ton}) + (\text{Amount NG MMCF/yr}) \times (0 \text{ lbs lead/MMCF})] \times \text{ton}/2000 \text{ lbs} \leq 0.41 \text{ ton lead/yr}$$

$$[(\text{Amount dry sludge feed tons/yr}) \times (0.022 \text{ lb mercury/dry ton}) + (\text{Amount NG MMCF/yr}) \times (0 \text{ lbs mercury/MMCF})] \times \text{ton}/2000 \text{ lbs} \leq 1.29 \text{ tons mercury/yr}$$

Where,



NG = natural gas

MMCF = million cubic feet

After stack testing is completed in accordance with f) below, emission factors derived from the average of the 3 test runs completed during the most recent stack test that demonstrated compliance shall be used in place of the emission factors noted above.

[Authority for term: OAC rule 3745-31-05(D) and PTI P0117161]

- (3) The permittee shall only use natural gas as the supplemental fuel for N009, N010 and N011.

[Authority for term: OAC rule 3745-31-05(D) and PTI P0117161]

- (4) The emissions from this emissions unit shall be vented to the Venturi and Impingement wet scrubbers at all times the emissions unit is in operation.

[Authority for term: OAC rule 3745-31-05(A)(3) and PTI P0117161 and 40 CFR Part 64]

- (5) The permittee shall operate this 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 rule 3745-31-05(A)(3) and PTI P0117161 and 40 CFR Part 64]

- (6) No changes in the operation shall be made, which would potentially increase mercury emissions above that determined by the most recent source test, until a new emission level has been estimated by calculation and the results reported to the Administrator.

[Authority for term: 40 CFR 61.53 and PTI P0117161]

- (7) Municipal solid waste shall not be fired in this emissions unit.

[Authority for term: OAC rule 3745-31-05 and PTI P0117161]

- (8) The permittee shall comply with the applicable operational restrictions and requirements under 40 CFR Part 60, Subpart M, including the following sections:

60.5130 through 60.5160	Operator training and qualification
60.5170; 60.5175; and 60.5180	Operating limitations
60.5190	Establish operating limits
Table 4 to Subpart M of Part 60	Operating parameters



[Authority for Term: 40 CFR Part 60, Subpart M]]

d) Monitoring and/or Recordkeeping Requirements

- (1) In accordance with OAC rule 3745-31-10(A)(3), the permittee shall maintain annual records for five (5) years after achieving normal operations of N009-N011 of the following:
 - a. the amount of sludge, in dry tons, incinerated;
 - b. the amount of natural gas, in million cubic feet (MMCF) consumed; and
 - c. the total annual NO_x, SO₂ and PM₁₀ emissions for this emissions unit, calculated by multiplying the emissions factor for each pollutant determined from the most recent stack test by the annual amount of dry sludge incinerated.

[Authority for term: OAC rule 3745-31-10(A)(3) and PTI P0117161]

- (2) 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 this 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 this emissions unit is in operation;
- c. records of monitoring equipment calibration checks; and
- d. records of a pressure drop reduction of more than 30 percent from the average pressure drop recorded during the most recent stack test which demonstrated the emissions unit to be in compliance shall be maintained.

Personnel will read the pressure drop at least twice per shift when biosolids are being combusted in an incinerator. If the pressure drop during a reading is outside of the designated range, personnel may continue to observe the pressure gauge to determine if this reading is a spike that will correct itself without further actions. If the reading remains outside the designated range after one hour, personnel will perform corrective maintenance on problems identified during the inspection until the pressure returns to the designated range. All such corrective actions will be recorded and made available to the Cleveland DAQ upon request.

[Authority for term: 40 CFR 60.153, 40 CFR 60.155, 40 CFR 60.7, 40, CFR Part 64, and PTI P0117161]



- (3) 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 this emissions unit is in operation. The oxygen monitor located upstream of any 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 this 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.

[Authority for term: 40 CFR 60.153, 40 CFR 60.155 40 CFR 60.7, and PTI P0117161]

- (4) Prior to the installation of the continuous carbon monoxide (CO) monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a, as appropriate. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specification 4 or 4a. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the director and/or the Cleveland Division of Air Quality (Cleveland DAQ) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditions hardware, analyzers, and data processing hardware and software.

[Authority for term: OAC rule 3745-31-05(A)(3), 40 CFR Part 60, Appendix B., and PTI P0117161]

- (5) The permittee shall calibrate, maintain and operate equipment to continuously monitor and record CO emissions in the exit gas from this 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 rule 3745-31-05(A)(3), 40 CFR Part 60 and PTI P0117161]

- (6) 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.

[Authority for term: 40 CFR 60.153 and PTI P0117161]

- (7) 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 3745-31-05(A)(3) and PTI P0117161]

- (8) 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 the 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.



Personnel will check the temperature at least twice per shift when biosolids are being combusted in an incinerator. If the temperature during a reading is outside of the designated range, personnel shall adjust the temperature as necessary to return the temperature to the designated range. All such corrective actions will be recorded and made available to the Cleveland DAQ upon request.

[Authority for term: 40 CFR 60.153 and PTI P0117161 and 40 CFR Part 64]

- (9) The frequency of monitoring for arsenic, cadmium, chromium, lead, and nickel in sewage sludge fed to the 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 arsenic, cadmium, chromium, lead, and nickel.

[Authority for term: ORC 3704.03(F)(4), OAC rule 3745-114 and PTI P0117161]

- (10) The permittee shall develop the following information and retain that information for a period of five years:
- a. the concentration of lead, arsenic, cadmium, chromium and nickel in the sewage sludge fed to the sewage sludge incinerator;
 - b. information that indicates the requirements in the National Emission Standard for beryllium in Subpart C of 40 CFR Part 61 are met;
 - c. information that indicates the requirements in the National Emission Standard for mercury in Subpart E of 40 CFR Part 61 are met;
 - d. the daily mean operating combustion temperatures for the sewage sludge incinerator;
 - e. values for the air pollution control device operating parameters;
 - f. the oxygen concentration and information used to measure moisture content in the exit gas from the sewage sludge incinerator stack;
 - g. the sewage sludge feed rate;
 - h. the stack height for the sewage sludge incinerator;
 - i. the dispersion factor for the site where the sewage sludge incinerator is located;
 - j. the control efficiency for arsenic, cadmium, chromium, lead, and nickel for each sewage sludge incinerator; and
 - k. the risk specific concentration for chromium calculated using the equation for 40 CFR Part 503.43(d), if applicable.

[Authority for term: ORC 3704.03(F)(4), OAC rule 3745-114, OAC rule 3745-31-05(A)(3) and PTI P0117161]



- (11) If the mercury emissions exceed 3.5 lbs per 24-hour period for this facility, the permittee 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)(2) and (4). 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: 40 CFR Part 61.55(a) and PTI P0117161]

- (12) 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: 40 CFR 60.153(a)(2) and PTI P0117161]

- (13) The permittee shall collect and record the following information on a monthly basis for emissions units N009, N010, and N011 combined:

- a. the amount of dry sludge processed, in tons;
- b. the amount of natural gas consumption, in million cubic feet (MMCF); and
- c. the rolling 12-month summation of emissions for PE, PM₁₀, PM_{2.5}, SO₂, VOC, NO_x, CO, lead and mercury, in tons/yr, determined in accordance with c)(2) above.

Also, during the first 12 calendar months of operation, the permittee shall record the cumulative NO_x emission rate for each calendar month for N009, N010, and N011 combined.

[Authority for term: OAC rule 3745-31-05(D) and PTI P0117161]

- (14) The permittee shall comply with the applicable monitoring and record keeping requirements under 40 CFR Part 60, Subpart M, including the following sections:

60.5160	Site-specific documentation
60.5185	Demonstrate initial compliance with emission limits
60.5195	Initial air pollution control device inspection
60.5200	Site-specific monitoring plan
60.5205	Continuous compliance with emission limits
60.5210	Demonstrate continuous compliance with operating limits
60.5215	Annual air pollution control device inspections
60.5225	Monitoring and calibration requirements
60.5230	Required records

[Authority for Term: 40 CFR Part 60, Subpart M]



- (15) The CAM plan for these emissions units have been developed for particulate emissions. The CAM performance indicators for particulate emission are: the pressure drop across the venturi/impingement scrubber, and temperature monitoring of the incinerator bed.

The CAM performance indicator range as measured by the venturi/impingement scrubber pressure drop is specified in d)(2). When the pressure drop readings are outside of the indicator range specified in d)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

The CAM performance indicator range as measured by the temperature of the incinerator bed is specified in d)(8). When the temperature readings are outside of the indicator range specified in d)(8), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

Upon detecting an excursion of any of the particulate emission indicator ranges listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) 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.

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]

e) Reporting Requirements

- (1) This facility shall submit semi-annual deviation reports to the Cleveland Division of Air Quality (Cleveland DAQ) which provide records of the operating conditions of the fluidized bed incinerator for each calendar day when:
- a. for each period of 15 minute duration or more, the total pressure drop across the scrubber system is less than 30 percent of the average scrubber pressure drop measured during the most recent performance test; and
 - 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.



These semi-annual reports shall be submitted by January 30 and July 31 of each year and shall cover the previous six calendar months (January through June and July through December, respectively).

[Authority for term: 40 CFR 60.155(a) and PTI P0117161]

- (2) The permittee shall comply with the following quarterly reporting requirements for the 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 Cleveland DAQ, 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 31, April 30, July 31 and October 31 of each year and shall include the following:
 - i. the facility name and address;
 - ii. the manufacturer and model number of the continuous CO and other associated monitors;
 - iii. the location of the continuous CO monitor;
 - iv. the exceedance report as detailed in (a) above;
 - v. the total CO emissions for the calendar quarter (tons);
 - vi. the total operating time (hours) of the emissions unit;
 - vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;
 - viii. the monthly average carbon monoxide concentration in the exit gas;
 - ix. results and dates of quarterly cylinder gas audits;
 - x. results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
 - xi. the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;



- xii. 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
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xii) and (xiii).

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 3745-31-05(A)(3), 40 CFR 60.7 and PTI P0117161]

- (3) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify all exceedances of the rolling 12-month emission limitations for PE, PM₁₀, SO₂, NO_x, VOC, CO, Lead, and Mercury for emissions units N009, N010 and N011, combined, as specified in b)(2)a. The deviation reports shall be submitted within 30 days after the deviations occurs.

[Authority for term: OAC rule 3745-31-05(D) and PTI P0117161]

- (4) The permittee shall submit an annual report to the Cleveland DAQ that provides the information required in d)(10) by February 19 of each year.

[Authority for term: OAC rule 3745-31-05(A)(3) and PTI P0117161]

- (5) Deviation (excursion) reports shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-31-05 and PTI P0117161]

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

Department of Public Health

Division of Air Quality

75 Erievue Plaza, 2nd Fl.

Cleveland, Ohio 44114-1839



[Authority for term: 40 CFR Parts 60 and 61 and PTI P0117161]

- (7) If the average particulate matter emission rate exceeds 0.75 lb 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: 40 CFR 60.155 and PTI P0117161]

- (8) In accordance with OAC rule 3745-31-10(A)(5), the permittee shall submit a deviation report to the Cleveland DAQ if the actual annual emissions, in tons/year, exceed the baseline actual emissions by a significant amount for NO_x, SO₂ or PM₁₀ as noted in b)(2)g. above and if such emissions differ from the preconstruction projection as documented and maintained pursuant to OAC rule 3745-31-10(A)(1)(c). Such report shall be submitted within 60 days after the end of such year. This condition will remain in effect for five years after achieving normal operations for emission units N009-N011.

[Authority for term: OAC rule 3745-31-10(A)(5) and PTI P0117161]

- (9) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rule 3745-31-05 and is based on term c)(3) and PTI P0117161]

- (10) The permittee shall submit an annual statement that, to the best of its knowledge, the sewage sludge processed in this 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.

[Authority for term: 40 CFR Part 61 Subpart C and PTI P0117161]

- (11) The permittee shall comply with the applicable reporting requirements under 40 CFR Part 60, Subpart M, including the following sections:

60.5085 through 60.5125	Increments of progress
60.5235	Required reports
Table 1 to Subpart M of Part 60	Increments of progress and compliance schedules
Table 6 to Subpart M of Part 60	Summary of reporting requirements

[Authority for Term: 40 CFR Part 60, Subpart M]



f) Testing Requirements

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

a. Emission Limitation:

Visible emissions from any stack servicing this emissions unit shall not exceed 20 percent opacity, as a six-minute average.

Applicable Compliance Method(s):

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using methods and procedures specified in U.S. EPA Method 9.

b. Emission Limitation:

1.67 lbs/hr of particulate/PM₁₀ emissions

Applicable Compliance Method(s):

If required by Ohio EPA or Cleveland DAQ, compliance shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, 5, 201 and 202. The results of the emissions test shall be reported in terms of pounds per hour.

c. Emission Limitation:

16.88 tons/year of particulate/PM₁₀ emissions from emissions units N009, N010 and N011 combined.

Applicable Compliance Method(s):

Compliance with the annual emission limit shall be determined by multiplying the emission factor derived from the average of the 3 test runs completed during most recent stack test that demonstrated compliance in terms of lbs PE/ton dry sludge times the actual amount of tons dry sludge/year incinerated and divided by 2000 lbs/ton. If natural gas is not consumed during the stack test but is used during other times of the year, then the contribution of emissions generated due to natural gas combustion shall be determined in accordance with c)(2) above.

d. Emission Limitation:

13.37 tons/year of PM_{2.5} emissions from emissions units N009, N010 and N011 combined.

Applicable Compliance Method(s):

Compliance with the annual emission limit shall be determined by multiplying the emission factor obtained in c. above by 81%, times the actual amount of tons dry sludge/year incinerated and divided by 2000 lbs/ton. The emissions factors for PM_{2.5} emissions from fluidized bed incinerators as listed in Section 2.2, Table 2.2-11 of AP-42, are 81% of the PM₁₀ emissions factors. Therefore, the emissions factors determined for particulate/PM₁₀ emissions derived from the most recent stack test shall be multiplied by 81% in order to calculate an



emissions factor for PM_{2.5} emissions. If natural gas is not consumed during the stack test but is used during other times of the year, then the contribution of emissions generated due to natural gas combustion shall be determined in accordance with c)(2) above.

- e. Emission Limitation:
7.08 lbs/hr of SO₂ emissions

Applicable Compliance Method(s):

If required by Ohio EPA or Cleveland DAQ, compliance shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 6. The results of the emissions test shall be reported in terms of pounds per hour.

- f. Emission Limitation:
70.16 tons/year of SO₂ emissions from emissions units N009, N010 and N011 combined.

Applicable Compliance Method(s):

Compliance with the annual emission limit shall be determined by multiplying the emission factor derived from the average of the 3 test runs completed during most recent stack test that demonstrated compliance in terms of lbs SO₂/ton dry sludge times the actual amount of tons dry sludge/year incinerated and divided by 2000 lbs/ton. If natural gas is not consumed during the stack test but is used during other times of the year, then the contribution of emissions generated due to natural gas combustion shall be determined in accordance with c)(2) above.

- g. Emission Limitation:
2.92 lbs/hour VOC emissions

Applicable Compliance Method(s):

If required by Ohio EPA or Cleveland DAQ, compliance shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 25 or 25a. The results of the emissions test shall be reported in terms of pounds per hour.

- h. Emission Limitation:
29.16 tons/year of VOC emissions from emissions units N009, N010 and N011 combined.

Applicable Compliance Method(s):

Compliance with the annual emission limit shall be determined by multiplying the emission factor derived from the average of the 3 test runs completed during most recent stack test demonstrating compliance in terms of lbs VOC/ton of dry sludge times the actual amount of tons dry sludge/year incinerated and divided by 2000 lbs/ton. If natural gas is not consumed during the stack test but is used during other times of the year, then the contribution of emissions generated due to natural gas combustion shall be determined in accordance with c)(2) above.



- i. Emission Limitation:
15.63 lbs/hr of NO_x emissions

Applicable Compliance Method(s):

If required by Ohio EPA or Cleveland DAQ, compliance shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 7. The results of the emissions test shall be reported in terms of pounds per hour.

- j. Emission Limitation:
159.69 tons/year of NO_x emissions from emissions units N009, N010 and N011 combined.

Applicable Compliance Method(s):

Compliance with the annual emission limit shall be determined by multiplying the emission factor derived from the most recent stack test demonstrating compliance in terms of lbs NO_x/ton dry sludge times the actual amount of tons dry sludge/year incinerated and divided by 2000 lbs/ton. If natural gas is not consumed during the stack test but is used during other times of the year, then the contribution of emissions generated due to natural gas combustion shall be determined in accordance with c)(2) above.

- k. Emission Limitation:
7.08 lbs/hr of CO emissions

Applicable Compliance Method(s):

Compliance with the CO emission limitation shall be determined through monitoring and record keeping specified in d)(5).

If required by Ohio EPA or Cleveland DAQ, compliance shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 10. The results of the emissions test shall be reported in terms of pounds per hour.

- l. Emission Limitation:
74.33 tons/year of CO emissions from units N009, N010 and N011 combined.

Applicable Compliance Method(s):

Compliance with the CO emission limitation shall be determined through monitoring and record keeping specified in d)(5). The permittee shall use the CO monitoring data, averaged over a 12-month operating period to develop an emission factor in lbs CO/ton. Multiply the emission factor by the actual amount of dry sludge, in tons/year and divide by 2000. If natural gas is not consumed during the stack test but is used during other times of the year, then the contribution of emissions generated due to natural gas combustion shall be determined in accordance with c)(2) above.



- m. Emission Limitation:
Lead emissions from emissions units N009, N010 and N011 combined shall not exceed 0.41 TPY of lead emissions.

Applicable Compliance Method(s):

The emission limit of 0.41 TPY of lead emissions specified in b)(2)a. was based on an emission estimation proposed by the facility based on historic information. It was derived from multiplying 0.01 lb lead/dry ton times the allowable tons dry sludge per year incinerated and divided by 2000. The permittee shall use the most recent sampling data, per d)(9), to establish the emission factor in lb lead/dry ton. Multiply the new emission factor by the actual amount of dry sludge in tons/year and divide by 2000.

- n. Emission Limitation:
Emission limitations from Table 2 of 40 CFR Part 60 Subpart M

Applicable Compliance Method:

Compliance shall be determined in accordance with f)(8) below.

- o. Emission Limitation:
Mercury emissions from emissions units N009, N010 and N011 combined shall not exceed 7.1 lbs/day and 1.29 TPY.

Applicable Compliance Method(s):

Compliance shall be demonstrated by the emissions testing or sludge sampling as described below.

The ton/year limitation can be calculated by multiplying the emission factor derived from the most recent stack or sludge test that demonstrated compliance in terms of lbs Mercury/ton dry sludge times the actual tons dry sludge/year incinerated and divided by 2000 lbs/ton.

[Authority for term: OAC rule 3745-31-05 and 40 CFR Parts 60 and 61 and PTI P0117161]

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

[Authority for term: 40 CFR 60.8 and PTI P0117161]

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

[Authority for term: 40 CFR 60 and PTI P0117161]

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

[Authority for term: 40 CFR 60 and PTI P0117161]



- (5) The permittee shall conduct, or have conducted, emissions testing for emissions units N009, N010 and N011 for mercury to comply with 40 CFR 61, Subpart E by either performing an emissions test or by performing sludge sampling:

- a. An emissions test using Method 101A in Appendix B;

The emissions test shall be performed annually.

The Cleveland DAQ shall be notified at least 30 days prior to an emissions test.

Samples shall be taken over such a period or periods as are necessary to determine accurately the maximum emissions which will occur in a 24-hour period.

Samples shall be analyzed and emissions determined within 30 days after the emissions unit performance stack test. All determinations shall be reported to the Cleveland DAQ by a registered letter dispatched before the close of business day following such determination. Records of emissions test results and other data needed to determine total emissions shall be retained at the source and shall be made available for inspection for a minimum of five years.

or;

- b. A sludge sampling test using Method 105 of Appendix B and paragraph 61.54 of 40 CFR 61.

The sludge sampling shall be performed annually.

Cleveland DAQ shall be notified at least 30 days prior to the sludge test.

Sludge shall be sampled, the sludge charging rate shall be determined and the sludge analysis shall be performed according to 40 CFR 61.54(c).

Mercury emissions shall be determined according to 40 CFR 61.54(d).

All sludge samples shall be analyzed for mercury content within 30 days after the sludge sample is collected.

Records of sludge sampling, sludge charging rate and other data needed to determine mercury content of the wastewater treatment plant sludge shall be retained at the source and shall be made available for inspection of a minimum of five years.

Emission testing was conducted on 9/3/2014 for N010, 9/23/2014 for N009, and 10/7/2014 for N011.

[Authority for term: 40 CFR 61.54 a-g and PTI P0117161]

- (6) 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.

Certification tests were conducted on 4/23/2014 for N010, 4/24/2014 for N011, and 5/15/2014 for N009.

[Authority for term: OAC rule 3745-31-05(A)(3) and PTI P0117161]

- (7) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted in accordance with 40 CFR Part 60 Subpart M. See f)(8) below.
 - b. The emission testing shall be conducted to demonstrate compliance with the pollutants identified in Table 2 of Subpart M and visible opacity emission limitations.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

See Table 2 of Subpart M; and

Visible emissions: Method 9 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 while the emissions unit is operating at a minimum of 85 percent of the maximum permitted capacity in accordance with 40 CFR Part 60, Subpart M, unless otherwise specified or approved by the Cleveland DAQ.
 - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Cleveland DAQ's refusal to accept the results of the emission test(s).
 - f. Personnel from the Cleveland DAQ 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.



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

Emission testing was conducted on 9/3/2014 for N010, 9/23/2014 for N009, and 10/7/2014 for N011.

[Authority for term: OAC rule 3745-31-05 and PTI P0117161]

- (8) The permittee shall comply with the applicable testing requirements under 40 CFR Part 60, Subpart M, including the following sections:

60.5185	Demonstrate initial compliance with emission limits and standards
60.5205	Demonstrate continuous compliance with emission limits and standards
60.5220	Performance testing, monitoring, and calibration requirements

[Authority for Term: 40 CFR Part 60, Subpart M]

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with, the Toxic Air Contaminant Statute, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

[Authority for term: ORC 3704.03(F)(3)(c) and (F)(4), OAC 3745-114 and PTI P0117161]