



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

12/18/02

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

14-31-07-0944
Mill Creek WWTP
Leroy Boone
1600 Gest Street
Cincinnati, OH 45204-2096

Dear Leroy Boone:

Enclosed is the 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.

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 Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final 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. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street
Room 300
Columbus, Ohio 43215

If you have any questions, please contact Hamilton County Dept. of Environmental Services.

Very truly yours,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: Hamilton County Dept. of Environmental Services
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: 12/18/02	Effective Date: 01/08/02	Expiration Date: 12/18/07
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This document constitutes issuance of a Title V permit for Facility ID: 14-31-07-0944 to:

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

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

B021 (1431070944) Boiler #21	N002 (1431070944) Incinerator #2	N006 (1431070944) Incinerator #5
B022 (1431070944) Boiler #22	N003 (1431070944) Incinerator #3	N007 (1431070944) Incinerator #6
N001 (1431070944) Incinerator #1	N004 (1431070944) Incinerator #4	

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. 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. 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, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Hamilton County Dept. of Environmental Services
250 William Howard Taft Rd
Cincinnati, OH 45219-2660
(513) 946-7777

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. *State and Federally Enforceable Section*

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

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. 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:
 - i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))
 - ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**
 - (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. 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. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six

months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i), (ii) and (iii))

- (b) 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 deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement 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. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(iii))

iii. **For monitoring, record keeping, and reporting requirements:**

Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. 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. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no deviations occurred during that period.

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

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

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions unit(s) or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06, 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).
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.
(Authority for term: OAC rule 3745-77-07(A)(4))

4. 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))

5. 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))

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and 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.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 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.

(Authority for term: OAC rule 3745-77-07(A)(7))

7. 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))

8. 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))

9. 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 general terms and conditions shall apply to all operating scenarios authorized in this permit.

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

10. 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))

11. 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))

12. 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:
 - i. 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.
 - ii. 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.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. 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 appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. 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 appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
 - i. 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.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. 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))

13. 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))

14. 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 appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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

15. 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))

16. 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 emission 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.

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)

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

17. 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 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

18. Insignificant Activities

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

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

19. 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))

20. 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))

B. State Only Enforceable Section

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

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 appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee

shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., 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.)

2. Records Retention Requirements

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.

3. 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.

4. Scheduled Maintenance/Malfunction Reporting

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

5. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

1. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.
2. If this Non-Industrial POTW Treatment Plant is reconstructed, then the requirements for a new or reconstructed POTW Treatment Plant, as defined in 40 CFR 63.1595 (Subpart VVV - National Emission Standards for Hazardous Air Pollutants: Publicly Owned Treatment Works) shall apply.

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

B012 - three 9.25 MMBtu/hr gas/oil-fired boilers;
B017 - 8 MMBtu/hr oil-fired boiler;
B023 - boiler, thickener building;
B024 - boiler, RAS building;
B025 - 5.23 MMBtu/hr oil-fired boiler;
B027 - 5.7 MMBtu/hr natural gas-fired boiler;
B028 - 5.7 MMBtu/hr natural gas-fired boiler;
P004 - diesel-fired emergency generator;
T001 - 6,500-gallon polymer tank;
T002 - 6,500-gallon polymer tank;
T004 - 5,000-gallon fuel oil tank;
T006 - 158,600-gallon #2 fuel oil storage tank;
T012 - 2,500-gallon waste oil storage tank;
T013 - 22,000-gallon polymer storage tank;
T014 - 22,000-gallon polymer storage tank;
T015 - 14,000-gallon polymer storage tank;
T016 - 25,000-gallon polymer storage tank;
T017 - cationic polyacrylamide storage tank;
T018 - 12,000-gallon ferric chloride storage tank; and
T019 - 12,000-gallon ferric chloride storage tank.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 1431070944 (B021)

Activity Description: Boiler #21

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
25.1 MMBtu/hr natural gas/digester gas/number two fuel oil-fired boiler	OAC rule 3745-31-05(A)(3) (PTI 14-710)	See terms A.I.2.a, A.I.2.b, and A.II below.
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-10(B)(1). Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as specified by rule.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed .020 lb/MMBtu of actual heat input.
	OAC rule 3745-18-06(D)	The emission limitation specified in OAC rule 3745-18-06(D) is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-18-06(A)	exempt pursuant to OAC rule 3745-18-06(A) when burning only natural gas (See term A.I.2.d below.)
	OAC rules 3745-21-08(B) and 3745-23-06(B)	None, see term A.I.2.c below.

2. Additional Terms and Conditions

- 2.a The SO₂ emissions from this emissions unit shall not exceed 0.25 lb/MMBtu of actual heat input (based on a monthly average).
- 2.b The total combined SO₂ emissions from emissions units B021 and B022 shall not exceed 39 TPY based on a rolling, twelve-month summation.

2. Additional Terms and Conditions (continued)

- 2.c** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 14-710.
- 2.d** 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).

II. Operational Restrictions

1. The permittee shall burn only natural gas, digester gas, and/or number two fuel oil in this emissions unit.
2. The quality of the oil burned in this emissions unit shall have a combination of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.25 lb SO₂/MMBtu actual heat input (based on a monthly average).

Compliance with the above-mentioned specifications shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of oil during the calendar month.

3. All digester gas used in this emissions unit shall come from sludge that was treated with metal salts prior to entering the digester. The metal salts employed shall result in the reduction of sulfur equivalent to at least 850 pounds per day of ferrous chloride. The daily average hydrogen sulfide content of the digester gas shall not exceed 870 parts per million (ppm) as fired.

Alternate sulfur removal technology which achieves a sulfur dioxide emission reduction equivalent to the metal salts treatment may be employed with the approval of the the Director (the appropriate Ohio EPA District Office or local air agency).

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, digester gas, and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect a weekly grab sample of the digester gas sent to emissions units B021 and B022 to be burned. The samples shall be analyzed in accordance with the appropriate ASTM methods to determine the heat content in Btu per standard cubic foot and the density in lbs/standard cubic foot.
3. The permittee shall operate and maintain existing equipment to continuously monitor and record the hydrogen sulfide concentration of the digester gas combusted in this emissions unit in ppm. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.13.

The permittee shall maintain records of all data obtained by the continuous hydrogen sulfide monitoring system including, but not limited to, ppm hydrogen sulfide on an instantaneous (one-minute) basis, the daily average hydrogen sulfide concentration, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments. The daily average hydrogen sulfide concentration shall be used to determine the decimal fraction of sulfur for purposes of determining compliance with the sulfur dioxide emission limitation.

III. Monitoring and/or Record Keeping Requirements (continued)

4. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with ASTM method D4294 for sulfur content and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Director (the appropriate Ohio EPA District Office or local air agency).
5. The permittee shall collect and record the following information on a monthly basis:
 - a. the total quantity, in cubic feet, of natural gas burned*;
 - b. the total quantity, in cubic feet, of digester gas burned;
 - c. the average decimal fraction of sulfur in the digester gas;
 - d. the average heat content of the digester gas, in Btu per standard cubic foot;
 - e. the average density, in lbs per standard cubic foot, of digester gas;
 - f. the total amount of number two fuel oil received, in gallons, for each shipment;
 - g. the average heat content, in Btu per gallon of number two fuel oil, of each shipment;
 - h. the average decimal fraction of sulfur in each shipment of number two fuel oil;
 - i. the calculated sulfur dioxide emission rate, in lbs SO₂/MMBtu of actual heat input, for each shipment of oil [this calculation shall be based on equations specified in OAC rule 3745-18-04(F)];
 - j. the average sulfur dioxide emission rate, in lbs SO₂/MMBtu of actual heat input, for the oil burned (based upon the average of the calculated sulfur dioxide emission rates for all the oil shipments received during the month; or if no shipments were received during the calendar month, the average of the calculated sulfur dioxide emission rates during the most recent calendar month during which oil shipments were received);
 - k. the monthly SO₂ emission rate, in tons per month, for this emissions unit [this calculation shall be based on equations specified in OAC rule 3745-18-04(F)]; and
 - l. the total combined SO₂ emissions from emissions units B021 and B022, in TPY, based on a rolling, twelve-month summation.

*Per OAC rule 3745-18-04(F)(4), the SO₂ emitted from the combustion of natural gas is negligible.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas, digester gas, and/or number two fuel oil was burned in this emissions unit.
2. The permittee shall submit quarterly deviation (excursion) reports that indicate each exceedance of the following limitations:
 - a. the daily average hydrogen sulfide concentration of 870 ppm for digester gas;
 - b. the SO₂ emission limitation of 0.25 lb/MMBtu of actual heat input; and
 - c. the SO₂ emission limitation of 39 TPY based on a rolling, twelve-month summation.

These reports shall specify the actual concentrations and/or emissions, the duration of each exceedance, and any corrective actions taken.

3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

V. Testing Requirements

1. If required, compliance with the visible emission limitation in Section A.I.1 of these terms and conditions 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).

V. Testing Requirements (continued)

2. Compliance with the particulate emission limitation in Section A.I.1 of these terms and conditions shall be determined as follows:

When firing digester gas or natural gas, 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 particulates/MMcu.ft) by the conversion factor (1020 MMBtu/MMcu.ft).

When firing number two fuel oil, compliance may be demonstrated by dividing the AP-42, Table 1.3-1 (7/98) emission factor for fuel oil combustion (2.0 lbs of particulates/1000 gal) by the conversion factor (140 MMBtu/1000 gal).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 5 while firing number two fuel oil.

3. Compliance with the SO₂ emission limitations specified in Section A.I.2 of these terms and conditions shall be determined by the monitoring, record keeping, and reporting requirements of these terms and conditions, or by emission testing using Method 6 or 6C of 40 CFR, Part 60, Appendix A.
4. Compliance with the hydrogen sulfide concentration limitation specified in Section A.II.3 of these terms and conditions shall be determined by the monitoring, record keeping, and reporting requirements of these terms and conditions.

VI. Miscellaneous Requirements

1. If probable cause exists indicating this emissions unit is causing or contributing to a nuisance in violation of Ohio Administrative Code rule 3475-15-07, the owner or operator of this emissions unit shall be required to submit and implement a control program which will bring this emissions unit into compliance.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 1431070944 (B022)

Activity Description: Boiler #22

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
25.1 MMBtu/hr natural gas/digester gas/number two fuel oil-fired boiler	OAC rule 3745-31-05(A)(3) (PTI 14-710)	See terms A.I.2.a, A.I.2.b, and A.II below.
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-10(B)(1). Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as specified by rule.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed .020 lb/MMBtu of actual heat input.
	OAC rule 3745-18-06(D)	The emission limitation specified in OAC rule 3745-18-06(D) is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-18-06(A)	exempt pursuant to OAC rule 3745-18-06(A) when burning only natural gas (See term A.I.2.d below.)
	OAC rules 3745-21-08(B) and 3745-23-06(B)	None, see term A.I.2.c below.

2. Additional Terms and Conditions

- 2.a The SO₂ emissions from this emissions unit shall not exceed 0.25 lb/MMBtu of actual heat input (based on a monthly average).
- 2.b The total combined SO₂ emissions from emissions units B021 and B022 shall not exceed 39 TPY based on a rolling, twelve-month summation.

2. Additional Terms and Conditions (continued)

- 2.c** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 14-710.
- 2.d** 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).

II. Operational Restrictions

1. The permittee shall burn only natural gas, digester gas, and/or number two fuel oil in this emissions unit.
2. The quality of the oil burned in this emissions unit shall have a combination of sulfur content and heat content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.25 lb SO₂/MMBtu actual heat input (based on a monthly average).

Compliance with the above-mentioned specifications shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of oil during the calendar month.

3. All digester gas used in this emissions unit shall come from sludge that was treated with metal salts prior to entering the digester. The metal salts employed shall result in the reduction of sulfur equivalent to at least 850 pounds per day of ferrous chloride. The daily average hydrogen sulfide content of the digester gas shall not exceed 870 parts per million (ppm) as fired.

Alternate sulfur removal technology which achieves a sulfur dioxide emission reduction equivalent to the metal salts treatment may be employed with the approval of the the Director (the appropriate Ohio EPA District Office or local air agency).

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, digester gas, and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect a weekly grab sample of the digester gas sent to emissions units B021 and B022 to be burned. The samples shall be analyzed in accordance with the appropriate ASTM methods to determine the heat content in Btu per standard cubic foot and the density in lbs/standard cubic foot.
3. The permittee shall operate and maintain existing equipment to continuously monitor and record the hydrogen sulfide concentration of the digester gas combusted in this emissions unit in ppm. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.13.

The permittee shall maintain records of all data obtained by the continuous hydrogen sulfide monitoring system including, but not limited to, ppm hydrogen sulfide on an instantaneous (one-minute) basis, the daily average hydrogen sulfide concentration, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments. The daily average hydrogen sulfide concentration shall be used to determine the decimal fraction of sulfur for purposes of determining compliance with the sulfur dioxide emission limitation.

III. Monitoring and/or Record Keeping Requirements (continued)

4. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with ASTM method D4294 for sulfur content and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Director (the appropriate Ohio EPA District Office or local air agency).
5. The permittee shall collect and record the following information on a monthly basis:
 - a. the total quantity, in cubic feet, of natural gas burned*;
 - b. the total quantity, in cubic feet, of digester gas burned;
 - c. the average decimal fraction of sulfur in the digester gas;
 - d. the average heat content of the digester gas, in Btu per standard cubic foot;
 - e. the average density, in lbs per standard cubic foot, of digester gas;
 - f. the total amount of number two fuel oil received, in gallons, for each shipment;
 - g. the average heat content, in Btu per gallon of number two fuel oil, of each shipment;
 - h. the average decimal fraction of sulfur in each shipment of number two fuel oil;
 - i. the calculated sulfur dioxide emission rate, in lbs SO₂/MMBtu of actual heat input, for each shipment of oil [this calculation shall be based on equations specified in OAC rule 3745-18-04(F)];
 - j. the average sulfur dioxide emission rate, in lbs SO₂/MMBtu of actual heat input, for the oil burned (based upon the average of the calculated sulfur dioxide emission rates for all the oil shipments received during the month; or if no shipments were received during the calendar month, the average of the calculated sulfur dioxide emission rates during the most recent calendar month during which oil shipments were received);
 - k. the monthly SO₂ emission rate, in tons per month, for this emissions unit [this calculation shall be based on equations specified in OAC rule 3745-18-04(F)]; and
 - l. the total combined SO₂ emissions from emissions units B021 and B022, in TPY, based on a rolling, twelve-month summation.

*Per OAC rule 3745-18-04(F)(4), the SO₂ emitted from the combustion of natural gas is negligible.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas, digester gas, and/or number two fuel oil was burned in this emissions unit.
2. The permittee shall submit quarterly deviation (excursion) reports that indicate each exceedance of the following limitations:
 - a. the daily average hydrogen sulfide concentration of 870 ppm for digester gas;
 - b. the SO₂ emission limitation of 0.25 lb/MMBtu of actual heat input; and
 - c. the SO₂ emission limitation of 39 TPY based on a rolling, twelve-month summation.

These reports shall specify the actual concentrations and/or emissions, the duration of each exceedance, and any corrective actions taken.

3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

V. Testing Requirements

1. If required, compliance with the visible emission limitation in Section A.I.1 of these terms and conditions 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).

V. Testing Requirements (continued)

2. Compliance with the particulate emission limitation in Section A.I.1 of these terms and conditions shall be determined as follows:

When firing digester gas or natural gas, 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 particulates/MMcu.ft) by the conversion factor (1020 MMBtu/MMcu.ft).

When firing number two fuel oil, compliance may be demonstrated by dividing the AP-42, Table 1.3-1 (7/98) emission factor for fuel oil combustion (2.0 lbs of particulates/1000 gal) by the conversion factor (140 MMBtu/1000 gal).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 5 while firing number two fuel oil.

3. Compliance with the SO₂ emission limitations specified in Section A.I.2 of these terms and conditions shall be determined by the monitoring, record keeping, and reporting requirements of these terms and conditions, or by emission testing using Method 6 or 6C of 40 CFR, Part 60, Appendix A.
4. Compliance with the hydrogen sulfide concentration limitation specified in Section A.II.3 of these terms and conditions shall be determined by the monitoring, record keeping, and reporting requirements of these terms and conditions.

VI. Miscellaneous Requirements

1. If probable cause exists indicating this emissions unit is causing or contributing to a nuisance in violation of Ohio Administrative Code rule 3475-15-07, the owner or operator of this emissions unit shall be required to submit and implement a control program which will bring this emissions unit into compliance.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 1431070944 (N001)

Activity Description: Incinerator #1

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
9.4 dry sludge tons per hour sewage sludge incinerator with wet scrubber	40 CFR Part 61, Subpart C, National Emission Standards for Hazardous Air Pollutants (NESHAP)	10 grams of beryllium (Be)/24-hour period
	40 CFR Part 61, Subpart E, National Emission Standards for Hazardous Air Pollutants (NESHAP)	3200 grams of mercury (Hg)/24-hour period
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-09(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
	OAC rule 3745-17-09(C)	This emissions unit shall be designed, operated, and maintained so as to prevent the emission of objectionable odors.
	OAC rule 3745-31-05(D) (PTI #14-987)	1.1 lbs particulate emissions per ton of dry sludge incinerated
		5.0 lbs NOx per ton of dry sludge incinerated
		See terms A.I.2.a and A.II.1.

2. Additional Terms and Conditions

2.a The total, combined mass emissions from emissions units N001, N002, N003, N004, N006, and N007 shall not exceed the following:

PE: 60.8 TPY;
SO₂: 44.2 TPY;
NO_x: 276.5 TPY;
VOC: 115.02 TPY;
HCl: 16.6 TPY; and
Hg: 1.3 TPY.

2.b There are no applicable SO₂ emission limitations under OAC Chapter 3745-18 for this emissions unit.

II. Operational Restrictions

1. The total combined dry sludge feed to emissions units N001, N002, N003, N004, N006 and N007 shall not exceed 303 tons per day.
2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 70% of the average pressure drop during the most recent emission test which demonstrated compliance with the particulate emission limitation listed in A.I.1. Compliance with this operational restriction shall be based on an hourly average (the time period encompassing the startup and shutdown of the incinerator shall not be counted towards this hourly average.)
3. The scrubber water flow rate shall be continuously maintained at a value not less than the average flow rate during the most recent emission test which demonstrated compliance with the particulate emission limitation listed in A.I.1. Compliance with this operational restriction shall be based on an hourly average of the gallons per minute flow rate.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the average hourly pressure drop across the scrubber, in inches of water;
 - b. the average hourly scrubber water flow rate, in gallons per minute; and
 - c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
2. The permittee shall maintain, calibrate and operate a flow measuring device to continuously determine the mass (lbs) of sludge charged to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of plus or minus 5 percent over its operating range. The permittee shall determine and record the daily total (tons) of dry sludge fed to emissions units N001, N002, N003, N004, N005, N006, and N007.
 3. The permittee shall provide access to the sludge charged so that a well mixed representative grab sample of the sludge can be obtained. Each day, the permittee shall collect a representative grab sample of the sludge to be incinerated. The sludge sample shall be analyzed using the appropriate ASTM methods to determine the dry solids content and the volatile solids content.

IV. 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 at or above the levels specified in A.II:
 - a. the pressure drop across the scrubber; and
 - b. the scrubber water flow rate.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the total combined dry sludge feed rate limitation of 303 tons per day for emissions units N001, N002, N003, N004, N006, and N007, combined, as well as corrective actions that were taken to achieve compliance.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.
4. The permittee shall submit annual reports that specify the emission totals, in tons per year (TPY), for PE, SO₂, NO_x, VOC, HCl and Hg from emissions units N001, N002, N003, N004, N006, and N007, combined for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this group of emissions units in the annual Fee Emission Report.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, sludge analyses in accordance with the following requirements:
 - a. The sludge analysis shall be conducted annually.
 - b. The sludge analysis shall be conducted to demonstrate compliance with the allowable mass emission rate for mercury of 3200 grams per 24-hour period.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: 40 CFR, section 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 person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2. If required, compliance with the visible emission limitation in Section A.I.1 of these terms and conditions 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).

V. Testing Requirements (continued)

3. The permittee shall conduct, or have conducted, emission testing for emissions units N001, N002, N003, N004, N006 and N007 in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months after permit issuance, approximately 2.5 years after permit issuance and within 6 months prior to permit expiration. The emission testing shall be conducted for emissions units N001, N002, N003, N004, N006, and N007 on a rotating basis such that a different emissions unit is tested during each emission test.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulate emissions, NO_x, and Be.
 - c. The following test method(s) shall be employed: for particulates, Method 5 of 40 CFR, Part 60, Appendix A; for NO_x, Method 7 of 40 CFR, Part 60, Appendix A; and for Be, Method 103 or 104 of 40 CFR Part 60, Appendix B. 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 or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The sludge feed rate during the test(s) shall be recorded.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

4. Compliance with the annual particulate and NO_x emission limitations shall be determined by multiplying the emission rates determined during the most recent emission test (lb/ton of dry sludge) by the tons of dry sludge incinerated during the previous 12 months.
5. Compliance with the annual SO₂ emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 0.2 lb SO₂/ton (emission factor from AP-42, Table 2.2-1, January, 1995).

If required, the permittee shall demonstrate compliance with the annual SO₂ emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 6 to determine the actual emission rate, in lbs SO₂/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

V. Testing Requirements (continued)

6. Compliance with the annual HCl emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 0.02 lb HCl/ton (emission factor from AP-42, Table 2.2-2, January, 1995).

If required, the permittee shall demonstrate compliance with the annual HCl emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 26 or 26A to determine the actual emission rate, in lbs HCl/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

7. Compliance with the annual VOC emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 1.6 lbs VOC/ton (emission factor from AP-42, Table 2.2-1, January, 1995).

If required, the permittee shall demonstrate compliance with the annual VOC emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 25 to determine the actual emission rate, in lbs VOC/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

8. Compliance with the annual Hg emission limitation shall be determined based on the annual sludge analysis specified in Section A.V.1 of these terms and conditions.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 1431070944 (N002)

Activity Description: Incinerator #2

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
9.4 dry sludge tons per hour sewage sludge incinerator with wet scrubber	40 CFR Part 61, Subpart C, National Emission Standards for Hazardous Air Pollutants (NESHAP)	10 grams of beryllium (Be)/24-hour period
	40 CFR Part 61, Subpart E, National Emission Standards for Hazardous Air Pollutants (NESHAP)	3200 grams of mercury (Hg)/24-hour period
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-09(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
	OAC rule 3745-17-09(C)	This emissions unit shall be designed, operated, and maintained so as to prevent the emission of objectionable odors.
	OAC rule 3745-31-05(D) (PTI #14-987)	1.1 lbs particulate emissions per ton of dry sludge incinerated
		5.0 lbs NOx per ton of dry sludge incinerated
		See terms A.I.2.a and A.II.1.

2. Additional Terms and Conditions

2.a The total, combined mass emissions from emissions units N001, N002, N003, N004, N006, and N007 shall not exceed the following:

PE: 60.8 TPY;
SO₂: 44.2 TPY;
NO_x: 276.5 TPY;
VOC: 115.02 TPY;
HCl: 16.6 TPY; and
Hg: 1.3 TPY.

2.b There are no applicable SO₂ emission limitations under OAC Chapter 3745-18 for this emissions unit.

II. Operational Restrictions

1. The total combined dry sludge feed to emissions units N001, N002, N003, N004, N006 and N007 shall not exceed 303 tons per day.
2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 70% of the average pressure drop during the most recent emission test which demonstrated compliance with the particulate emission limitation listed in A.I.1. Compliance with this operational restriction shall be based on an hourly average (the time period encompassing the startup and shutdown of the incinerator shall not be counted towards this hourly average.)
3. The scrubber water flow rate shall be continuously maintained at a value not less than the average flow rate during the most recent emission test which demonstrated compliance with the particulate emission limitation listed in A.I.1. Compliance with this operational restriction shall be based on an hourly average of the gallons per minute flow rate.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the average hourly pressure drop across the scrubber, in inches of water;
 - b. the average hourly scrubber water flow rate, in gallons per minute; and
 - c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
2. The permittee shall maintain, calibrate and operate a flow measuring device to continuously determine the mass (lbs) of sludge charged to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of plus or minus 5 percent over its operating range. The permittee shall determine and record the daily total (tons) of dry sludge fed to emissions units N001, N002, N003, N004, N005, N006, and N007.
 3. The permittee shall provide access to the sludge charged so that a well mixed representative grab sample of the sludge can be obtained. Each day, the permittee shall collect a representative grab sample of the sludge to be incinerated. The sludge sample shall be analyzed using the appropriate ASTM methods to determine the dry solids content and the volatile solids content.

IV. 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 at or above the levels specified in A.II:
 - a. the pressure drop across the scrubber; and
 - b. the scrubber water flow rate.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the total combined dry sludge feed rate limitation of 303 tons per day for emissions units N001, N002, N003, N004, N006, and N007, combined, as well as corrective actions that were taken to achieve compliance.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.
4. The permittee shall submit annual reports that specify the emission totals, in tons per year (TPY), for PE, SO₂, NO_x, VOC, HCl and Hg from emissions units N001, N002, N003, N004, N006, and N007, combined for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this group of emissions units in the annual Fee Emission Report.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, sludge analyses in accordance with the following requirements:
 - a. The sludge analysis shall be conducted annually.
 - b. The sludge analysis shall be conducted to demonstrate compliance with the allowable mass emission rate for mercury of 3200 grams per 24-hour period.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: 40 CFR, section 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 person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2. If required, compliance with the visible emission limitation in Section A.I.1 of these terms and conditions 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).

V. Testing Requirements (continued)

3. The permittee shall conduct, or have conducted, emission testing for emissions units N001, N002, N003, N004, N006 and N007 in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months after permit issuance, approximately 2.5 years after permit issuance and within 6 months prior to permit expiration. The emission testing shall be conducted for emissions units N001, N002, N003, N004, N006, and N007 on a rotating basis such that a different emissions unit is tested during each emission test.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulate emissions, NO_x, and Be.
 - c. The following test method(s) shall be employed: for particulates, Method 5 of 40 CFR, Part 60, Appendix A; for NO_x, Method 7 of 40 CFR, Part 60, Appendix A; and for Be, Method 103 or 104 of 40 CFR Part 60, Appendix B. 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 or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The sludge feed rate during the test(s) shall be recorded.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

4. Compliance with the annual particulate and NO_x emission limitations shall be determined by multiplying the emission rates determined during the most recent emission test (lb/ton of dry sludge) by the tons of dry sludge incinerated during the previous 12 months.
5. Compliance with the annual SO₂ emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 0.2 lb SO₂/ton (emission factor from AP-42, Table 2.2-1, January, 1995).

If required, the permittee shall demonstrate compliance with the annual SO₂ emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 6 to determine the actual emission rate, in lbs SO₂/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

V. Testing Requirements (continued)

6. Compliance with the annual HCl emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 0.02 lb HCl/ton (emission factor from AP-42, Table 2.2-2, January, 1995).

If required, the permittee shall demonstrate compliance with the annual HCl emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 26 or 26A to determine the actual emission rate, in lbs HCl/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

7. Compliance with the annual VOC emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 1.6 lbs VOC/ton (emission factor from AP-42, Table 2.2-1, January, 1995).

If required, the permittee shall demonstrate compliance with the annual VOC emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 25 to determine the actual emission rate, in lbs VOC/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

8. Compliance with the annual Hg emission limitation shall be determined based on the annual sludge analysis specified in Section A.V.1 of these terms and conditions.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 1431070944 (N003)

Activity Description: Incinerator #3

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
9.4 dry sludge tons per hour sewage sludge incinerator with wet scrubber	40 CFR Part 61, Subpart C, National Emission Standards for Hazardous Air Pollutants (NESHAP)	10 grams of beryllium (Be)/24-hour period
	40 CFR Part 61, Subpart E, National Emission Standards for Hazardous Air Pollutants (NESHAP)	3200 grams of mercury (Hg)/24-hour period
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-09(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
	OAC rule 3745-17-09(C)	This emissions unit shall be designed, operated, and maintained so as to prevent the emission of objectionable odors.
	OAC rule 3745-31-05(D) (PTI #14-987)	1.1 lbs particulate emissions per ton of dry sludge incinerated
		5.0 lbs NOx per ton of dry sludge incinerated
		See terms A.I.2.a and A.II.1.

2. Additional Terms and Conditions

2.a The total, combined mass emissions from emissions units N001, N002, N003, N004, N006, and N007 shall not exceed the following:

PE: 60.8 TPY;
SO₂: 44.2 TPY;
NO_x: 276.5 TPY;
VOC: 115.02 TPY;
HCl: 16.6 TPY; and
Hg: 1.3 TPY.

2.b There are no applicable SO₂ emission limitations under OAC Chapter 3745-18 for this emissions unit.

II. Operational Restrictions

1. The total combined dry sludge feed to emissions units N001, N002, N003, N004, N006 and N007 shall not exceed 303 tons per day.
2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 70% of the average pressure drop during the most recent emission test which demonstrated compliance with the particulate emission limitation listed in A.I.1. Compliance with this operational restriction shall be based on an hourly average (the time period encompassing the startup and shutdown of the incinerator shall not be counted towards this hourly average.)
3. The scrubber water flow rate shall be continuously maintained at a value not less than the average flow rate during the most recent emission test which demonstrated compliance with the particulate emission limitation listed in A.I.1. Compliance with this operational restriction shall be based on an hourly average of the gallons per minute flow rate.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the average hourly pressure drop across the scrubber, in inches of water;
 - b. the average hourly scrubber water flow rate, in gallons per minute; and
 - c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
2. The permittee shall maintain, calibrate and operate a flow measuring device to continuously determine the mass (lbs) of sludge charged to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of plus or minus 5 percent over its operating range. The permittee shall determine and record the daily total (tons) of dry sludge fed to emissions units N001, N002, N003, N004, N005, N006, and N007.
 3. The permittee shall provide access to the sludge charged so that a well mixed representative grab sample of the sludge can be obtained. Each day, the permittee shall collect a representative grab sample of the sludge to be incinerated. The sludge sample shall be analyzed using the appropriate ASTM methods to determine the dry solids content and the volatile solids content.

IV. 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 at or above the levels specified in A.II:
 - a. the pressure drop across the scrubber; and
 - b. the scrubber water flow rate.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the total combined dry sludge feed rate limitation of 303 tons per day for emissions units N001, N002, N003, N004, N006, and N007, combined, as well as corrective actions that were taken to achieve compliance.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.
4. The permittee shall submit annual reports that specify the emission totals, in tons per year (TPY), for PE, SO₂, NO_x, VOC, HCl and Hg from emissions units N001, N002, N003, N004, N006, and N007, combined for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this group of emissions units in the annual Fee Emission Report.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, sludge analyses in accordance with the following requirements:
 - a. The sludge analysis shall be conducted annually.
 - b. The sludge analysis shall be conducted to demonstrate compliance with the allowable mass emission rate for mercury of 3200 grams per 24-hour period.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: 40 CFR, section 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 person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2. If required, compliance with the visible emission limitation in Section A.I.1 of these terms and conditions 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).

V. Testing Requirements (continued)

3. The permittee shall conduct, or have conducted, emission testing for emissions units N001, N002, N003, N004, N006 and N007 in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months after permit issuance, approximately 2.5 years after permit issuance and within 6 months prior to permit expiration. The emission testing shall be conducted for emissions units N001, N002, N003, N004, N006, and N007 on a rotating basis such that a different emissions unit is tested during each emission test.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulate emissions, NO_x, and Be.
 - c. The following test method(s) shall be employed: for particulates, Method 5 of 40 CFR, Part 60, Appendix A; for NO_x, Method 7 of 40 CFR, Part 60, Appendix A; and for Be, Method 103 or 104 of 40 CFR Part 60, Appendix B. 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 or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The sludge feed rate during the test(s) shall be recorded.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

4. Compliance with the annual particulate and NO_x emission limitations shall be determined by multiplying the emission rates determined during the most recent emission test (lb/ton of dry sludge) by the tons of dry sludge incinerated during the previous 12 months.
5. Compliance with the annual SO₂ emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 0.2 lb SO₂/ton (emission factor from AP-42, Table 2.2-1, January, 1995).

If required, the permittee shall demonstrate compliance with the annual SO₂ emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 6 to determine the actual emission rate, in lbs SO₂/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

V. Testing Requirements (continued)

6. Compliance with the annual HCl emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 0.02 lb HCl/ton (emission factor from AP-42, Table 2.2-2, January, 1995).

If required, the permittee shall demonstrate compliance with the annual HCl emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 26 or 26A to determine the actual emission rate, in lbs HCl/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

7. Compliance with the annual VOC emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 1.6 lbs VOC/ton (emission factor from AP-42, Table 2.2-1, January, 1995).

If required, the permittee shall demonstrate compliance with the annual VOC emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 25 to determine the actual emission rate, in lbs VOC/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

8. Compliance with the annual Hg emission limitation shall be determined based on the annual sludge analysis specified in Section A.V.1 of these terms and conditions.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 1431070944 (N004)

Activity Description: Incinerator #4

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
9.4 dry sludge tons per hour sewage sludge incinerator with wet scrubber	40 CFR Part 61, Subpart C, National Emission Standards for Hazardous Air Pollutants (NESHAP)	10 grams of beryllium (Be)/24-hour period
	40 CFR Part 61, Subpart E, National Emission Standards for Hazardous Air Pollutants (NESHAP)	3200 grams of mercury (Hg)/24-hour period
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-09(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
	OAC rule 3745-17-09(C)	This emissions unit shall be designed, operated, and maintained so as to prevent the emission of objectionable odors.
	OAC rule 3745-31-05(D) (PTI #14-987)	1.1 lbs particulate emissions per ton of dry sludge incinerated
		5.0 lbs NOx per ton of dry sludge incinerated
		See terms A.I.2.a and A.II.1.

2. Additional Terms and Conditions

2.a The total, combined mass emissions from emissions units N001, N002, N003, N004, N006, and N007 shall not exceed the following:

PE: 60.8 TPY;
SO₂: 44.2 TPY;
NO_x: 276.5 TPY;
VOC: 115.02 TPY;
HCl: 16.6 TPY; and
Hg: 1.3 TPY.

2.b There are no applicable SO₂ emission limitations under OAC Chapter 3745-18 for this emissions unit.

II. Operational Restrictions

1. The total combined dry sludge feed to emissions units N001, N002, N003, N004, N006 and N007 shall not exceed 303 tons per day.
2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 70% of the average pressure drop during the most recent emission test which demonstrated compliance with the particulate emission limitation listed in A.I.1. Compliance with this operational restriction shall be based on an hourly average (the time period encompassing the startup and shutdown of the incinerator shall not be counted towards this hourly average.)
3. The scrubber water flow rate shall be continuously maintained at a value not less than the average flow rate during the most recent emission test which demonstrated compliance with the particulate emission limitation listed in A.I.1. Compliance with this operational restriction shall be based on an hourly average of the gallons per minute flow rate.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the average hourly pressure drop across the scrubber, in inches of water;
 - b. the average hourly scrubber water flow rate, in gallons per minute; and
 - c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
2. The permittee shall maintain, calibrate and operate a flow measuring device to continuously determine the mass (lbs) of sludge charged to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of plus or minus 5 percent over its operating range. The permittee shall determine and record the daily total (tons) of dry sludge fed to emissions units N001, N002, N003, N004, N005, N006, and N007.
 3. The permittee shall provide access to the sludge charged so that a well mixed representative grab sample of the sludge can be obtained. Each day, the permittee shall collect a representative grab sample of the sludge to be incinerated. The sludge sample shall be analyzed using the appropriate ASTM methods to determine the dry solids content and the volatile solids content.

IV. 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 at or above the levels specified in A.II:
 - a. the pressure drop across the scrubber; and
 - b. the scrubber water flow rate.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the total combined dry sludge feed rate limitation of 303 tons per day for emissions units N001, N002, N003, N004, N006, and N007, combined, as well as corrective actions that were taken to achieve compliance.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.
4. The permittee shall submit annual reports that specify the emission totals, in tons per year (TPY), for PE, SO₂, NO_x, VOC, HCl and Hg from emissions units N001, N002, N003, N004, N006, and N007, combined for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this group of emissions units in the annual Fee Emission Report.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, sludge analyses in accordance with the following requirements:
 - a. The sludge analysis shall be conducted annually.
 - b. The sludge analysis shall be conducted to demonstrate compliance with the allowable mass emission rate for mercury of 3200 grams per 24-hour period.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: 40 CFR, section 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 person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2. If required, compliance with the visible emission limitation in Section A.I.1 of these terms and conditions 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).

V. Testing Requirements (continued)

3. The permittee shall conduct, or have conducted, emission testing for emissions units N001, N002, N003, N004, N006 and N007 in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months after permit issuance, approximately 2.5 years after permit issuance and within 6 months prior to permit expiration. The emission testing shall be conducted for emissions units N001, N002, N003, N004, N006, and N007 on a rotating basis such that a different emissions unit is tested during each emission test.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulate emissions, NO_x, and Be.
 - c. The following test method(s) shall be employed: for particulates, Method 5 of 40 CFR, Part 60, Appendix A; for NO_x, Method 7 of 40 CFR, Part 60, Appendix A; and for Be, Method 103 or 104 of 40 CFR Part 60, Appendix B. 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 or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The sludge feed rate during the test(s) shall be recorded.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

4. Compliance with the annual particulate and NO_x emission limitations shall be determined by multiplying the emission rates determined during the most recent emission test (lb/ton of dry sludge) by the tons of dry sludge incinerated during the previous 12 months.
5. Compliance with the annual SO₂ emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 0.2 lb SO₂/ton (emission factor from AP-42, Table 2.2-1, January, 1995).

If required, the permittee shall demonstrate compliance with the annual SO₂ emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 6 to determine the actual emission rate, in lbs SO₂/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

V. Testing Requirements (continued)

6. Compliance with the annual HCl emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 0.02 lb HCl/ton (emission factor from AP-42, Table 2.2-2, January, 1995).

If required, the permittee shall demonstrate compliance with the annual HCl emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 26 or 26A to determine the actual emission rate, in lbs HCl/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

7. Compliance with the annual VOC emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 1.6 lbs VOC/ton (emission factor from AP-42, Table 2.2-1, January, 1995).

If required, the permittee shall demonstrate compliance with the annual VOC emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 25 to determine the actual emission rate, in lbs VOC/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

8. Compliance with the annual Hg emission limitation shall be determined based on the annual sludge analysis specified in Section A.V.1 of these terms and conditions.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 1431070944 (N006)

Activity Description: Incinerator #5

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
9.4 dry sludge tons per hour sewage sludge incinerator with wet scrubber	40 CFR Part 61, Subpart C, National Emission Standards for Hazardous Air Pollutants (NESHAP)	10 grams of beryllium (Be)/24-hour period
	40 CFR Part 61, Subpart E, National Emission Standards for Hazardous Air Pollutants (NESHAP)	3200 grams of mercury (Hg)/24-hour period
	40 CFR Part 60, Subpart O, New Source Performance Standards (NSPS)	Visible particulate emissions shall not exceed 20 percent opacity. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the emission limitation established by 40 CFR, Part 60, Subpart O.
	OAC rule 3745-17-09(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
	OAC rule 3745-17-09(C)	This emissions unit shall be designed, operated, and maintained so as to prevent the emission of objectionable odors.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	None, see term A.I.2.b below.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(D) (PTI #14-987)	<p>1.1 lbs particulate emissions per ton of dry sludge incinerated</p> <p>5.0 lbs NOx per ton of dry sludge incinerated</p> <p>See terms A.I.2.a and A.II.1.</p> <p>The requirements of this rule also include compliance with the requirements of 40 CFR Part 61, Subpart C, 40 CFR Part 61, Subpart E, 40 CFR, Part 60, Subpart O, and OAC rule 3745-17-09(C).</p>

2. Additional Terms and Conditions

- 2.a** The total, combined mass emissions from emissions units N001, N002, N003, N004, N006, and N007 shall not exceed the following:
 - PE: 60.8 TPY;
 - SO2: 44.2 TPY;
 - NOx: 276.5 TPY;
 - VOC: 115.02 TPY;
 - HCl: 16.6 TPY; and
 - Hg: 1.3 TPY.
- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(D) in Permit to Install #14-987.
- 2.c** There are no applicable SO2 emission limitations under OAC Chapter 3745-18 for this emissions unit.

II. Operational Restrictions

- 1.** The total combined dry sludge feed to emissions units N001, N002, N003, N004, N006 and N007 shall not exceed 303 tons per day.
- 2.** The pressure drop across the scrubber shall be continuously maintained at a value of not less than 70% of the average pressure drop during the most recent emission test which demonstrated compliance with the particulate emission limitation listed in A.I.1. Compliance with this operational restriction shall be based on an hourly average (the time period encompassing the startup and shutdown of the incinerator shall not be counted towards this hourly average.)
- 3.** The scrubber water flow rate shall be continuously maintained at a value not less than the average flow rate during the most recent emission test which demonstrated compliance with the particulate emission limitation listed in A.I.1. Compliance with this operational restriction shall be based on an hourly average of the gallons per minute flow rate.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the average hourly pressure drop across the scrubber, in inches of water;
 - b. the average hourly scrubber water flow rate, in gallons per minute; and
 - c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
2. The permittee shall maintain, calibrate and operate a flow measuring device to continuously determine the mass (lbs) of sludge charged to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of plus or minus 5 percent over its operating range. The permittee shall determine and record the daily total (tons) of dry sludge fed to emissions units N001, N002, N003, N004, N006, and N007.
 3. The permittee shall provide access to the sludge charged so that a well mixed representative grab sample of the sludge can be obtained. Each day, the permittee shall collect a representative grab sample of the sludge to be incinerated. The sludge sample shall be analyzed using the appropriate ASTM methods to determine the dry solids content and the volatile solids content.
 4. The permittee shall calibrate, maintain, and operate a monitoring device that continuously measures and records the oxygen content of the incinerator exhaust gas. The oxygen monitor shall be located upstream of any rabble shaft cooling air inlet into the incinerator exhaust gas stream, fan, ambient air recirculation damper, or any other source of dilution air. The oxygen monitoring device shall be certified by the manufacturer to have a relative accuracy of plus or minus 5 percent over its operating range and shall be calibrated according to method(s) prescribed by the manufacturer at least once each 24-hour operating period. The permittee shall maintain a record of the measured oxygen content of the incinerator exhaust gas.
 5. The permittee shall calibrate, maintain, and operate temperature measuring devices at every hearth. A minimum of one thermocouple shall be maintained in each hearth in the cooling and drying zones and a minimum of two thermocouples shall be maintained in each hearth in the combustion zone. 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 maintain a record of the measured temperatures within the incinerator.
 6. The permittee shall calibrate, maintain, and operate a device for measuring the fuel flow to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of plus or minus 5 percent over its operating range. The permittee shall maintain a record of the fuel flow to the incinerator.

IV. 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 at or above the levels specified in A.II:
 - a. the pressure drop across the scrubber; and
 - b. the scrubber water flow rate.
2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the total combined dry sludge feed rate limitation of 303 tons per day for emissions units N001, N002, N003, N004, N006, and N007 combined, as well as corrective actions that were taken to achieve compliance.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the average oxygen content in the incinerator exhaust gas exceeded the average oxygen content measured during the most recent stack test by more than 3 percent.

IV. Reporting Requirements (continued)

4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.
5. The permittee shall submit annual reports that specify the emission totals, in tons per year (TPY), for PE, SO₂, NO_x, VOC, HCl and Hg from emissions units N001, N002, N003, N004, N006, and N007, combined for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this group of emissions units in the annual Fee Emission Report.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, sludge analyses in accordance with the following requirements:
 - a. The sludge analysis shall be conducted annually.
 - b. The sludge analysis shall be conducted to demonstrate compliance with the allowable mass emission rate for mercury of 3200 grams per 24-hour period.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: 40 CFR, section 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 person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2. If required, compliance with the visible emission limitation in Section A.I.1 of these terms and conditions 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).
3. The permittee shall conduct, or have conducted, emission testing for emissions units N001, N002, N003, N004, N006 and N007 in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months after permit issuance, approximately 2.5 years after permit issuance and within 6 months prior to permit expiration. The emission testing shall be conducted for emissions units N001, N002, N003, N004, N006, and N007 on a rotating basis such that a different emissions unit is tested during each emission test.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulate emissions, NO_x, and Be.
 - c. The following test method(s) shall be employed: for particulates, Method 5 of 40 CFR, Part 60, Appendix A; for NO_x, Method 7 of 40 CFR, Part 60, Appendix A; and for Be, Method 103 or 104 of 40 CFR Part 60, Appendix B. 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 or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The sludge feed rate during the test(s) shall be recorded.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

4. Compliance with the annual particulate and NO_x emission limitations shall be determined by multiplying the emission rates determined during the most recent emission test (lb/ton of dry sludge) by the tons of dry sludge incinerated during the previous 12 months.
5. Compliance with the annual SO₂ emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 0.2 lb SO₂/ton (emission factor from AP-42, Table 2.2-1, January, 1995).

If required, the permittee shall demonstrate compliance with the annual SO₂ emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 6 to determine the actual emission rate, in lbs SO₂/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

6. Compliance with the annual HCl emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 0.02 lb HCl/ton (emission factor from AP-42, Table 2.2-2, January, 1995).

If required, the permittee shall demonstrate compliance with the annual HCl emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 26 or 26A to determine the actual emission rate, in lbs HCl/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

7. Compliance with the annual VOC emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 1.6 lbs VOC/ton (emission factor from AP-42, Table 2.2-1, January, 1995).

If required, the permittee shall demonstrate compliance with the annual VOC emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 25 to determine the actual emission rate, in lbs VOC/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

8. Compliance with the annual Hg emission limitation shall be determined based on the annual sludge analysis specified in Section A.V.1 of these terms and conditions.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 1431070944 (N007)

Activity Description: Incinerator #6

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
9.4 dry sludge tons per hour sewage sludge incinerator with wet scrubber	40 CFR Part 61, Subpart C, National Emission Standards for Hazardous Air Pollutants (NESHAP)	10 grams of beryllium (Be)/24-hour period
	40 CFR Part 61, Subpart E, National Emission Standards for Hazardous Air Pollutants (NESHAP)	3200 grams of mercury (Hg)/24-hour period
	40 CFR Part 60, Subpart O, New Source Performance Standards (NSPS)	Visible particulate emissions shall not exceed 20 percent opacity. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the emission limitation established by 40 CFR, Part 60, Subpart O.
	OAC rule 3745-17-09(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
	OAC rule 3745-17-09(C)	This emissions unit shall be designed, operated, and maintained so as to prevent the emission of objectionable odors.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	None, see term A.I.2.b below.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(D) (PTI #14-987)	<p>1.1 lbs particulate emissions per ton of dry sludge incinerated</p> <p>5.0 lbs NOx per ton of dry sludge incinerated</p> <p>See terms A.I.2.a and A.II.1.</p> <p>The requirements of this rule also include compliance with the requirements of 40 CFR Part 61, Subpart C, 40 CFR Part 61, Subpart E, 40 CFR, Part 60, Subpart O, and OAC rule 3745-17-09(C).</p>

2. Additional Terms and Conditions

- 2.a** The total, combined mass emissions from emissions units N001, N002, N003, N004, N006, and N007 shall not exceed the following:
 - PE: 60.8 TPY;
 - SO2: 44.2 TPY;
 - NOx: 276.5 TPY;
 - VOC: 115.02 TPY;
 - HCl: 16.6 TPY; and
 - Hg: 1.3 TPY.
- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(D) in Permit to Install #14-987.
- 2.c** There are no applicable SO2 emission limitations under OAC Chapter 3745-18 for this emissions unit.

II. Operational Restrictions

- 1.** The total combined dry sludge feed to emissions units N001, N002, N003, N004, N006 and N007 shall not exceed 303 tons per day.
- 2.** The pressure drop across the scrubber shall be continuously maintained at a value of not less than 70% of the average pressure drop during the most recent emission test which demonstrated compliance with the particulate emission limitation listed in A.I.1. Compliance with this operational restriction shall be based on an hourly average (the time period encompassing the startup and shutdown of the incinerator shall not be counted towards this hourly average.)
- 3.** The scrubber water flow rate shall be continuously maintained at a value not less than the average flow rate during the most recent emission test which demonstrated compliance with the particulate emission limitation listed in A.I.1. Compliance with this operational restriction shall be based on an hourly average of the gallons per minute flow rate.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the average hourly pressure drop across the scrubber, in inches of water;
 - b. the average hourly scrubber water flow rate, in gallons per minute; and
 - c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
2. The permittee shall maintain, calibrate and operate a flow measuring device to continuously determine the mass (lbs) of sludge charged to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of plus or minus 5 percent over its operating range. The permittee shall determine and record the daily total (tons) of dry sludge fed to emissions units N001, N002, N003, N004, N006, and N007.
 3. The permittee shall provide access to the sludge charged so that a well mixed representative grab sample of the sludge can be obtained. Each day, the permittee shall collect a representative grab sample of the sludge to be incinerated. The sludge sample shall be analyzed using the appropriate ASTM methods to determine the dry solids content and the volatile solids content.
 4. The permittee shall calibrate, maintain, and operate a monitoring device that continuously measures and records the oxygen content of the incinerator exhaust gas. The oxygen monitor shall be located upstream of any rabble shaft cooling air inlet into the incinerator exhaust gas stream, fan, ambient air recirculation damper, or any other source of dilution air. The oxygen monitoring device shall be certified by the manufacturer to have a relative accuracy of plus or minus 5 percent over its operating range and shall be calibrated according to method(s) prescribed by the manufacturer at least once each 24-hour operating period. The permittee shall maintain a record of the measured oxygen content of the incinerator exhaust gas.
 5. The permittee shall calibrate, maintain, and operate temperature measuring devices at every hearth. A minimum of one thermocouple shall be maintained in each hearth in the cooling and drying zones and a minimum of two thermocouples shall be maintained in each hearth in the combustion zone. 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 maintain a record of the measured temperatures within the incinerator.
 6. The permittee shall calibrate, maintain, and operate a device for measuring the fuel flow to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of plus or minus 5 percent over its operating range. The permittee shall maintain a record of the fuel flow to the incinerator.

IV. 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 at or above the levels specified in A.II:
 - a. the pressure drop across the scrubber; and
 - b. the scrubber water flow rate.
2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the total combined dry sludge feed rate limitation of 303 tons per day for emissions units N001, N002, N003, N004, N006, and N007 combined, as well as corrective actions that were taken to achieve compliance.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the average oxygen content in the incinerator exhaust gas exceeded the average oxygen content measured during the most recent stack test by more than 3 percent.

IV. Reporting Requirements (continued)

4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.
5. The permittee shall submit annual reports that specify the emission totals, in tons per year (TPY), for PE, SO₂, NO_x, VOC, HCl and Hg from emissions units N001, N002, N003, N004, N006, and N007, combined for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this group of emissions units in the annual Fee Emission Report.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, sludge analyses in accordance with the following requirements:
 - a. The sludge analysis shall be conducted annually.
 - b. The sludge analysis shall be conducted to demonstrate compliance with the allowable mass emission rate for mercury of 3200 grams per 24-hour period.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: 40 CFR, section 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 person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2. If required, compliance with the visible emission limitation in Section A.I.1 of these terms and conditions 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).
3. The permittee shall conduct, or have conducted, emission testing for emissions units N001, N002, N003, N004, N006 and N007 in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months after permit issuance, approximately 2.5 years after permit issuance and within 6 months prior to permit expiration. The emission testing shall be conducted for emissions units N001, N002, N003, N004, N006, and N007 on a rotating basis such that a different emissions unit is tested during each emission test.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulate emissions, NO_x, and Be.
 - c. The following test method(s) shall be employed: for particulates, Method 5 of 40 CFR, Part 60, Appendix A; for NO_x, Method 7 of 40 CFR, Part 60, Appendix A; and for Be, Method 103 or 104 of 40 CFR Part 60, Appendix B. 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 or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The sludge feed rate during the test(s) shall be recorded.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

4. Compliance with the annual particulate and NO_x emission limitations shall be determined by multiplying the emission rates determined during the most recent emission test (lb/ton of dry sludge) by the tons of dry sludge incinerated during the previous 12 months.
5. Compliance with the annual SO₂ emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 0.2 lb SO₂/ton (emission factor from AP-42, Table 2.2-1, January, 1995).

If required, the permittee shall demonstrate compliance with the annual SO₂ emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 6 to determine the actual emission rate, in lbs SO₂/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

6. Compliance with the annual HCl emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 0.02 lb HCl/ton (emission factor from AP-42, Table 2.2-2, January, 1995).

If required, the permittee shall demonstrate compliance with the annual HCl emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 26 or 26A to determine the actual emission rate, in lbs HCl/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

7. Compliance with the annual VOC emission limitation may be determined by multiplying the amount of sludge incinerated, in tons, by 1.6 lbs VOC/ton (emission factor from AP-42, Table 2.2-1, January, 1995).

If required, the permittee shall demonstrate compliance with the annual VOC emission limitation through emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 25 to determine the actual emission rate, in lbs VOC/ton, and the actual emission rate shall be multiplied by the maximum amount of sludge incinerated for the emissions unit.

8. Compliance with the annual Hg emission limitation shall be determined based on the annual sludge analysis specified in Section A.V.1 of these terms and conditions.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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