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

10/31/00

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

15-76-00-0806
Water Pollution Control Center
Tracy J Mills
3530 Central Avenue, S.E
Canton, OH 44707

Dear Tracy J Mills:

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 Canton Division of Air Pollution Control.

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: Canton Division of Air Pollution Control
Becky Castle, DAPC PMU

Ohio EPA
State of Ohio Environmental Protection Agency

TITLE V PERMIT

Issue Date: 10/31/00

FINAL ISSUANCE

Effective Date: 10/31/00

Expiration Date: 10/31/05

This document constitutes issuance to:

Water Pollution Control Center
3530 Central Avenue, S.E
Canton, OH 44707

of a Title V permit for Facility ID: 15-76-00-0806

Emissions Unit ID (Company ID)/
Emissions Unit Activity Description:
N001 (Incinerator No.1)
Incinerate dewatered municipal sewage sludge; Provide auxiliary fuel; Scrub off-gases

N002 (Incinerator No.2)
Incinerate dewatered municipal sewage sludge; Provide auxiliary fuel; Scrub off-gases

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 3745-77-04(A) 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 Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Canton Division of Air Pollution Control
420 Market Avnue N.
Canton, OH 44702-1544
(330) 489-3385

OHIO ENVIRONMENTAL PROTECTION AGENCY

_____

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping 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.

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.

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

   i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
   ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. 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. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
   iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, 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. 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, recordkeeping, 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.

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 are true, accurate, and complete.

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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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

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.

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.

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.

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. 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.

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.

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.

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.

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 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.

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.

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 appropriate Ohio EPA District Office or local air agency 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.

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.

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).

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.

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, 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; and

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 further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

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.

B. State Only Enforceable Section

1. 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.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping 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 (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. 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.)

3. 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.

4. 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.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction 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).

6. 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.

7. 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.

8. Additional Reporting Requirements When There Are No Deviations of <u>Federally Enforceable</u> 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

None

B. State Only Enforceable Section

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

Z001 - digester building boiler (B-1)
Z002 - maintenance building boiler (B-2)
Z003 - administration building boiler (B-3)
Z004 - wet wells & aeration tanks
Z005 - paved roads and parking areas

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: Incinerator No.1 (N001)

Activity Description: Incinerate dewatered municipal sewage sludge; Provide auxiliary fuel; Scrub off-gases

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
2,160 pounds per hour of dry sludge feed, multiple hearth incinerator for sewage sludge with the use of a wet scrubbing system that includes a precooler, a 3-stage impingement tray scrubber, six venturi stages, and a demister	OAC rule 3745-31-05 (PTI 15-1283)	1.28 lbs/hr of volatile organic compounds (VOC) 5.61 tpy of VOC 0.4 lb/hr of sulfur dioxide (SO2) 1.8 tpy of SO2 1.3 lbs/hr of nitrogen oxides (NOx) 5.7 tpy of NOx 49.5 lbs/hr of carbon monoxide (CO) 217 tpy of CO 1.23 lbs/hr of chromium (Cr) 5.4 tpy of Cr 0.27 lb/hr of lead (Pb) 1.2 tpy of Pb 0.3 lb/hr of nickel (Ni) 1.31 tpy of Ni
	40 CFR Part 61, Subpart C	10 grams of beryllium (Be) per 24-hour period 0.004 tpy of Be
	40 CFR Part 61, Subpart E	3200 grams of mercury (Hg) per 24-hour period 1.29 tpy of Hg
	40 CFR Part 503	See A.II below.
	40 CFR Part 60, Subpart O	1.30 pounds of particulate emissions per ton of dry sludge input 6.15 tpy of particulate emissions Visible particulate emissions, from any stack, shall be less than 20% opacity.
	OAC rule 3745-17-07	See A.I.2.d below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-09	See A.I.2.d below.

2. Additional Terms and Conditions

2.a The terms and conditions of this permit were established in the federally enforceable permit to install 15-1283 issued on May 26, 1999.

2.b The annual emission limitations established in this permit are the combined totals for N001 and N002.

2.c Emission limitations for pollutants other than beryllium, mercury, and particulate matter have been established in accordance with the best available technology (BAT) requirements specified in OAC rule 3745-31-05.

2.d The emissions limitation required by this applicable rule is less stringent than the emission limitation established by 40 CFR part 60, Subpart O.

II. Operational Restrictions

1. This emissions unit is subject to all applicable provisions of the final Standards for the Use or Disposal of Sewage Sludge as promulgated by the United States Environmental Protection Agency under 40 CFR, Part 503, Subpart E, which applies to facilities that incinerate sewage sludge.

2. If a performance test shows PM emissions exceed 0.75 pound per ton of dry sludge, the formulation established in 40 CFR 60.155(a)(1)(i) shall be used to determine the allowable pressure drop range. An exceedance of the pressure drop operating level is considered to have occurred when the pressure drop across the scrubber is less than the minimum acceptable level for a duration of 15 minutes or more in an hour and measured only when the sludge is being charged to the incinerator (i.e., excluding downtime, start-up, and shut-down periods).

3. Except as noted, the average oxygen content of the incinerator exhaust gas for each one-hour incinerator operating period shall not exceed the oxygen content measured during the most recent performance test by more than 3 percent. During the performance test conducted on 10/9/96, the average oxygen concentration was 3.3%; therefore, the limit until another performance test is done is 6.3%. If the last previous satisfactory performance test showed a particulate matter emission rate of less than 0.75 lb/ton charged, the oxygen content does not have to be maintained below the designated threshold.

4. Except as noted, every hearth shall be maintained at a temperature to be determined during a performance test in which compliance is demonstrated. The operation of the sewage sludge incinerator shall not exceed the maximum or minimum combustion temperatures (averaged over each one-hour incinerator operating period) as determined during the performance test of the sludge incinerator. If the last previous satisfactory performance test showed a particulate matter emission rate of less than 0.75 lb/ton charged, the temperature does not have to be monitored and these minimum and maximum limits will not have to be met.

5. This facility operates two identical incinerators, N001 and N002. The permittee shall only operate one of these two incinerators at any one time, except during the switchover from one incinerator to the other. The time period for the switchover shall not exceed 48 hours.

III. Monitoring and/or Record Keeping Requirements

1. Monitoring for Be and Hg shall be performed as follows:

a. perform and maintain records of an annual sludge sampling test for Be and Hg using Method 105 in Appendix B and paragraph 61.54 of 40 CFR Part 61; or

b. upon written approval from USEPA, the permittee may perform monitoring and record keeping for Be and Hg using sludge analysis methods.

If the permittee performs the stack test as outlined in sections A.V.1.a and A.V.1.b, then the above monitoring will not be required.

2. This facility shall install, calibrate, maintain, and operate the following monitoring devices:

a. A flow measuring device which can be used to continuously determine either the mass or volume of sludge charged to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of within plus/minus 5 percent over its operating range. The amount of sludge shall be recorded during all periods of operation.

b. A monitoring device that continuously measures and records the pressure drop of the gas flow through the wet scrubbing device. Where a combination of wet scrubbers is used in series, the pressure drop of the gas flow through the combined system shall be continuously monitored. The device used to monitor the scrubber pressure drop shall be certified by the manufacturer to be accurate within plus/minus 1 inch water gauge and shall be calibrated on an annual basis in accordance with the manufacturer's instructions.

c. 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 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 within plus/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.

d. A monitoring device that monitors the water flow rate through the scrubber so that proper operation of the scrubber can be verified.

e. A temperature measuring device at every hearth. A minimum of one thermocouple shall be installed in each hearth in the cooling and drying zones, and a minimum of two thermocouples shall be installed in each hearth in the combustion zone.

f. A continuous measuring device for measuring fuel flow to the incinerator. Each fuel flow measuring device shall be certified by the manufacturer to have an accuracy of within plus or minus 5 percent over its operating range.

3. If the particulate emission rate measured during the most recent performance test is less than 0.75 lb/ton, this facility shall not be required to operate continuous monitoring devices for the mass or volume of sludge charged to the incinerator (section A.III.2.a), temperature of the hearths (section A.III.2.e), and the fuel flow to the incinerator (section A.III.2.f).

4. If exempt from continuous monitoring of the mass or volume of sludge per section A.III.3, then the facility shall maintain daily records of the amount of sludge charged.

5. The permittee shall provide access to the sludge charged so that a well-mixed representative grab sample of the sludge can be obtained. The permittee shall collect a representative grab sample of the sludge fed to the incinerator once per day, and shall analyze the sample for volatile solids content and dry sludge content once per day.

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

6. Unless the permittee is exempt from monitoring fuel flow, temperature, and rate of sludge as noted in section A.III.3, the following quality assurance/quality control requirements shall apply:

a. fuel flow continuous monitoring - quarterly calibration error checks;

b. temperature continuous monitoring - quarterly calibration error checks; and

c. rate of sludge charged to the incinerator continuous monitoring - quarterly calibration error checks.

7. Records of emission test results and other data needed to determine total emissions from emissions units N001 and N002 of all pollutants listed in this permit shall be retained at the facility and shall be made available for inspection by the Director or a representative of the Ohio EPA for a minimum of five years.

8. The permittee shall maintain records of the time periods during which emissions units N001 and N002 were operating simultaneously, including periods during the switchover from one incinerator to the other.

IV. Reporting Requirements

1. If the average particulate matter emission rate measured during the most recent compliance test exceeds 0.75 lb/ton of dry sludge input, the permittee shall submit to the Canton local air agency semi-annually a report in writing which contains the following:

1.a A record of average scrubber pressure drop measurements for each period of 15 minutes duration or more during which the pressure drop of the scrubber was less than, by a percentage specified below, the average scrubber pressure drop measured during the most recent performance test. A percent reduction in pressure drop greater than that calculated according to the following equation shall be reported:

$$P = -111E + 72.15$$

where:

P = the percent reduction in pressure drop, and
E = the average particulate matter emissions (kg/megagram).

1.b A record of average oxygen content in the incinerator exhaust gas for each period of 1-hour duration or more that the oxygen content of the incinerator exhaust gas exceeds the average oxygen content measured during the most recent performance test by more than 3 percent.

1.c A record of when the incinerator combustion zone temperature falls below a minimum temperature, to be determined during a compliance test in which compliance was demonstrated.

2. If the average particulate matter emission rate measured during the most recent compliance test exceeds 0.75 lb/ton of dry sludge input, the permittee shall include in the semi-annual exceedance reports (described in section A.IV.1 above), for each calendar day that an increase in oxygen content of exhaust gas is reported, a record of the following:

a. the scrubber pressure drop average over each 1-hour incinerator operating period;

b. the oxygen content in the incinerator exhaust over each 1-hour incinerator operating period;

c. the temperature of each hearth in the incinerator, averaged over each 1-hour incinerator operating period;

d. the rate of sludge charged to the incinerator, averaged over each 1-hour incinerator operating period;

e. the incinerator fuel use, averaged over each 8-hour incinerator operating period; and

f. the moisture and volatile solids content of the daily grab sample of sludge charged to the incinerator.

These semi-annual reports shall be submitted by January 30 and July 30 of each year and shall cover the previous 6 calendar months (January through June and July through December, respectively).

IV. Reporting Requirements (continued)

3. The permittee shall submit exceedance reports for each day during which emissions units N001 and N002 were in continuous operation simultaneously (except during periods of switchover). The report shall include the reasons for the excursion and any actions which were taken to correct the operational infraction.

4. If applicable, the permittee shall submit annual reports of the sludge analysis results for Be and Hg required under section A.III.1. The reports shall be due by January 30 of each year.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

10 grams of Be over a 24-hour period

Applicable Compliance Method:

The testing for Be emissions from this incinerator, in order to demonstrate compliance with 40 CFR 61, Subpart C, shall be done by conducting either:

i. a stack test using either Method 103 or Method 104 of Appendix B of 40 CFR 61 and as described in 40 CFR 61.33 (USEPA Method 29 may also be used to determine maximum emissions over a 24-hour period); or

ii. perform an annual sludge sampling test using Method 105 in Appendix B and paragraph 61.54 of 40 CFR 61 (same as for Hg sampling); or

iii. upon USEPA approval, testing may be performed using sludge analysis methods.

In accordance with 40 CFR 61.33, samples shall be taken over such a period as necessary to determine accurately the maximum emissions which will occur in a 24-hour period. Samples shall be analyzed and emissions determined within 30 days after the emissions unit performance or stack test.

1.b Emission Limitation:

3200 grams of Hg over a 24-hour period

Applicable Compliance Method:

The testing for Hg emissions from this incinerator, in order to demonstrate compliance with 40 CFR 61, Subpart E, shall be done by conducting either:

i. a stack test using Method 101A in Appendix B and paragraph 61.54 of 40 CFR 61 (USEPA Method 29 may also be used to determine maximum emissions over a 24-hour period); or

ii. perform an annual sludge sampling test using Method 105 in Appendix B and paragraph 61.54 of 40 CFR 61; or

iii. upon USEPA approval, testing may be performed using sludge analysis methods.

In accordance with 40 CFR 61.53(d), samples shall be taken over such a period as necessary to determine accurately the maximum emissions which will occur in a 24-hour period. Samples shall be analyzed and emissions determined within 30 days after the emissions unit performance or stack test.

If test results show that Hg emissions do not exceed 1,600 grams per 24-hour period after two years of sludge testing, further testing for Hg emissions shall be done at the time of renewal for the operating permit for this emissions unit.

V. Testing Requirements (continued)

1.c Emission Limitation:

1.3 pounds of particulate emissions per ton of dry sludge feed

Applicable Compliance Method:

Compliance shall be determined using the test methods and equations specified in 40 CFR 60.154.

1.d Emission Limitation:

0.004 tpy of Be

Applicable Compliance Method:

Multiply the NESHAP emission limit of 10 grams of Be per 24-hour period by 2.205 E-03 lb/gram, then multiply by the actual number of days this emissions unit operated per year, and divide by 2000 lbs/ton. Provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation based on 8760 hours/year of operation.

1.e Emission Limitation:

1.29 tpy of Hg

Applicable Compliance Method:

Multiply the NESHAP emission limit of 3200 grams of Hg per 24-hour period by 2.205 E-03 lb/gram, then multiply by the actual number of days this emissions unit operated per year, and divide by 2000 lbs/ton. Provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation based on 8760 hours/year of operation.

1.f Emission Limitation:

6.15 tpy of particulate emissions

Applicable Compliance Method:

Multiply the NSPS emission limit of 1.3 pounds of particulate emissions per ton of dry sludge feed by the actual amount of dry sludge processed per year and, and divide by 2000 lbs/ton.

1.g Emission Limitation:

less than 20% opacity

Applicable Compliance Method:

USEPA Method 9 (40 CFR Part 60, Appendix A)

1.h Emission Limitation:

1.28 lbs/hr of VOC

Applicable Compliance Method:

If required, USEPA Method 25A (40 CFR Part 60, Appendix A).

V. Testing Requirements (continued)

1.i Emission Limitation:

0.4 lb/hr of SO2

Applicable Compliance Method:

If required, USEPA Method 6 (40 CFR Part 60, Appendix A).

1.j Emission Limitation:

1.3 lbs/hr of NOx

Applicable Compliance Method:

If required, USEPA Method 7 (40 CFR Part 60, Appendix A).

1.k Emission Limitation:

49.5 lbs/hr of CO

Applicable Compliance Method:

If required, USEPA Method 10 (40 CFR Part 60, Appendix A).

1.l Emission Limitation:

1.23 lbs/hr of Cr

Applicable Compliance Method:

If required, USEPA Method 29 (40 CFR Part 60, Appendix A).

1.m Emission Limitation:

0.27 lb/hr of Pb

Applicable Compliance Method:

If required, USEPA Method 29 (40 CFR Part 60, Appendix A).

1.n Emission Limitation:

0.3 lb/hr of Ni

Applicable Compliance Method:

If required, USEPA Method 29 (40 CFR Part 60, Appendix A).

V. Testing Requirements (continued)

1.o Emission Limitation:

5.61 tpy of VOC
1.8 tpy of SO2
5.7 tpy of NOx
217.0 tpy of CO
5.4 tpy of Cr
1.2 tpy of Pb
1.31 tpy of Ni

Applicable Compliance Method:

The tpy limitations were developed by multiplying the lb/hr limitations by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitations. Note: this facility operates two identical incinerators, emissions units N001 and N002. Only one of these two incinerators shall be allowed to operate at any one time, except during the switchover from one incinerator to the other. Consequently the annual allowable emissions reflect the operation of just one incinerator.

2. In accordance with the requirements of PTI 15-1283, the permittee shall conduct, or have conducted, emission testing for this emissions unit for Be, Hg, and particulate emissions by no later than December 1, 1999. Thereafter, the permittee shall conduct, or have conducted, emission testing for this emissions unit for Be, Hg, and particulate emissions 6 months prior to permit renewal, except as noted.

2.a Be Testing - NESHAPs

The permittee shall test emissions from this incinerator for Be to comply with 40 CFR Part 61, Subpart C by conducting:

i. a stack test using either Method 103 or Method 104 of Appendix B of 40 CFR Part 61; or

ii. an annual sludge sampling test using Method 105 in Appendix B and paragraph 61.54 of 40 CFR Part 61 (same as for Hg sampling); or

iii. upon USEPA approval, testing may be performed using sludge analysis methods.

In accordance with 40 CFR 61.33, samples shall be taken over such a period as necessary to determine accurately the maximum emissions which will occur in a 24-hour period. Samples shall be analyzed and emissions determined within 30 days after the emissions unit performance or stack test.

2.b Hg Testing - NESHAPs

The permittee shall test emissions from this incinerator for Hg to comply with 40 CFR Part 61, Subpart E by conducting:

i. a stack test using Method 101A in Appendix B and paragraph 61.54 of 40 CFR Part 61 or Method 29; or

ii. an annual sludge sampling test using Method 105 in Appendix B and paragraph 61.54 of 40 CFR Part 61; or

iii. upon USEPA approval, testing may be performed using sludge analysis methods.

In accordance with 40 CFR 61.53(d), samples shall be taken over such a period as necessary to determine accurately the maximum emissions which will occur in a 24-hour period. Samples shall be analyzed and emissions determined within 30 days after the emissions unit performance or stack test.

If test results show that Hg emissions do not exceed 1,600 grams per 24-hour period after two years of sludge testing, further testing for Hg emissions shall be done 6 months prior to permit renewal for this emissions unit.

V. Testing Requirements (continued)

2.c Particulate emissions testing

Testing for particulate emissions shall be performed as outlined in 40 CFR 60.154 and 40 CFR 60.8.

2.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 Canton City Health Department, Air Pollution Control Division (CCHD, APCD).

2.e The test(s) shall be conducted to determine compliance with the mercury, beryllium, and particulate matter standards to satisfy both the NESHAP and NSPS requirements. The CCHD, APCD reserves the right to require performance testing for each of the other pollutants listed in this permit if it is determined that the emissions unit is either the cause of a nuisance condition and/or is necessary to verify the compliance status with the emissions limitations of this permit.

3. 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).

VI. Miscellaneous Requirements

1. This facility operates two identical incinerators, emissions units N001 and N002. Only one of these two incinerators shall be allowed to operate at any one time, except during the switchover from one incinerator to the other. Consequently the annual allowable emissions reflect the operation of just one incinerator. For example, the total facility carbon monoxide emissions shall be limited to 217 tpy. However, for each emissions unit, an allowable limit of 217 tpy of CO per emissions unit has been established with the restriction that only one emissions unit can be operated at any given time.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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: Incinerator No.2 (N002)

Activity Description: Incinerate dewatered municipal sewage sludge; Provide auxiliary fuel; Scrub off-gases

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
2,160 pounds per hour of dry sludge feed, multiple hearth incinerator for sewage sludge with the use of a wet scrubbing system that includes a precooler, a 3-stage impingement tray scrubber, six venturi stages, and a demister	OAC rule 3745-31-05 (PTI 15-1283)	1.28 lbs/hr of volatile organic compounds (VOC) 5.61 tpy of VOC 0.4 lb/hr of sulfur dioxide (SO2) 1.8 tpy of SO2 1.3 lbs/hr of nitrogen oxides (NOx) 5.7 tpy of NOx 49.5 lbs/hr of carbon monoxide (CO) 217 tpy of CO 1.23 lbs/hr of chromium (Cr) 5.4 tpy of Cr 0.27 lb/hr of lead (Pb) 1.2 tpy of Pb 0.3 lb/hr of nickel (Ni) 1.31 tpy of Ni
	40 CFR Part 61, Subpart C	10 grams of beryllium (Be) per 24-hour period 0.004 tpy of Be
	40 CFR Part 61, Subpart E	3200 grams of mercury (Hg) per 24-hour period 1.29 tpy of Hg
	40 CFR Part 503	See A.II below.
	40 CFR Part 60, Subpart O	1.30 pounds of particulate emissions per ton of dry sludge input 6.15 tpy of particulate emissions Visible particulate emissions, from any stack, shall be less than 20% opacity.
	OAC rule 3745-17-07	See A.I.2.d below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-17-09	See A.I.2.d below.

2. Additional Terms and Conditions

2.a The terms and conditions of this permit were established in the federally enforceable permit to install 15-1283 issued on May 26, 1999.

2.b The annual emission limitations established in this permit are the combined totals for N001 and N002.

2.c Emission limitations for pollutants other than beryllium, mercury, and particulate matter have been established in accordance with the best available technology (BAT) requirements specified in OAC rule 3745-31-05.

2.d The emissions limitation required by this applicable rule is less stringent than the emission limitation established by 40 CFR part 60, Subpart O.

II. Operational Restrictions

1. This emissions unit is subject to all applicable provisions of the final Standards for the Use or Disposal of Sewage Sludge as promulgated by the United States Environmental Protection Agency under 40 CFR, Part 503, Subpart E, which applies to facilities that incinerate sewage sludge.

2. If a performance test shows PM emissions exceed 0.75 pound per ton of dry sludge, the formulation established in 40 CFR 60.155(a)(1)(i) shall be used to determine the allowable pressure drop range. An exceedance of the pressure drop operating level is considered to have occurred when the pressure drop across the scrubber is less than the minimum acceptable level for a duration of 15 minutes or more in an hour and measured only when the sludge is being charged to the incinerator (i.e., excluding downtime, start-up, and shut-down periods).

3. Except as noted, the average oxygen content of the incinerator exhaust gas for each one-hour incinerator operating period shall not exceed the oxygen content measured during the most recent performance test by more than 3 percent. During the performance test conducted on 10/9/96, the average oxygen concentration was 3.3%; therefore, the limit until another performance test is done is 6.3%. If the last previous satisfactory performance test showed a particulate matter emission rate of less than 0.75 lb/ton charged, the oxygen content does not have to be maintained below the designated threshold.

4. Except as noted, every hearth shall be maintained at a temperature to be determined during a performance test in which compliance is demonstrated. The operation of the sewage sludge incinerator shall not exceed the maximum or minimum combustion temperatures (averaged over each one-hour incinerator operating period) as determined during the performance test of the sludge incinerator. If the last previous satisfactory performance test showed a particulate matter emission rate of less than 0.75 lb/ton charged, the temperature does not have to be monitored and these minimum and maximum limits will not have to be met.

5. This facility operates two identical incinerators, N001 and N002. The permittee shall only operate one of these two incinerators at any one time, except during the switchover from one incinerator to the other. The time period for the switchover shall not exceed 48 hours.

III. Monitoring and/or Record Keeping Requirements

1. Monitoring for Be and Hg shall be performed as follows:

a. perform and maintain records of an annual sludge sampling test for Be and Hg using Method 105 in Appendix B and paragraph 61.54 of 40 CFR Part 61; or

b. upon written approval from USEPA, the permittee may perform monitoring and record keeping for Be and Hg using sludge analysis methods.

If the permittee performs the stack test as outlined in sections A.V.1.a and A.V.1.b, then the above monitoring will not be required.

2. This facility shall install, calibrate, maintain, and operate the following monitoring devices:

a. A flow measuring device which can be used to continuously determine either the mass or volume of sludge charged to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of within plus/minus 5 percent over its operating range. The amount of sludge shall be recorded during all periods of operation.

b. A monitoring device that continuously measures and records the pressure drop of the gas flow through the wet scrubbing device. Where a combination of wet scrubbers is used in series, the pressure drop of the gas flow through the combined system shall be continuously monitored. The device used to monitor the scrubber pressure drop shall be certified by the manufacturer to be accurate within plus/minus 1 inch water gauge and shall be calibrated on an annual basis in accordance with the manufacturer's instructions.

c. 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 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 within plus/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.

d. A monitoring device that monitors the water flow rate through the scrubber so that proper operation of the scrubber can be verified.

e. A temperature measuring device at every hearth. A minimum of one thermocouple shall be installed in each hearth in the cooling and drying zones, and a minimum of two thermocouples shall be installed in each hearth in the combustion zone.

f. A continuous measuring device for measuring fuel flow to the incinerator. Each fuel flow measuring device shall be certified by the manufacturer to have an accuracy of within plus or minus 5 percent over its operating range.

3. If the particulate emission rate measured during the most recent performance test is less than 0.75 lb/ton, this facility shall not be required to operate continuous monitoring devices for the mass or volume of sludge charged to the incinerator (section A.III.2.a), temperature of the hearths (section A.III.2.e), and the fuel flow to the incinerator (section A.III.2.f).

4. If exempt from continuous monitoring of the mass or volume of sludge per section A.III.3, then the facility shall maintain daily records of the amount of sludge charged.

5. The permittee shall provide access to the sludge charged so that a well-mixed representative grab sample of the sludge can be obtained. The permittee shall collect a representative grab sample of the sludge fed to the incinerator once per day, and shall analyze the sample for volatile solids content and dry sludge content once per day.

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

6. Unless the permittee is exempt from monitoring fuel flow, temperature, and rate of sludge as noted in section A.III.3, the following quality assurance/quality control requirements shall apply:

a. fuel flow continuous monitoring - quarterly calibration error checks;

b. temperature continuous monitoring - quarterly calibration error checks; and

c. rate of sludge charged to the incinerator continuous monitoring - quarterly calibration error checks.

7. Records of emission test results and other data needed to determine total emissions from emissions units N001 and N002 of all pollutants listed in this permit shall be retained at the facility and shall be made available for inspection by the Director or a representative of the Ohio EPA for a minimum of five years.

8. The permittee shall maintain records of the time periods during which emissions units N001 and N002 were operating simultaneously, including periods during the switchover from one incinerator to the other.

IV. Reporting Requirements

1. If the average particulate matter emission rate measured during the most recent compliance test exceeds 0.75 lb/ton of dry sludge input, the permittee shall submit to the Canton local air agency semi-annually a report in writing which contains the following:

1.a A record of average scrubber pressure drop measurements for each period of 15 minutes duration or more during which the pressure drop of the scrubber was less than, by a percentage specified below, the average scrubber pressure drop measured during the most recent performance test. A percent reduction in pressure drop greater than that calculated according to the following equation shall be reported:

$$P = -111E + 72.15$$

where:

P = the percent reduction in pressure drop, and
E = the average particulate matter emissions (kg/megagram).

1.b A record of average oxygen content in the incinerator exhaust gas for each period of 1-hour duration or more that the oxygen content of the incinerator exhaust gas exceeds the average oxygen content measured during the most recent performance test by more than 3 percent.

1.c A record of when the incinerator combustion zone temperature falls below a minimum temperature, to be determined during a compliance test in which compliance was demonstrated.

2. If the average particulate matter emission rate measured during the most recent compliance test exceeds 0.75 lb/ton of dry sludge input, the permittee shall include in the semi-annual exceedance reports (described in section A.IV.1 above), for each calendar day that an increase in oxygen content of exhaust gas is reported, a record of the following:

a. the scrubber pressure drop average over each 1-hour incinerator operating period;

b. the oxygen content in the incinerator exhaust over each 1-hour incinerator operating period;

c. the temperature of each hearth in the incinerator, averaged over each 1-hour incinerator operating period;

d. the rate of sludge charged to the incinerator, averaged over each 1-hour incinerator operating period;

e. the incinerator fuel use, averaged over each 8-hour incinerator operating period; and

f. the moisture and volatile solids content of the daily grab sample of sludge charged to the incinerator.

These semi-annual reports shall be submitted by January 30 and July 30 of each year and shall cover the previous 6 calendar months (January through June and July through December, respectively).

IV. Reporting Requirements (continued)

3. The permittee shall submit exceedance reports for each day during which emissions units N001 and N002 were in continuous operation simultaneously (except during periods of switchover). The report shall include the reasons for the excursion and any actions which were taken to correct the operational infraction.

4. If applicable, the permittee shall submit annual reports of the sludge analysis results for Be and Hg required under section A.III.1. The reports shall be due by January 30 of each year.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

10 grams of Be over a 24-hour period

Applicable Compliance Method:

The testing for Be emissions from this incinerator, in order to demonstrate compliance with 40 CFR 61, Subpart C, shall be done by conducting either:

i. a stack test using either Method 103 or Method 104 of Appendix B of 40 CFR 61 and as described in 40 CFR 61.33 (USEPA Method 29 may also be used to determine maximum emissions over a 24-hour period); or

ii. perform an annual sludge sampling test using Method 105 in Appendix B and paragraph 61.54 of 40 CFR 61 (same as for Hg sampling); or

iii. upon USEPA approval, testing may be performed using sludge analysis methods.

In accordance with 40 CFR 61.33, samples shall be taken over such a period as necessary to determine accurately the maximum emissions which will occur in a 24-hour period. Samples shall be analyzed and emissions determined within 30 days after the emissions unit performance or stack test.

1.b Emission Limitation:

3200 grams of Hg over a 24-hour period

Applicable Compliance Method:

The testing for Hg emissions from this incinerator, in order to demonstrate compliance with 40 CFR 61, Subpart E, shall be done by conducting either:

i. a stack test using Method 101A in Appendix B and paragraph 61.54 of 40 CFR 61 (USEPA Method 29 may also be used to determine maximum emissions over a 24-hour period); or

ii. perform an annual sludge sampling test using Method 105 in Appendix B and paragraph 61.54 of 40 CFR 61; or

iii. upon USEPA approval, testing may be performed using sludge analysis methods.

In accordance with 40 CFR 61.53(d), samples shall be taken over such a period as necessary to determine accurately the maximum emissions which will occur in a 24-hour period. Samples shall be analyzed and emissions determined within 30 days after the emissions unit performance or stack test.

If test results show that Hg emissions do not exceed 1,600 grams per 24-hour period after two years of sludge testing, further testing for Hg emissions shall be done at the time of renewal for the operating permit for this emissions unit.

V. Testing Requirements (continued)

1.c Emission Limitation:

1.3 pounds of particulate emissions per ton of dry sludge feed

Applicable Compliance Method:

Compliance shall be determined using the test methods and equations specified in 40 CFR 60.154.

1.d Emission Limitation:

0.004 tpy of Be

Applicable Compliance Method:

Multiply the NESHAP emission limit of 10 grams of Be per 24-hour period by 2.205 E-03 lb/gram, then multiply by the actual number of days this emissions unit operated per year, and divide by 2000 lbs/ton. Provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation based on 8760 hours/year of operation.

1.e Emission Limitation:

1.29 tpy of Hg

Applicable Compliance Method:

Multiply the NESHAP emission limit of 3200 grams of Hg per 24-hour period by 2.205 E-03 lb/gram, then multiply by the actual number of days this emissions unit operated per year, and divide by 2000 lbs/ton. Provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation based on 8760 hours/year of operation.

1.f Emission Limitation:

6.15 tpy of particulate emissions

Applicable Compliance Method:

Multiply the NSPS emission limit of 1.3 pounds of particulate emissions per ton of dry sludge feed by the actual amount of dry sludge processed per year and, and divide by 2000 lbs/ton.

1.g Emission Limitation:

less than 20% opacity

Applicable Compliance Method:

USEPA Method 9 (40 CFR Part 60, Appendix A)

1.h Emission Limitation:

1.28 lbs/hr of VOC

Applicable Compliance Method:

If required, USEPA Method 25A (40 CFR Part 60, Appendix A).

V. Testing Requirements (continued)

1.i Emission Limitation:

0.4 lb/hr of SO2

Applicable Compliance Method:

If required, USEPA Method 6 (40 CFR Part 60, Appendix A).

1.j Emission Limitation:

1.3 lbs/hr of NOx

Applicable Compliance Method:

If required, USEPA Method 7 (40 CFR Part 60, Appendix A).

1.k Emission Limitation:

49.5 lbs/hr of CO

Applicable Compliance Method:

If required, USEPA Method 10 (40 CFR Part 60, Appendix A).

1.l Emission Limitation:

1.23 lbs/hr of Cr

Applicable Compliance Method:

If required, USEPA Method 29 (40 CFR Part 60, Appendix A).

1.m Emission Limitation:

0.27 lb/hr of Pb

Applicable Compliance Method:

If required, USEPA Method 29 (40 CFR Part 60, Appendix A).

1.n Emission Limitation:

0.3 lb/hr of Ni

Applicable Compliance Method:

If required, USEPA Method 29 (40 CFR Part 60, Appendix A).

V. Testing Requirements (continued)

1.o Emission Limitation:

5.61 tpy of VOC
1.8 tpy of SO2
5.7 tpy of NOx
217.0 tpy of CO
5.4 tpy of Cr
1.2 tpy of Pb
1.31 tpy of Ni

Applicable Compliance Method:

The tpy limitations were developed by multiplying the lb/hr limitations by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitations. Note: this facility operates two identical incinerators, emissions units N001 and N002. Only one of these two incinerators shall be allowed to operate at any one time, except during the switchover from one incinerator to the other. Consequently the annual allowable emissions reflect the operation of just one incinerator.

2. In accordance with the requirements of PTI 15-1283, the permittee shall conduct, or have conducted, emission testing for this emissions unit for Be, Hg, and particulate emissions by no later than December 1, 1999. Thereafter, the permittee shall conduct, or have conducted, emission testing for this emissions unit for Be, Hg, and particulate emissions 6 months prior to permit renewal, except as noted.

2.a Be Testing - NESHAPs

The permittee shall test emissions from this incinerator for Be to comply with 40 CFR Part 61, Subpart C by conducting:

i. a stack test using either Method 103 or Method 104 of Appendix B of 40 CFR Part 61; or

ii. an annual sludge sampling test using Method 105 in Appendix B and paragraph 61.54 of 40 CFR Part 61 (same as for Hg sampling); or

iii. upon USEPA approval, testing may be performed using sludge analysis methods.

In accordance with 40 CFR 61.33, samples shall be taken over such a period as necessary to determine accurately the maximum emissions which will occur in a 24-hour period. Samples shall be analyzed and emissions determined within 30 days after the emissions unit performance or stack test.

2.b Hg Testing - NESHAPs

The permittee shall test emissions from this incinerator for Hg to comply with 40 CFR Part 61, Subpart E by conducting:

i. a stack test using Method 101A in Appendix B and paragraph 61.54 of 40 CFR Part 61 or Method 29; or

ii. an annual sludge sampling test using Method 105 in Appendix B and paragraph 61.54 of 40 CFR Part 61; or

iii. upon USEPA approval, testing may be performed using sludge analysis methods.

In accordance with 40 CFR 61.53(d), samples shall be taken over such a period as necessary to determine accurately the maximum emissions which will occur in a 24-hour period. Samples shall be analyzed and emissions determined within 30 days after the emissions unit performance or stack test.

If test results show that Hg emissions do not exceed 1,600 grams per 24-hour period after two years of sludge testing, further testing for Hg emissions shall be done 6 months prior to permit renewal for this emissions unit.

V. Testing Requirements (continued)

2.c Particulate emissions testing

Testing for particulate emissions shall be performed as outlined in 40 CFR 60.154 and 40 CFR 60.8.

2.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 Canton City Health Department, Air Pollution Control Division (CCHD, APCD).

2.e The test(s) shall be conducted to determine compliance with the mercury, beryllium, and particulate matter standards to satisfy both the NESHAP and NSPS requirements. The CCHD, APCD reserves the right to require performance testing for each of the other pollutants listed in this permit if it is determined that the emissions unit is either the cause of a nuisance condition and/or is necessary to verify the compliance status with the emissions limitations of this permit.

3. 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).

VI. Miscellaneous Requirements

1. This facility operates two identical incinerators, emissions units N001 and N002. Only one of these two incinerators shall be allowed to operate at any one time, except during the switchover from one incinerator to the other. Consequently the annual allowable emissions reflect the operation of just one incinerator. For example, the total facility carbon monoxide emissions shall be limited to 217 tpy. However, for each emissions unit, an allowable limit of 217 tpy of CO per emissions unit has been established with the restriction that only one emissions unit can be operated at any given time.

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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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