

Synthetic Minor Determination and/or **Netting Determination**

Permit To Install **02-10853**

- A. Source Description
Hazardous Waste Incinerator equipped with six Ionic Wet Scrubbers.
- B. Facility Emissions and Attainment Status
Facility is a major facility. The Facility is located in Lorain County which is an attainment area.
- C. Source Emissions
The source has recently (October 2000) conducted stack testing. With respect to parameters tested, the stack test indicated that the emissions unit was in compliance with applicable limits. The Air Pollution Control equipment for this emissions unit will be completely revamped in order for the emissions unit to show compliance with the MACT for Hazardous Waste Incinerators (40 CFR, Part 63, Subpart EEE). The facility is taking restrictions (rolling 12-month limits) on Oxides of Nitrogen to stay below PSD levels. The facility has CEMS for Oxides of Nitrogen, Oxygen, and Carbon Monoxide.
- D. Conclusion
This permit is a result of negotiations with the facility. The permit should be issued.



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL
LORAIN COUNTY**

CERTIFIED MAIL

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center

Application No: 02-10853

DATE: 9/11/2001

Ross Incineration Services Inc
Arthur Hargate
36790 Giles Road
Grafton, OH 44044

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$2500** will be due. Please do not submit any payment now.

The Ohio EPA is urging 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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

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

CC: USEPA

NEDO



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

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

DRAFT PERMIT TO INSTALL 02-10853

Application Number: 02-10853
APS Premise Number: 0247050278
Permit Fee: **To be entered upon final issuance**
Name of Facility: Ross Incineration Services Inc
Person to Contact: Arthur Hargate
Address: 36790 Giles Road
Grafton, OH 44044

Location of proposed air contaminant source(s) [emissions unit(s)]:
36790 Giles Road
Grafton, Ohio

Description of proposed emissions unit(s):
Replacement rotary kiln for hazardous waste incineration.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Ross Incineration Services Inc

Facility ID: 0247050278

PTI Application: 02-10853

Issued: To be entered upon final issuance

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

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, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable 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 made to the appropriate Ohio EPA District Office or local air agency. 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. See B.10 below if no deviations occurred during the quarter.

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- 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. 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 shall be submitted pursuant to OAC rule 3745-15-06.

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

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

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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. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. 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

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shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- 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 ORC section 3704.08.
 - 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.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete

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

- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35 , the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

Ross Incineration Services Inc

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Issued: To be entered upon final issuance

B. State Only Enforceable Permit To Install General Terms and Conditions

1. Compliance Requirements

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

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 of state-only enforceable 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 state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the 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. 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.

4. 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.

5. Termination of Permit To Install

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

6. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

7. Public Disclosure

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

8. Applicability

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

Ross Incineration Services Inc

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9. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

10. 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.

C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

Pollutant

Tons Per Year

Ross Incineration Services Inc**Facility ID: 0247050278****PTI Application: 02-10853****Issued: To be entered upon final issuance**

Particulate Emissions	50.37
Oxides of Nitrogen	196.2
Sulfur Dioxide	66.14
Carbon Monoxide	179.6
Total Hydrocarbons	10.5
Lead	3.0
Hydrogen Chloride	17.5
Mercury	1.13
Beryllium	0.004
Combined Emissions of Dioxin and Furan	1.8 E-05

Ross I

PTI A

Emissions Unit ID: N001

Issued: To be entered upon final issuance

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

1. The permittee shall comply with all applicable requirements of 40 CFR, Part 61, Subpart FF, National Emission Standard for Benzene Waste Operations.

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
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N001 - Replacement rotary kiln for hazardous waste incineration	OAC rule 3745-31-05(A)(3)
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OAC rule 3745-31-05(D)

OAC rule 3745-17-07(A)

OAC rule 3745-17-09

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	Applicable Emissions <u>Limitations/Control Measures</u>	
OAC rule 3745-18-06	Particulate emissions from the stack shall not exceed 0.047 grains per dry standard cubic foot at seven percent oxygen, 11.5 pounds per hour, and 50.37 tons per year.	0.004 ton per year. Combined emissions of Dioxin and furan (total tetra- through octachlorinated dibenzo-p-dioxins and dibenzofurans) emissions shall not exceed 30 nanograms per dry standard cubic meter at seven percent oxygen, and 1.8 E-05 ton per year.
OAC rule 3745-17-08(B)	Oxides of nitrogen emissions shall not exceed 158.1 pounds per rolling 24-hour period.	See A.2.e.
OAC rule 3745-17-07(B)	Sulfur dioxide emissions shall not exceed 15.1 pounds per hour and 66.14 tons per year.	Visible fugitive emissions shall not exceed 20% opacity as a three-minute average.
40 CFR Part 63, Subpart EEE	Carbon monoxide emissions shall not exceed 41 pounds per hour and 179.6 tons per year.	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)
40 CFR, Part 61, Subpart C	Total Hydrocarbon emissions shall not exceed 2.4 pounds per hour and 10.5 tons per year.	Oxides of nitrogen shall not exceed 196.2 tons per rolling 12-month period, see A.2.d.
	Lead emissions shall not exceed 11.5 pound per hour, 0.76 tons per quarter and 3.0 tons per year.	Visible emissions from the stack shall not exceed 20% opacity as a six-minute average, except as provided by rule
	Hydrogen chloride emissions shall not exceed 4.0 pounds per hour or one percent of the hydrogen chloride in the exhaust gas prior to entering any air pollution control equipment and 17.5 tons per year.	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	Mercury emissions shall not exceed 2.7 pound per rolling 24-hour period and 1.13 tons per year.	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	Beryllium emissions shall not exceed	The requirements of this rule do not apply, in accordance with OAC rule

3745-17-08(A)(1).

The requirements of this rule do not apply, in accordance with OAC rule 3745-17-07(A)(3)(h).

See A.2.b. and A.2.c.

Beryllium emissions shall not exceed 10 grams per 24 hour period.

2. Additional Terms and Conditions

2.a This permit to install is for the installation of a rotary kiln which is used for the incineration of hazardous and non-hazardous waste. This kiln replaced an existing kiln in 1991. Total maximum waste feed rate to the kiln and to an existing main combustion chamber is 24,000 pounds per hour. Air contaminant emissions are controlled by a quench chamber, two packed bed tower scrubbers in series and three parallel banks of two ionic wet scrubber (IWS) units equating to a total of six IWS units. Replacement of this air pollution control equipment shall not require a permit to install unless the replacement meets the definition of modification in OAC rule 3745-31-01 (VV).

2.b This emissions unit is a hazardous waste combustor and shall comply with all requirements of 40 CFR Part 63 (MACT), Subpart EEE, National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors. The compliance date for the standards and operating requirements of the MACT rule is September 30, 2002.

2.c After the compliance deadline of the MACT rule, any emission limitation, control measure or operating restriction from this permit to install that is less stringent than the limitation, control measure or operating restriction from the MACT rule shall no longer remain in effect but shall be replaced by the limitation, control measure or operating restriction from the MACT. All other requirements of this permit shall remain in effect.

2.d The emissions of Oxides of Nitrogen from this emissions unit shall not exceed 196.2 tons per year, based upon a rolling, monthly summation of the Oxides of Nitrogen emissions.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of Oxides of Nitrogen (Tons)</u>
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**Ross I
PTI A**

Emissions Unit ID: N001

Issued: To be entered upon final issuance

1	16.4
1-2	32.8
1-3	49.2
1-4	65.6
1-5	82
1-6	98.4
1-7	114.8
1-8	131.2
1-9	147.6
1-10	164
1-11	180.4
1-12	196.2

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual emission limitation for Oxides of Nitrogen shall be based upon a rolling, 12-month summation of the Oxides of Nitrogen emissions.

- 2.e** The incinerator system shall achieve a destruction and removal efficiency of 99.99% for each principal organic hazardous constituent (POHC).

II. Operational Restrictions

1. Except as provided in Section A.II.13 of this permit, the maximum hourly waste feed rate for this emissions unit shall not exceed 24,000 pounds per hour.
2. The incinerator, including all associated equipment and grounds, shall be designed, operated and maintained to prevent the emissions of objectionable odors.
3. The permittee shall operate and maintain a slag and bottom ash collection system in order to minimize and eliminate fugitive dust emissions. Trucks hauling slag and bottom ash shall be covered prior to leaving the plant property.
4. The temperature at the thermocouple at the midpoint of the secondary combustion chamber (i.e. the main combustion chamber) shall be maintained at a temperature in excess of the minimum average temperature, as determined by the most recent stack test, which has been demonstrated to be necessary to destroy 99.99% of each POHC at all times while waste is being fed into the kiln. At all times, this gas temperature shall be a minimum of 1900 degrees Fahrenheit.
5. The temperature at the inlet to the air pollution control equipment (after the quench chamber) shall be maintained at or below 400 degrees Fahrenheit.

Emissions Unit ID: N001

6. The pH of the scrubber liquor used in the quench chamber and in the packed tower scrubbers shall be maintained at or above 7.0.
7. The pH of the scrubber liquor used in the IWS units shall be maintained at or above 6.0.
8. Four of the six IWS units shall be operational at all times the emissions unit is operating. The total power input to the operational units shall be greater than or equal to the total power input established during the most recent emissions test that demonstrated compliance with the particulate matter limit. The number of IWS units that were operational during the most recent stack test that demonstrated compliance shall be the minimum number of IWS units that the permittee shall operate all times the emissions unit is operational.
9. Start up of the incinerator shall begin with the heating of the cold combustion zone with natural gas, propane, distillate fuel oil or waste materials which have been classified as hazardous solely due to their ignitability. Alternate fuels may not be used unless approved by the Ohio EPA.
10. Feeding of waste materials to the kiln and to the main combustion chamber shall not commence until the temperature in the secondary combustion chamber (i.e. the main combustion chamber), as measured by a thermocouple located at its midpoint, has reached or exceeded the temperature demonstrated to be necessary to destroy 99.99% of each POHC. At no time shall waste material be fed to the incinerator unless the temperature in the secondary combustion chamber has reached at least 1900 degrees Fahrenheit.
11. Waste material shall not be fed to the kiln until the IWS units and the packed tower scrubbers have been started up and have achieved a stable operating condition. A stable condition for the IWS shall be realized when the power input equals or exceeds the power input during the most recent stack test. A stable condition for the packed tower scrubbers shall occur when the minimum required flow rate, that was established during the most recent stack test, has been realized.
12. The permittee shall comply with all State and federal laws and regulations including, but not limited to, the Toxic Substances Control Act of 1979. No polychlorinated biphenyls (PCBs) in excess of 50 ppm shall be incinerated. No herbicides, pesticides, rodenticides, or insecticides shall be incinerated in violation of State and federal laws and regulations.
13. In preparation for a RCRA trial burn or the comprehensive performance test required by 40 CFR Part 63, Subpart EEE, the total feed rate to the incinerator may exceed 24,000 pounds per hour. This preparation period shall not exceed 720 hours and, during this period, the maximum hourly waste feed rate shall not exceed 26,400 pounds per hour.
14. The packed tower scrubber flow rate shall be no less than 700 GPM while the emissions unit is operating.
15. Emergency process terminations (EPTs) shall be minimized per the Preventive Maintenance and Malfunction Abatement Plan as required in section VI.1 of this permit.

III. Monitoring and/or Recordkeeping Requirements

1. CO monitoring system
 - a. A statement of certification of the existing continuous CO monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 and 6. Proof of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.
 - b. The permittee shall operate and maintain existing equipment to continuously monitor and record CO from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.
 - c. The permittee shall maintain records of all data obtained by the continuous CO monitoring system including, but not limited to, parts per million CO on an instantaneous (one-minute) basis, emissions of CO in units of the applicable standard in the appropriate averaging period (e.g., hourly, hourly rolling, 3-hour, daily, 30-day rolling, annual, etc.), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
2. NO_x monitoring system
 - a. A statement of certification of the existing continuous NO_x monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 and 6. Proof of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.
 - b. The permittee shall operate and maintain existing equipment to continuously monitor and record NO_x from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.
 - c. The permittee shall maintain records of all data obtained by the continuous NO_x monitoring system including, but not limited to, parts per million NO_x on an instantaneous (one-minute) basis, emissions of NO_x in units of the applicable standard in the appropriate averaging period (e.g., hourly, hourly rolling, 3-hour, daily, 30-day rolling, annual, etc.), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
3. O₂ monitoring system
 - a. A statement of certification of the existing continuous O₂ monitoring system shall be

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maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3. Proof of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

- b. The permittee shall operate and maintain existing equipment to continuously monitor and record O₂ from this emissions unit in units of percent O₂. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 .
 - c. The permittee shall maintain records of all data obtained by the continuous O₂ monitoring system including, but not limited to percent O₂ on an instantaneous (one-minute) basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
 - d. The permittee shall determine and record O₂ from this emissions unit in units of percent O₂. dry.
4. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the incinerator at the following locations: the midpoint of the main combustion chamber, mcc (i.e. the secondary combustion chamber) and the outlet of the quench chamber. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. All periods of time during which the temperature within the main combustion chamber, when the emissions unit was burning hazardous waste, was less than 1900 degrees Fahrenheit or less than the temperature demonstrated to be necessary to destroy 99.99% of each POHC.
 - b. All periods of time during which the temperature at the outlet of the quench chamber, when the emissions unit was burning hazardous waste, was more than 400 degrees Fahrenheit.
5. The permittee shall properly install, operate and maintain equipment to continuously monitor 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 scrubber water flow rate, in gallons per minute, on a continuous basis.

6. The permittee shall monitor and record the pH of the scrubber liquor while the emissions unit is in operation at the following locations: quench chamber, packed tower scrubbers and the IWS units. The permittee shall collect and record the pH of the scrubber liquor, at each location. The frequency of pH monitoring shall be approved by the Ohio EPA.
7. The permittee shall properly install, operate and maintain equipment to monitor and record the power input for each IWS unit while the emissions unit is in operation. The monitors 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 for each operational IWS unit:

- a. The power input for each IWS, on an hourly basis.
 - b. The total power input for the IWS control system, on an hourly basis.
 - c. The number of fields that were energized, on an hourly basis.
 - d. The charging amperage for each IWS unit on a daily basis.
 - e. The charging voltage for each IWS on a daily basis.
 - f. The pressure drop across each IWS unit, on a daily basis.
8. The permittee shall maintain a record of the materials burned in the kiln and the main combustion chamber. At a minimum, the record shall contain:
 - a. the total hourly average waste feed rate to the kiln and the main combustion chamber (mcc);
 - b. the average hourly chlorine content of the waste fed to the kiln and the mcc;
 - c. the average hourly sulfur content of the waste fed to the kiln and the mcc; and
 - d. the average hourly lead content of the waste fed to the kiln and the mcc.
 9. On at least four days of each calendar week (Sunday through Saturday), the permittee shall determine the opacity of the stack gases, in accordance with U.S. EPA Reference Method 9, for a period of not less than sixty consecutive minutes while the emissions unit is in operation. The total waste feed rate shall be recorded for the period during which the stack gases' opacity was recorded.

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10. The permittee shall develop a plan for the routine sampling and laboratory analysis of incoming wastes for the purpose of preventing polychlorinated biphenyls (PCBs), in excess of 50 ppm from being incinerated in the kiln and the secondary combustion chamber. Such plan shall include as a minimum:
- a. A copy of the standard supplier contract which prohibits the delivery of PCBs in excess of 50 ppm to the facility; and
 - b. a copy of written provision for PCB analysis from an Ohio EPA-approved laboratory.
- All laboratory analyses shall be reported to the permittee directly from the laboratory and shall be retained on site and available for inspection by the Ohio EPA for a minimum of five (5) years.
11. The permittee shall record the following information for each EPT (Emergency Process Termination) that occurs while burning hazardous waste:
- a. the date;
 - b. the time the bypass vent was opened and closed;
 - c. the amount of waste in the kiln and the main combustion chamber at the time the vent opened;
 - d. an estimate of air emissions, using the best available data, including emissions of particulate matter, VOC, hydrogen chloride, sulfur dioxide, oxides of nitrogen, carbon monoxide, beryllium, lead, mercury and other hazardous air pollutants (HAPs);
 - e. the cause(s) of the EPT; and
 - f. whether, prior to the EPT, all actions necessary and required by the permittee's preventative maintenance and malfunction abatement plan were being implemented.
12. The permittee shall comply with the monitoring and record keeping sections of the hazardous waste combustor MACT, 40 CFR Part 63, section 63.1209 and section 63.1211 by the compliance date of the MACT Rule.
13. The permittee shall maintain monthly records of the following information:
- a. The Oxides of Nitrogen emission rate for each month (tons).
 - b. Beginning after the first 12 calendar months of operation following the issuance of this

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permit, the rolling, 12-month summation of the Oxides of Nitrogen emission rate (tons).

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.

14. The following information shall be recorded electronically and made accessible via modem:
 - a. Oxides of nitrogen emissions (ppm and lbs/hr, as a one minute block average);
 - b. CO emissions (raw ppm, ppm corrected to 7% oxygen on a dry basis, and pounds per hour, on a ten minute and 60 minute rolling average);
 - c. percent oxygen on a dry basis, as a one minute average;
 - d. kiln and main chamber temperature, as a one minute average, in degrees Fahrenheit; and
 - e. the quench gas temperature, in degrees Fahrenheit.
15. The permittee shall record the number and duration for each waste feed cut off.
16. The permittee shall record all times fuels not listed in II.9 and not approved by the Ohio EPA are used to heat the cold-combustion zone during incinerator start-up.
17. The permittee shall record all times waste material was fed to the kiln when the IWS units and packed bed scrubbers were not operating at stable conditions.

IV. Reporting Requirements

1. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of any applicable limitation(s) specified in OAC Chapter 3745-21, 40 CFR Part 60, or any limitation(s) specified in the terms and conditions of this permit, in units of the standard. These reports shall also contain the total CO emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

2. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of Oxides of Nitrogen values in excess of the applicable limits specified in 40 CFR Part 76 or any limitations specified in the terms and conditions of this permit. These reports shall also contain the total Oxides of Nitrogen emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous Oxides of Nitrogen monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

3. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of continuous O₂ monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit malfunctions. The total operating time of

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the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

4. The permittee shall submit deviation (excursion) reports which identify all periods of time during which the temperature did not comply with the temperature limitations specified above for the main combustion chamber and the quench.

5. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:

The packed tower scrubber water flow rate.

6. The permittee shall submit pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above for the quench chamber, the packed tower scrubbers and the IWS units.

7. The permittee shall submit deviation (excursion) reports that identify all periods of time during which more than 2 IWS units were not operational and the emissions unit was in operation.

8. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the total hourly waste feed to the kiln and main combustion chamber exceeded 24,000 pounds per hour. The report shall indicate the amount of waste fed during that period.

9. The permittee shall submit deviation (excursion) reports that identify all periods of time during which opacity of the stack gases exceeded the limit specified in this permit. The report shall include the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation.

10. The permittee shall submit deviation (excursion) reports that identify all periods of time during which waste with a concentration of greater than 50 ppm of PCB was fed to the kiln or to the main combustion chamber. The report shall indicate the amount of waste fed during that period and the PCB concentration.

11. The permittee shall submit reports on every EPT that occurs while hazardous waste is being combusted. These reports shall contain at a minimum:

a. the date and the time(s) the bypass vent was opened and closed:

b. the amount of waste in the kiln and the main combustion chamber at the time the vent opened;

c. an estimate of air emissions, using the best available data, including emissions of particulate matter, VOC, hydrogen chloride, sulfur dioxide, oxides of nitrogen, carbon monoxide,

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beryllium, lead, mercury and other hazardous air pollutants (HAPs);

- d. the cause(s) of the EPT; and
- e. whether, prior to the EPT, all actions necessary and required by the permittee's preventative maintenance and malfunction abatement plan were being implemented.

These reports shall not excuse the permittee from reporting malfunctions in accordance with OAC rule 3745-15-06(B) nor prevent the Ohio EPA, Division of Hazardous Waste Management from requiring the submittal of reports.

- 12. The permittee shall comply with the reporting sections of the hazardous waste combustor MACT, 40 CFR Part 63, sections 63.1211 and 63.1212 by the compliance date of the MACT Rule.
- 13. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, NOx emissions limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels.
- 14. The permittee shall submit reports to the Ohio EPA District Office documenting any waste feed cut off events (date, time, duration and reason) along with any corrective action(s) taken.
- 15. The permittee shall submit deviation (excursion) reports which identify all times fuels other than those allowed by II.9. are used to heat the cold combustion zone during incinerator start-up.
- 16. The permittee shall submit deviation (excursion) reports which identify all times waste was fed to the kiln while the IWS units and packed bed scrubbers were not operating at stable conditions.

V. Testing Requirements

- 1. Emission Limitation: Particulate emissions from the stack shall not exceed 0.047 grains per dry standard cubic foot at seven percent oxygen, 11.5 pounds per hour.

Applicable Compliance Method: Compliance with the shall be determined in accordance with OAC rule 3745-17-03(B)(8).
- 2. Emission Limitation: Particulate emissions from the stack shall not exceed 50.37 tons per year.

Applicable Compliance Method: Compliance shall be determined by multiplying the results of the most recent compliance stack test (pounds of particulate emissions per hour) by 8760 (maximum operating hours per year) and dividing by 2000 (pounds per ton).
- 3. Emission Limitation: Oxides of nitrogen emissions shall not exceed 158.1 pounds per rolling 24-hour period.

Applicable Compliance Method: Compliance shall be determined by operating the continuous emissions monitoring system (CEMS) for oxides of nitrogen, provided that

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system meets the requirements of 40 CFR, Part 60, Appendix B.

4. Emission Limitation: Oxides of nitrogen shall not exceed 196.2 tons per rolling 12-month period.

Applicable Compliance Method: Compliance shall be determined by summing the monthly oxides of nitrogen emission rates over any 12-month period. The monthly emission rates shall be determined by operating the CEMS for oxides of nitrogen.
5. Emission Limitation: Sulfur dioxide emissions shall not exceed 15.1 pounds per hour.

Applicable Compliance Method: Compliance shall be determined in accordance with OAC rule 3745-18-04(A).
6. Emission Limitation: Sulfur dioxide emissions shall not exceed 66.14 tons per year.

Applicable Compliance Method: Compliance shall be determined by multiplying the allowable hourly emissions limit (15.1 lbs/hr) by maximum possible operating hours (8760 hours/yr) and dividing by 2000 (lbs/ton). Therefore, provided that compliance with the hourly limit is met, compliance with the annual limit shall be met.
7. Emission Limitation: Carbon monoxide emissions shall not exceed 41.0 pounds per hour.

Applicable Compliance Method: Compliance shall be determined by operating the CEMS for carbon monoxide, provide that system meets the requirements of 40 CFR, Part 60, Appendix B.
8. Emission Limitation: Carbon monoxide emissions shall not exceed 179.6 tons per year.

Applicable Compliance Method: Compliance shall be determined by multiplying the allowable hourly emissions limit (41.0 lbs/hr) by maximum possible operating hours (8760 hours/yr) and dividing by 2000 (lbs/ton). Therefore, provided that compliance with the hourly limit is met, compliance with the annual limit shall be met.
9. Emission Limitation: Total Hydrocarbon emissions shall not exceed 2.4 pounds per hour.

Applicable Compliance Method: Compliance shall be determined by emissions testing, using US EPA Reference Method 25 or 25A, if required by the Ohio EPA.
10. Emission Limitation: Total Hydrocarbon emissions shall not exceed 10.5 tons per year.

Applicable Compliance Method: Compliance shall be determined by multiplying the allowable

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hourly emissions limit (2.4 lbs/hr) by maximum possible operating hours (8760 hours/yr) and dividing by 2000 (lbs/ton). Therefore, provided that compliance with the hourly limit is met, compliance with the annual limit shall be met.

11. Emission Limitation: Lead emissions shall not exceed 11.5 pounds per hour.

Applicable Compliance Method: Compliance shall be determined based on the permittee's BIF lead feed rate as determined during a trial burn.

12. Emission Limitation: Lead emissions shall not exceed 0.76 tons per quarter.

Applicable Compliance Method: Compliance shall be determined by multiplying 0.003 grains per dry standard cubic foot by the flow rate (as determined by the most recent stack test) multiplying by the number of operating hours per quarter.

13. Emission Limitation: Hydrogen chloride emissions shall not exceed 4.0 pounds per hour or one percent of the hydrogen chloride in the exhaust gas prior to entering any air pollution control equipment.

Applicable Compliance Method: Compliance shall be determined by emissions testing, using US EPA Reference Method 26A, if required by the Ohio EPA.

14. Emission Limitation: Hydrogen chloride emissions shall not exceed 17.5 tons per year.

Applicable Compliance Method: Compliance shall be determined by multiplying the allowable hourly emissions limit (4.0 lbs/hr) by maximum possible operating hours (8760 hours/yr) and dividing by 2000 (lbs/ton). Therefore, provided that compliance with the hourly limit is met, compliance with the annual limit shall be met.

15. Emission Limitation: Mercury emissions shall not exceed 2.7 pound per rolling 24-hour period.

Applicable Compliance Method: Compliance shall be determined by emissions testing, using US EPA Reference Method 29 or Method 101A (Part 61, Appendix B), if required by the Ohio EPA.

16. Emission Limitation: Mercury emissions shall not exceed 1.13 tons per year.

Applicable Compliance Method: Compliance shall be determined by multiplying the results of the most recent stack test (average pounds per hour) by (8760 hours/yr) and dividing by 2000 (lbs/ton). Therefore, provided that compliance with the rolling 24-hour limit is met, compliance with the annual limit shall be met.

17. Emission Limitation: Beryllium emissions shall not exceed 10 grams per 24 hour period.

Applicable Compliance Method: Compliance shall be determined by emissions testing, using US EPA Reference Method 29, if required by the Ohio EPA.

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18. Emission Limitation: Beryllium emissions shall not exceed 0.004 ton per year.
- Applicable Compliance Method: Compliance shall be determined by multiplying the allowable 24-hour emissions limit (10 gram/h24-hour period) by maximum possible operating hours (8760 hours/yr), dividing by 454 (grams/lb) and dividing by 2000 (lbs/ton). Therefore, provided that compliance with the hourly limit is met, compliance with the annual limit shall be met.
19. Emission Limitation: Combined Dioxin and furan (total tetra- through octachlorinated dibenzo-p-dioxins and dibenzofurans) emissions shall not exceed 30 nanograms per dry standard cubic meter at seven percent oxygen.
- Applicable Compliance Method: Compliance shall be determined by emissions testing, using US EPA Reference Method 23, if required by the Ohio EPA.
20. Emission Limitation: Dioxin and furan (total tetra- through octachlorinated dibenzo-p-dioxins and dibenzofurans) emissions shall not 1.8 E-05 ton per year.
- Applicable Compliance Method: Compliance shall be determined by multiplying the allowable hourly emissions limit (30 gram/dscm) by maximum possible operating hours (8760 hours/yr), and by maximum gas flow rate (dscm/hr) and dividing by 2000 (lbs/ton). Therefore, provided that compliance with the hourly limit is met, compliance with the annual limit shall be met.
21. Emission Limitation: Visible fugitive emissions shall not exceed 20% opacity as a three-minute average.
- Applicable Compliance Method: Compliance shall be determined according to test method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.
22. Emission Limitation: Visible emissions from the stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.
- Applicable Compliance Method: Compliance with the stack visible emissions limitation shall be determined according to test method 9 as set forth in 40 CFR Part 60, Appendix A, as such appendix existed on July 1, 1996.
23. Emission Limitation: The incinerator system shall achieve a destruction and removal efficiency of

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99.99% for each principal organic hazardous constituent (POHC).

Applicable Compliance Method: Compliance shall be determined by emissions testing, using US EPA Reference Methods, if required by the Ohio EPA.

24. Stack Test Requirements

The permittee shall conduct, or have conducted, emission testing for emissions unit N001 in accordance with the following requirements:

- a. The emission testing shall be conducted within 90 days after the issuance of this permit to install and on an annual basis thereafter.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rates for particulate matter, sulfur dioxide, VOC, lead, hydrogen chloride, mercury, beryllium, dioxin and furans and the destruction efficiency requirement for POHC.
- c. The following test method(s) from 40 CFR Part 60, Appendix A shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate matter, Method 5, for SO₂, Method 6 or 6C, for VOC, Method 25 or 25A, for HCl, Method 26A, for lead, Method 12 or 29, for beryllium and mercury, Method 29 and for dioxin and furan, Method 23.
- 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 Ohio EPA District Office.
- e. 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. 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 refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office 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 (i.e. stack test contractor) and submitted to the appropriate Ohio EPA District Office within 30 days following completion of the test(s).

25. The permittee may, upon receipt of written approval from the Ohio EPA District Office, modify the frequency of the stack tests required by this permit if operating experience indicates that less

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frequent testing would be sufficient to ensure compliance with the above-mentioned applicable requirements.

VI. Miscellaneous Requirements

1. The permittee shall follow all requirements of an approved Preventive Maintenance and Malfunction Abatement Plan (PMMAP) for this emissions unit and its air pollution control equipment.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
N001 - Replacement rotary kiln for hazardous waste incineration		Compliance with Air Toxic Policy

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P015) was evaluated based on the actual materials and the design parameters of (P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, P013, P014, P015, and P016) emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the TSCREEN model. The predicted 1-hour maximum ground-level concentration from the use of the TSCREEN model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hydrogen Chloride

Ceiling Value (mg/m3): 7.46

Maximum Hourly Emission Rate (lbs/hr): 4.0

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**Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 1.66**

MAGLC (ug/m3): 131

Pollutant: Mercury

TLV (mg/m3): 0.025

Maximum Hourly Emission Rate (lbs/hr): 2.7

**Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): To Be Determined (TSCREEN - 1.12)**

MAGLC (ug/m3): 0.595

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the

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permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None