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

RE: FINAL PERMIT TO INSTALL
LORAIN COUNTY
Application No: 02-10853

CERTIFIED MAIL

Y	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
40 CFR Part 63, subpart EEE	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 3/13/2003

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

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

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.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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 within thirty (30) days after the notice of the Directors 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. 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

Very truly yours,

Michael W. Ahern

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

CC: USEPA **NEDO**

FINAL PERMIT TO INSTALL 02-10853

Application Number: 02-10853

APS Premise Number: 0247050278

Permit Fee: **$2500**

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

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 <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, 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.9 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. 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

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 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 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 <u>obtained before</u> 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 ninety (90) 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.

12. 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.

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

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

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

4. Termination of Permit To Install

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.

5. 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.

6. 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.

7. 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).

8. 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.

9. 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.

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
Particulate Emissions	**50.37**
Nitrogen Oxides	**196.2**
Sulfur Dioxide	**66.14**
Carbon Monoxide	**179.6**
Hydrocarbons	**22.56**
Lead	**3.0**
Hydrochloric acid and chlorine gas	**144.07**
Mercury	**1.13**
Beryllium	**0.004**
Combined Emissions of Dioxin and Furan	**2.3 E-06**

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, the National Emission Standard for Benzene Waste Operations; Subpart C, National Emission Standard for Beryllium; 40 CFR Part 63, the interim standards for Subpart EEE, National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors, and the final standards when promulgated; and Subpart DD, National Emission Standards for Hazardous Air Pollutants from Off-site Waste and Recovery 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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
N001 - Hazardous Waste Incinerator (Thermal Oxidizer # 7, rotary kiln and main combustion chamber) rated at 24,000 pounds per hour feed, and equipped with a quench chamber, cyclone separator, radial-flow venturi scrubber, a packed bed scrubber, two wet electrostatic precipitators, and an ash management system	OAC rule 3745-31-05(A)(3)	Particulate emissions from the stack shall not exceed: 0.047 grain per dry standard cubic foot at seven percent oxygen; 11.5 pounds per hour; and 50.37 tons per year. Nitrogen oxides emissions shall not exceed: 158.1 pounds per hour on a rolling 24-hour average basis; and 196.2 tons per year (see Section A.I.2.d). Sulfur dioxide emissions shall not exceed: 15.1 pounds per hour; and 66.14 tons per year. Carbon monoxide emissions shall not exceed: 41 pounds per hour; and 179.6 tons per year. Hydrocarbon emissions shall not exceed: 5.15 pounds per hour; and 22.56 tons per year. Lead emissions shall not exceed: 11.5 pound per hour; 0.76 ton per quarter; and 3.0 tons per year

	Hydrochloric acid and chlorine gas emissions, expressed as hydrochloric acid equivalents, shall not exceed: 32.89 pounds per hour; and 144.07 tons per year. Mercury emissions shall not exceed: 1.85 pounds per hour on a rolling 24-hour average basis; and 1.13 tons per year. Beryllium emissions shall not exceed 0.004 ton per year. Dioxin and furan emissions shall not exceed: 2 ng TEQ/dscm, at seven percent oxygen; and 2.3×10^{-6} ton per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) See Section A.I.2.e.
OAC rule 3745-31-05(D)	Nitrogen oxides emissions shall not exceed 196.2 tons per rolling 365-day period (and see Section A.I.2.d).
OAC rule 3745-17-07(A)	Visible emissions from the stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.
OAC rule 3745-17-09	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-18-06	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-08(B)	The requirements of this rule do not apply, in accordance with OAC rule 3745-17-08(A)(1).

	OAC rule 3745-17-07(B)	The requirements of this rule do not apply, in accordance with OAC rule 3745-17-07(A)(3)(h).
	40 CFR Part 63, Subpart EEE (interim MACT standards for hazardous waste combustors, compliance must be demonstrated by 9/30/03)	Dioxins and furans emissions shall not exceed: 0.40 ng TEQ/dscm, corrected to 7 % oxygen; 1.049×10^{-7} lb/hr; and 4.6×10^{-7} ton/yr (see Section A.II.5). Mercury emissions shall not exceed: 130 ug/dscm, corrected to 7% oxygen; 0.034 lb/hr; and 0.149 ton/yr. Lead and cadmium emissions, combined, shall not exceed: 240 ug/dscm, corrected to 7% oxygen; 0.063 lb/hr; and 0.276 ton/yr. Arsenic, beryllium, and chromium emissions, combined, shall not exceed: 97 ug/dscm, corrected to 7% oxygen; 0.025 lb/hr; and 0.110 ton/yr. CO emissions shall not exceed: 100 ppm by volume, over an hourly rolling average, on a dry basis, corrected to 7% oxygen; 32.76 lbs/hr; and 143.5 tons/yr. Hydrocarbon emissions shall not exceed: 10 ppm by volume during the DRE test run or equivalent, over an hourly rolling average, on a dry basis, corrected to 7% oxygen, reported as propane; 5.15 lbs/hr; and 22.56 tons/yr. Hydrochloric acid and chlorine gas emissions, combined and expressed as

	hydrochloric acid equivalents, shall not exceed: 77 ppm by volume, on a dry basis, corrected to 7% oxygen; 32.89 lbs/hr; and 144.07 tons/yr. Particulate emissions shall not exceed: 34 mg/dscm, corrected to 7% oxygen; 0.015 grain/dscf, corrected to 7% oxygen; 8.91 lbs/hr; and 39.03 tons/yr. See Sections A.I.2.b and A.I.2.c.
40 CFR Part 61, Subpart E (NESHAP for Mercury)	The emission limitation specified by this rule is less stringent that the emission limitation for mercury, established pursuant to OAC rule 3745-31-05(A)(3) and 40 CFR 63, Subpart EEE.
40 CFR Part 61, Subpart C (NESHAP for beryllium)	Beryllium emissions shall not exceed 10 grams per 24 hour period. See Sections A.I.2.g and A.III.25.
40 CFR Part 61, Subpart FF (NESHAP for benzene waste operations)	

* TEQ is the toxicity equivalence, the international method of relating the toxicity of various dioxin/furan cogeners to the toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin

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, a cyclone separator, a radial flow venturi scrubber, and a packed bed scrubber, followed by two wet electrostatic precipitators.

2.b This emissions unit is a hazardous waste combustor and shall comply with all applicable requirements of the interim standards of 40 CFR Part 63 Maximum Achievable Control Technology (MACT), Subpart EEE, National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors, by September 30, 2003, until the final standards are promulgated, at which time the permittee shall comply with all the applicable requirements of the final standards.

2.c This emissions unit is not permitted to burn and shall not burn dioxin-listed hazardous wastes, including waste codes of F020, F021, F022, F023, F026, or F027.

2.d The emissions of nitrogen oxides from this emissions unit shall not exceed 196.2 tons, based upon a cumulative, 365-day summation of the nitrogen oxides emissions.

To ensure enforceability during the first twelve calendar months of operation, following the issuance of this permit, the emissions from the previous 11 calendar months of operation shall be used to calculate the rolling, 12-month nitrogen oxides emissions.

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual emission limitation for nitrogen oxides shall be based upon a cumulative rolling, 365-day summation of the nitrogen oxides emissions.

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

2.f As a requirement of 40 CFR Part 63, Subpart EEE 63.1207(e)(1)(i), the permittee shall submit a notification of the intention to conduct an initial comprehensive performance test and continuous monitoring system (CMS) performance evaluation. The permittee shall submit a site-specific comprehensive performance test plan and CMS performance evaluation test plan at least one year before the performance test and performance evaluation are scheduled to begin. The comprehensive performance test plan and CMS performance evaluation test plan shall have the content as required by the rule and shall be reviewed and approved by the Ohio EPA.

2.g The permittee shall monitor and maintain the total annual benzene quantity from facility waste to less than 10 megagrams per year. The total annual benzene quantity is determined based upon the quantity of benzene in the waste before entering the incinerator. If it is determined that the benzene quantity has exceeded or will exceed 10 megagrams per year, the permitee shall demonstrate compliance with 61.342(b) and 61.342(c) of the NESHAP.

2.h The permittee may request an extension, petition, adjustment, waiver, or alternative method for certain requirements, in accordance with the interim standards or as will be permitted in the final standards of 40 CFR Part 63, Subpart EEE and/or as is provided in 40 CFR Part 63, Subpart A. Such requests shall be in accordance with the rules referenced in Part 63.1210(a) of the National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors, Subpart EEE, or as required by the General Provisions of the National Emissions Standards for Hazardous Air Pollutants for Source Categories, Subpart A.

II. Operational Restrictions

1. Except as provided in Section A.II.10 of this permit, the maximum hourly waste feed rate for this emissions unit shall not exceed 24,000 pounds per hour. Following the compliance date of

the interim standards for 40 CFR 63, Subpart EEE, the permittee shall comply with the feed rate limit on an hourly rolling average basis.

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 that will eliminate fugitive dust emissions. Trucks hauling slag and bottom ash shall be covered prior to leaving the plant property.

4. The main combustion chamber temperature shall be maintained at a temperature in excess of the minimum temperature which has been demonstrated to be necessary to destroy 99.99% of each POHC at all times while waste is being fed to the incinerator. Until a performance test is conducted that demonstrates compliance and a lower minimum temperature is established, this gas temperature shall be maintained at a minimum of 1900 degrees Fahrenheit at all times, except during periods of start up and shutdown. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, this condition shall be established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206 (Compliance with Standards and Operating Requirements), 63.1207 (Performance Testing Requirements), 63.1209 (Monitoring Requirements), 63.1210 (Notification Requirements), and 63.1211 (Record keeping and Reporting Requirements).

5. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the facility shall demonstrate compliance with the dioxin and furan emissions limit of 0.40 ng TEQ/dscm, corrected to 7 % oxygen.

6. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the minimum hourly rolling average pH of the gas-liquid contactor (packed bed scrubber) shall be established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

7. 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.

8. The permittee shall comply with the operating requirements found in Section 63.1206 of the hazardous waste combustor MACT, 40 CFR Part 63 Subpart EEE, by the compliance dates of the interim and final (when promulgated) MACT Rules.

9. 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.

10. 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.

11. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall establish and comply with one of the following parameters for the radial-flow venturi scrubber, in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211:

    a. a limit on the minimum liquid to gas ratio, on an hourly rolling average; or

    b. the minimum scrubber water flow rate and maximum flue gas flow rate, on an hourly rolling average.

12. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall establish a limit on the minimum pressure drop across the radial-flow venturi scrubber on an hourly rolling average, in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

13. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall establish a minimum liquid feed pressure to the packed bed scrubber based on the manufacturer's specifications. The permittee shall comply with this limit on an hourly rolling average basis, in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

14. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall establish a minimum pressure drop across the packed bed scrubber based on the manufacturer's specifications. The permittee shall comply with this limit on an hourly rolling average basis and in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

15. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall establish and comply with one of the following parameters for the wet scrubbers, in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211:

    a. a limit for the solids content of the scrubber liquid in both the radial-flow venturi and packed bed scrubber, measured using a continuous monitoring system (CMS) or by manual sampling and analysis:

        i. for maximum solids content monitored with a CMS, the limit shall be establishes as a 12-hour rolling average; and

        ii. for maximum solids content measured manually, the solids content shall be measured at least once per hour, unless an alternative monitoring frequency is approved by the regulating agency; or

b. a minimum blowdown rate, using a CMS, and either a minimum scrubber tank volume or liquid level, using a CMS, both established on an hourly rolling average.

16. The permittee shall operate and maintain the radial flow venturi scrubber, the packed bed scrubber, and the wet electrostatic precipitator (WESP) in accordance with the following conditions, and as required per the facility RCRA Federal Operating Permit:

    a. the radial flow venturi water flow rate shall be continuously maintained at a value of not less than 800 gallons per minute (gpm), on an hourly rolling average;

    b. the packed bed scrubber water flow rate shall be continuously maintained at a value of not less than 2,200 gpm, on an hourly rolling average;

    c. the minimum pressure drop across the radial flow venturi scrubber shall be maintained at a value greater than 10" water column, on an hourly rolling average;

    d. the pH of the scrubber liquor used in the gas-liquid contactor drain (to the packed bed scrubber), shall be maintained at or above 6.0, on an hourly rolling average; and

    e. the total power to the WESP shall be maintained at a minimum of 2,500 volt-amperes (VA) as an hourly average.

17. As an indicator of gas residence time in the incinerator and control devices, and following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall establish and comply with a limit on the maximum flue gas flow rate, the maximum production/process rate, or other proposed parameter, approved by the Ohio EPA, as an appropriate surrogate for the gas residence time. The permittee shall comply with this limit on an hourly rolling average basis, and in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

18. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall establish 12-hour rolling average feed rate limits for the following, as established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211:

    a. the average mercury content of the waste fed to the kiln and the main combustion chamber;

    b. the average chlorine content of the waste fed to the kiln and the main combustion chamber;

    c. the average lead and cadmium content, combined, of the waste fed to the kiln and the main combustion chamber; and

    d. the average arsenic, beryllium, and chromium content, combined, of the waste fed to the kiln and the main combustion chamber.

19. The permittee shall maintain the control equipment, associated with this emissions unit, in accordance with the manufacturers' operating manuals, with any adjustments or modifications deemed necessary by the permittee, and as required by the standards promulgated in 40 CFR 63, Subpart EEE.

20. The permittee shall minimize or eliminate visible fugitive particulate emissions from the kiln and main combustion chamber by maintaining the maximum combustion zone pressure lower than ambient pressure, by means of an induced draft fan. The kiln and main combustion chamber draft (vacuum) shall be maintained at at least 0.05 inches of water column during all periods of operation. The draft transmitter shall scan the draft reading once each second of operating time and shall record the draft reading once every ten seconds.

21. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall operate the hazardous waste combustor with a functioning automatic waste feed cutoff (AWFCO) system that immediately and automatically cuts off the hazardous waste feed to the kiln and which shall be activated and operated as required in Section 63.1206(c)(3) of the rule. The AWFCO and associated alarms must be tested at least weekly to verify operability, unless the permittee documents in the operating record that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate; in which case, the permittee shall conduct operability testing at least monthly.

22. By the compliance date of the interim standards for 40 CFR 63 Subpart EEE, the permittee shall develop a Documentation of Compliance (DOC), that shall identify the applicable emission standards and the limits on the operating parameters, established under Section 63.1209, that will ensure compliance with the standards. And following the initial comprehensive performance test and each subsequent comprehensive and confirmatory performance test, the permittee shall establish and document the hourly rolling average of each of these parameters including, but not limited to (as per the final rule), the following parameters:

    maximum waste feedrate;
    minimum combustion chamber temperature;
    minimum scrubber pH in the gas-liquid contactor;

minimum pressure drop across the radial-flow venturi and packed bed scrubbers;
maximum flue gas flow rate;
minimum scrubber water flow rate in the radial-flow venturi and packed bed scrubbers; and
minimum liquid to gas ratio in the radial-flow venturi scrubber, and/or minimum liquid feed pressure to the packed bed scrubber.

These parameters shall also be established as required by 40 CFR 63.1209, during the most recent compliance demonstration, and reported in the Notification of Compliance (NOC).

23. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, compliance with the hourly rolling average limits for the above parameters (hazardous waste feedrate, combustion chamber temperature, gas-liquid contactor pH, pressure drop across the radial-flow venturi and packed bed scrubbers, flue gas flow rate, scrubber water flow rate in the radial-flow venturi and packed bed scrubbers, liquid to gas ratio in the radial-flow venturi scrubber, and/or the liquid feed pressure to the packed bed scrubber) shall be demonstrated by each continuous monitoring system. The hourly rolling average shall be calculated as required in 40 CFR 63.1209 (a)(6) and (b)(5) of the interim rule, and as required in the final rule when promulgated; each minute of operation would constitute a new hourly rolling average.

24. The permittee shall operate the WESP controller in a manner that maximizes the particulate removal performance of the unit. This shall include but not be limited to setting the controller to automatically maximize effective secondary voltage, while considering the manufacturer's recommended maximum spark rate. The permittee shall not arbitrarily or artificially lower the WESP controller set points, except for the purposes of particulate removal performance testing or to optimize particulate removal performance by minimizing sparking.

III. Monitoring and/or Record keeping 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 (Ohio EPA Northeast District Office) 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 (hourly), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

d. In order to demonstrate compliance with the annual CO limit, the permittee shall add the hourly emissions, documented by the continuous CO monitoring system, at the end of each month.

2. NOx monitoring system

a. A statement of certification of the existing continuous NOx 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 2 and 6. Proof of certification shall be made available to the Director (Ohio EPA Northeast District Office) upon request.

b. The permittee shall operate and maintain existing equipment to continuously monitor and record NOx 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 NOx monitoring system including, but not limited to, parts per million NOx on an instantaneous (one-minute) basis, emissions of NOx in units of the applicable standard in the appropriate averaging period, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

d. In order to demonstrate compliance with the rolling 365-day NOx limit, the permittee shall add the hourly (or 24-hour average times 24) emissions, documented by the continuous NOx monitoring system, to the previous rolling 364 day records, at the end of each day. During the first 12 calendar months following the issuance of this permit, the NOx emissions shall be maintained as a rolling 12-month record.

3. Oxygen monitoring system

a. A statement of certification of the existing continuous oxygen 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 3. Proof of certification shall be made available to the Director (Ohio EPA Northeast District Office) upon request.

b. The permittee shall operate and maintain existing equipment to continuously monitor and record oxygen from this emissions unit in units of percent oxygen. 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 oxygen monitoring system including, but not limited to percent oxygen 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 oxygen from this emissions unit in units of percent oxygen dry.

4. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the incinerator from a location that best represents the bulk gas temperature in the combustion zone. 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 and/or less than the temperature demonstrated to be necessary to destroy 99.99% of each selected POHC; and

b. a log of all periods of time during which the temperature did not meet the requirements specified above.

5. The permittee shall comply with the monitoring and record keeping requirements found in Sections 63.1209 and 63.1211 of the hazardous waste combustor MACT, 40 CFR Part 63 Subpart EEE, by the compliance dates of the interim and final MACT Rules. By the compliance date of the interim standards for 40 CFR 63 Subpart EEE, the permittee shall have developed a Documentation of Compliance (DOC), that shall identify the limits on the operating parameters, established under Section 63.1209, that will ensure compliance with the standards. Following any compliance testing activities conducted to satisfy the requirements of the standard, and upon postmark of the Notification of Compliance (NOC) for each such demonstration, the operating parameter limits identified in the NOC shall replace those limits identified in the DOC or a previous NOC. Record keeping demonstrating compliance with each of the hourly rolling average limits for each of these parameters shall be maintained using the appropriate continuous monitoring systems and associated recording equipment.

6. The permittee shall properly install, operate, and maintain equipment to continuously monitor the water flow rate through the radial-flow venturi scrubber and the packed bed scrubber 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.

7. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pH of the scrubber liquor in the gas-liquid contactor (packed bed scrubber) while the emissions unit is in operation. The pH monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall demonstrate compliance with the established limit for the minimum pH of the scrubber liquor on an hourly rolling average, in accordance with 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211, from the most recent performance test that demonstrated compliance.

8. The permittee shall maintain the following records for the WESP(s) when the emissions unit is in operation:

   a. The permittee shall monitor and record the following information on an hourly basis:

      i. the average secondary voltage, in kilovolts, and the average secondary current in millamps, for each transformer rectifier (TR) set in the WESP(s);

      ii. the average power input (in Volt-Amperes {VA}) of each TR set for each hour (calculated by multiplying the average secondary voltage {in kilovolts} by the average secondary current {in amps} for each TR set); and

      iii. the average total power input to the WESP(s) for each hour (add together the average power inputs for the TR sets operating during the hour).

   b. The permittee shall record the following information for each day of operation:

      i. the average total combined power input to the WESP(s) as 1-hour averages when the emissions unit was in operation;

      ii. the duration of any downtime for the WESP(s) monitoring equipment for secondary voltage and current, not maintained as specified above; and each WESP section that is out of service, and the duration of the downtime for each section, when the associated emissions unit was in operation; and

      iii. any 1-hour period of time in which the average total combined power input (in VA) to all fields of the WESP(s), was less than the operating limit specified in Section A.II.16.e.

   The monitors and recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the parameters they were meant to record.

9. The permittee shall maintain daily records of the materials burned in the kiln and the main combustion chamber. At a minimum, the records shall contain:

a. the total hourly average waste feed rate to the kiln and the main combustion chamber;

b. the average hourly chlorine content of the waste fed to the system, calculated using the concentration of chlorine in each waste stream fed to the system (as indicated on the waste product survey and/or by analytical testing), and the average hourly waste feed rate for that stream; and

c. the average hourly lead content of the waste fed to the system, calculated using the concentration of lead in each waste stream fed to the system (as indicated on the waste product survey and/or by analytical testing), and the average hourly waste feed rate for that stream.

10. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall maintain daily records of the materials burned in the kiln and main combustion chamber, and the 12-hour rolling average feed rate of the following pollutants. At a minimum, the records shall contain:

a. the total hourly average waste feed rate to the kiln and the main combustion chamber;

b. each 12-hour rolling average chlorine content of the waste fed to the kiln and the main combustion chamber;

c. each 12-hour rolling average lead and cadmium content, combined, of the waste fed to the kiln and the main combustion chamber;

d. each 12-hour rolling average arsenic, beryllium, and chromium content, combined, of the waste fed to the kiln and the main combustion chamber; and

e. each 12-hour rolling average mercury content of the waste fed to the kiln and the main combustion chamber.

These records may replace the record keeping requirements in Section A.III.9 above, as the BAT limit is replaced by this MACT. Compliance shall be demonstrated through analyses of the feed as required in the following section, Section A.III.11.

11. Unless a waiver pursuant to 40 CFR 63.1207(m) is obtained following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall obtain an analysis of each feedstream that is sufficient to document compliance with the applicable feedrate limits for mercury, semivolatile metals, low volatile metals, total chlorine (organic and inorganic), and chloride. The permittee shall develop and implement a feedstream analysis plan. The plan, at a minimum, shall specify the following:

a. the parameters for which each feedsteam will be analyzed;

b. documentation as to whether the analysis for each waste stream shall be performed through sampling and analysis or from analytical information;

c. documentation as to how the analysis shall document compliance with the applicable feedrate limits;

d. the test methods used to obtain the analysis;

e. the sampling method used to obtain a representative sample of each feedstream analyzed;

f. the frequency with which the permittee shall review or repeat the analysis of the feedstream;

g. documentation of the mass or volume flowrate of each feedstream using a continuous monitoring system (CMS) (if the flowrate of the feedstream is determined by volume, the density of the feedsteam must also be determined and documented, unless the constituent concentration is in units of weight per unit volume); and

h. procedures for calculating and maintaining records of the mass feedrate of mercury, semivolatile metals, low volatile metals, total chlorine (organic and inorganic), and chloride, as the twelve-hour rolling average maximum theoretical emission concentration (MTEC).

The feedstream analysis plan shall be submitted to the Ohio EPA Northeast District Office upon request.

12. 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.

13. The permittee shall record the following information for each Emergency Safety Vent (ESV) opening 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 emissions, hydrocarbons, hydrogen chloride, sulfur dioxide, nitrogen oxides, carbon monoxide, beryllium, lead, mercury, benzene, and other hazardous air pollutants (HAPs); and

e. the cause(s) of the ESV opening.

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee must develop an ESV operating plan, comply with the plan, and keep the plan in the operating record.

14. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall maintain daily records of the following operating parameters, based on an hourly rolling average, unless otherwise specified:

a. the minimum temperature in the kiln and in main combustion chamber;

b. the minimum pH of the scrubber liquor in the gas-liquid contactor;

c. the minimum water flow rate and the maximum flue gas flowrate; or the minimum liquid to gas ratio in the radial-flow venturi scrubber and the packed bed scrubber;

d. the minimum liquid feed pressure to the packed bed scrubber;

e. the minimum pressure drop across the radial-flow venturi and packed bed scrubbers;

f. the maximum solids content* of the radial-flow venturi and packed bed scrubbers; or the minimum blowdown rate and either the minimum scrubber tank volume or liquid level;

g. the maximum flue gas flowrate or maximum process/production weight rate;

h. the maximum waste feed rate, not to exceed 24,000 pounds per hour; and

i. a log or record of the operating time for the control devices, monitoring equipment, and the incinerator itself (this may be maintained as one record for the entire system, if no part of the system was down or in malfunction while the incinerator was in operation).

* if the solids content is measured using a CMS, the record may be maintained as a 12-hour rolling average, rather than an hourly rolling average

15. The permittee shall maintain monthly records of the following information:

a. the nitrogen oxides emission rate for each month (tons);

b. the hours of operation for each month;

c. total tons of waste fed to the incinerator; and

d. during the first 12 calendar months of operation following the issuance of this permit, the summation of the cumulative rolling 12-month nitrogen oxides emissions (tons).

16. The following information shall be recorded electronically and made accessible via modem:

a. nitrogen oxides emissions (ppm and lbs/hr, as a one minute block average); and

b. CO emissions (raw ppm, ppm corrected to 7% oxygen on a dry basis, and pounds per hour, on a one minute and 60-minute rolling average).

17. The permittee shall record the date, time, duration, and reason for each waste feed cutoff actuated as a result of an excursion from the RCRA Part B Permit.

18. The permittee shall maintain daily records of the main combustion chamber and kiln draft (vacuum, expressed in inches of water column) through the proper operation and maintenance of a continuous pressure monitor and an alarm/waste cut-off system. The draft transmitter shall record the draft reading once every ten seconds. The permittee shall record each event where the kiln or main combustion draft pressure is less than 0.05 inches of water pressure for 30 seconds or longer in the kiln and/or for 15 seconds or longer for the main combustion chamber. The record shall include the date, time, length of each event, and if shut-down procedures were implemented. Following the compliance date of the interim and final standards for 40 CFR 63, Subpart EEE, records shall be maintained as required per the promulgated rule.

19. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall maintain records of any AWFCO event, as required in Section 63.1206(c)(3) of the rule. A record of the weekly AWFCO operability testing shall be maintained, and/or a record documenting that any weekly inspection will unduly restrict or upset operations, in which case, a monthly inspection shall be conducted and the event documented.

20. The permittee shall conduct Method 9 readings at least four days of each calendar week (Sunday through Saturday) and for at least 30 minutes on each of the four days. If a more stringent opacity standard is developed upon the promulgation of the final rules for 40 CFR 63, Subpart EEE, the permittee shall comply with the requirements of the MACT. The permittee may install a continuous opacity monitor (COM), in lieu of conducting the required Method 9 readings.

21. The permittee shall record all times fuels not listed in Section A II.7 and not approved by the Ohio EPA are used to heat the cold-combustion zone during incinerator start-up.

22. The permittee shall record all times waste material was fed to the kiln when any part of the control equipment was not operating within the operating limits specified in Section A.II.

23. The permittee shall maintain daily records of the amount of each fuel burned in this emissions unit.

24. The permittee shall maintain daily records of the materials received for burning at the facility. The records shall contain, as a minimum, the following information:

    a. name and address of the facility from which the material was received;

    b. name and address of the facility from which the material was generated or blended;

    c. date the material was received;

    d. amount of material and type of container; and

    e. description of the material including chemical composition.

25. The permittee shall determine the total annual benzene quantity from facility waste as required in 40 CFR 61.355, from the National Emission Standard for Benzene Waste Operations. The total annual benzene quantity from facility waste shall be calculated by adding together the annual benzene quantity for each waste stream generated during the year. The facility shall maintain records of all measurements, calculations, and other documentation used to determine the benzene content of each waste stream fed to this emissions unit.

26. The permittee shall maintain daily records of the cumulative 365-day emissions of nitrogen oxides; and beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 365-day summation of the nitrogen oxides emissions (tons). During the first 12 months of operation following the issuance of this permit, emission records for the previous 11 months shall be used and these emissions shall be maintained as a rolling 12-month record.

IV. Reporting Requirements

1. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Northeast District Office of the Ohio EPA 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 the limitations specified in the terms and conditions of this permit, in units of the standards. 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 Ohio EPA Northeast District Office 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.

   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. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Northeast District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of nitrogen oxides values in excess of the limitations specified in the terms and conditions of this permit. These reports shall also contain the total nitrogen oxides emissions for the calendar quarter (in tons).

   The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Northeast District Office documenting any continuous nitrogen oxide 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. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Northeast District Office documenting all instances of continuous O_2 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 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. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports which identify all periods of time

during which the temperature of the kiln and the main combustion chamber did not comply with the temperature limitations, established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

Prior to the compliance date of the interim standards for 40 CFR 63, Subpart EEE and/or prior to initial compliance testing, the permittee shall submit deviation (excursion) reports which identify all periods of time during which waste material was fed to the incinerator when the main combustion chamber temperature was below 1900 degrees Fahrenheit.

5. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the minimum scrubber water flow rate and the maximum flue gas flowrate, or the minimum liquid to gas ratio for the radial-flow venturi scrubber and packed bed scrubber were not maintained at the limit(s) established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

6. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the established minimum liquid feed pressure to the packed bed scrubber was not maintained as established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

7. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the established minimum pressure drop across the radial-flow venturi scrubber was not maintained at the limit established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

8. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the established maximum solids content of the radial-flow venturi and packed bed scrubbers were not maintained at the limit established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211, based on an hourly rolling average if measured manually, or on a 12-hour rolling average if measured with a CMS.

9. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the established minimum pressure drop across the packed bed scrubber was not maintained as established in accordance with the procedures for demonstration of compliance specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

10. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH in the gas-liquid contactor (packed bed scrubber) was not maintained as established in accordance with the procedures for demonstration of compliance

specified in 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211.

11. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the 1-hour average total combined power input to all fields of the WESP(s) was less than that required in Section II.16.e and as recorded in Section A.III.8.

12. The permittee shall submit quarterly 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, excluding the exception described in Section A.II.10. The report shall indicate the amount of waste fed during that period.

13. The permittee shall submit quarterly deviation (excursion) reports that identify any day in which records were not maintained of the waste feed analysis, as required in Sections A.III.9 or A.III.10.

14. The permittee shall submit quarterly 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.

15. The permittee shall submit reports on every ESV opening 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 emissions, hydrocarbons, hydrogen chloride, sulfur dioxide, nitrogen oxides, carbon monoxide, beryllium, lead, mercury and other hazardous air pollutants (HAPs); and

    d. the cause(s) of the ESV opening.

16. The permittee shall comply with the reporting requirements found in Sections 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211 of the hazardous waste combustor MACT, 40 CFR Part 63 Subpart EEE, by the compliance dates of the interim and final (when promulgated) MACT Rules.

17. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the cumulative rolling, 365-day NOx emissions limitation; and for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the cumulative rolling 12-month NOx emission limit, calculated from the emission records for the present and previous 11 months.

18. The permittee shall submit quarterly deviation reports to the Ohio EPA Northeast District Office documenting any of the following event(s):

    a. each event in which the kiln or main combustion draft pressure was less than 0.05 inches of water pressure for 30 seconds or longer in the kiln and/or for 15 seconds or longer for the main combustion chamber;

    b. any period of time in which the draft transmitters did not maintain a record of the pressure inside the kiln and/or main combustion chamber during each 10 second period of operation; and or

    c. any waste feed cut-off event(s), actuated as a result of an excursion from the RCRA Part B Permit conditions.

    The reports shall include the date, time, duration, reason for the occurrence, and any corrective action(s) taken. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit deviation reports for any AWFCO event, as required in Section 63.1206(c)(3) and 63.1210 of the rule. The permittee shall submit quarterly deviation reports for any such event, as well as a report of any week in which the weekly AWFCO operability testing did not occur or was not documented; and/or a record documenting that the weekly inspection would have restricted or upset operations during any such week was not maintained, and/or the monthly inspection event did not occur and/or was not documented.

19. The permittee shall submit quarterly deviation (excursion) reports that identify all times fuels other than those allowed by Section A.II.7 are used to heat the cold combustion zone during incinerator start-up.

20. The permittee shall submit quarterly deviation (excursion) reports that identify any period of time in which waste was fed to the kiln, while any part of the control equipment was non-operational (excluding a second WESP), and/or not operating as required in Section A.II.16.

21. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the established maximum flue gas flow rate or maximum production/process rate

was/were not maintained at the limit established (used as an indicator of gas residence time in the incinerator and control devices) in accordance with 40 CFR 63.1206, 63.1207, 63.1209, 63.1210, and 63.1211, during the most recent performance test, based on an hourly rolling average.

22. The permittee shall submit quarterly deviation reports that identify each day in which a Method 9 reading(s) demonstrated an exceedance of the 20% opacity limit, and/or each week during which four Method 9 readings were not conducted for at least 30 minutes on each of the four days. This report shall include the date, duration, and cause for the exceedance. If a more stringent standard is developed upon promulgation of the final rules for 40 CFR 63, Subpart EEE, the permittee shall submit quarterly deviation (excursion) reports of non-compliance with the final MACT standard. In the event the permittee decides to install a COM, non-compliance with the Method 9 reporting requirements shall be replace by reporting any exceedance of the opacity limit, as demonstrated by the COM.

23. The permittee shall submit the following notifications of performance testing and site-specific test plans as follows:

    a. The permittee shall submit a notification of intention to conduct the initial comprehensive performance test and CMS performance evaluation and must submit a site-specific test plan and CMS performance evaluation test plan at least one year before the initial performance test and performance evaluation are scheduled to begin. The Director shall notify the permittee of approval or intent to deny approval of the site-specific test plan and CMS performance evaluation test plan within 9 months after receipt of the original plan. The permittee shall notify the Ohio EPA of the intention to conduct the comprehensive performance test at least 60 calendar days before the test is scheduled to begin.

    b. Following the compliance date of the final standards for 40 CFR 63, Subpart EEE, the permittee shall submit a notification of intention to conduct the comprehensive performance test and CMS performance evaluation and must submit a site-specific test plan and CMS performance evaluation test plan at least one year before the performance test and performance evaluation are scheduled to begin. The Director shall notify the permittee of approval or intent to deny approval of the site-specific test plan and CMS performance evaluation test plan within 9 months after receipt of the original plan. The permittee shall notify the Ohio EPA of the intention to conduct the comprehensive performance test at least 60 calendar days before the test is scheduled to begin.

    c. Following the compliance date of the final standards for 40 CFR 63, Subpart EEE, the permittee shall submit a notification of intention to conduct the confirmatory performance tests and CMS performance evaluation and must submit a site-specific test plan and CMS performance evaluation test plan at least 60 calendar days before the performance test and performance evaluation are scheduled to begin. The Director shall notify the permittee of approval or intent to deny approval of the site-specific test plan and CMS performance evaluation test plan within 30 calendar days after receipt of the original plan. The Ohio EPA must issue a public notice announcing the approval of the

test plans and the location where the test plans are available for review.

24. Following the initial comprehensive performance test and each subsequent comprehensive and confirmatory performance test, the permittee shall establish and document the hourly rolling average operating parameters, as required by 40 CFR 63.1209. Within 90 days of completion of a comprehensive or confirmatory performance test, the permittee shall postmark a NOC documenting compliance or noncompliance with the emissions standards and continuous monitoring system requirements, and identifying the operating parameter limits established under 40 CFR 63.1209 and 63.1210.

25. The permittee shall notify the Ohio EPA by February 1 of each year if the total annual benzene quantity equals or exceeds 10 megagrams per year.

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, and 11.5 pounds per hour.
Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, particulate emissions from the stack shall not exceed 0.015 grains per dry standard cubic foot corrected to 7% oxygen, 34 mg/dscm corrected to 7% oxygen, and 8.91 pounds per hour.

Applicable Compliance Method:

Compliance with the shall be determined in accordance with the stack testing requirements in Section A.V.24.

2. Emission Limitation:

Particulate emissions from the stack shall not exceed 50.37 tons per year.
Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, particulate emissions from the stack shall not exceed 39.03 tons per year.

Applicable Compliance Method:

Compliance shall be determined by multiplying the results from the most recent stack test (pounds of particulate emissions per hour) by the total annual hours of operation, and dividing by 2000 (pounds per ton).

3. Emission Limitation:

Nitrogen oxides emissions shall not exceed 158.1 pounds per hour on a rolling 24-hour average basis.

Applicable Compliance Method:

Compliance shall be determined by operating the continuous emissions monitoring system (CEMS) for nitrogen oxides, provided that system meets the requirements of 40 CFR, Part 60, Appendix B, and through the record keeping requirements contained in this permit.

4. Emission Limitation:

Nitrogen oxides emissions shall not exceed 196.2 tons per rolling 365-day period, except during the first 12 months of operation following the issuance of this permit, nitrogen oxides emissions shall not exceed 196.2 tons per rolling 12-month period.

Applicable Compliance Method:

At the end of each day the permittee shall add (or maintain the sum of) the daily records of the hourly NOx emissions, from the previous 365-day period, as was documented by the continuous NOx monitoring system. For any period of operating time not recorded by the continuous NOx monitoring system, the average hourly emission rate from the closest period of time for which the monitor was properly operating, will be added for the missing hours of operation not recorded. While the rolling 365-day record is being established and during the first 12 months of operation, following the issuance of this permit, the NOx emissions shall be maintained as a rolling 12-month record, using the existing records from the previous 11 months.

5. Emission Limitation:

Sulfur dioxide emissions shall not exceed 15.1 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined by emissions testing as required in Section A.V.24.b, using U.S. EPA Method 6C, and in accordance with OAC rule 3745-18-04(A). If required, and following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, Method 6C shall be used to demonstrate compliance.

6. Emission Limitation:

Sulfur dioxide emissions shall not exceed 66.14 tons per year.

Applicable Compliance Method:

This limit was set at the potential of the unit by multiplying the allowable hourly emissions limit (15.1 lbs/hr) by the 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 is also met. In order to accurately report annual emissions, the actual hours of operation and the pound per hour results from the most recent stack test may be used to calculate emissions for reporting requirements.

7. Emission Limitation:

Carbon monoxide emissions shall not exceed 41.0 pounds per hour.
Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, carbon monoxide emissions shall not exceed 100 ppm by volume, over an hourly rolling average, on a dry basis, and corrected to 7% oxygen; and 32.76 pounds per hour

Applicable Compliance Method:

Compliance shall be determined by operating the CEMS for carbon monoxide, provided that system meets the requirements of 40 CFR, Part 60, Appendix B, and through the record keeping requirements contained in this permit. If required by the Ohio EPA, U.S. EPA Method 10 testing shall be conducted in order to demonstrate compliance.

8. Emission Limitation:

Carbon monoxide emissions shall not exceed 179.6 tons per year.
Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, carbon monoxide emissions shall not exceed 143.5 tons per year.

Applicable Compliance Method:

At the end of each year the permittee shall add the daily (or if totaled monthly) records of the sum of each hourly record of CO emissions, as was documented by the continuous CO monitoring system. For any period of operating time not recorded by the continuous CO monitoring system, the average hourly emission rate from the closest period of time for which the monitor was properly operating, will be added for the missing hours of operation not recorded.

9. Emission Limitation:

Hydrocarbon emissions shall not exceed 5.15 pounds per hour.
In addition, following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, hydrocarbon emissions shall not exceed 10 ppm by volume, over an hourly rolling average, on a dry basis, corrected to 7% oxygen, reported as propane.

Applicable Compliance Method:

Prior to the compliance date of the interim standards for 40 CFR 63, Subpart EEE and if required

by the Ohio EPA, compliance shall be determined through emissions testing, using U.S. EPA Method 25 or 25A. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, Method 25 or 25A shall be used to demonstrate compliance, as required in Section A.V.24.

10. Emission Limitation:

Hydrocarbon emissions shall not exceed 22.56 tons per year.

Applicable Compliance Method:

This limit was set at the potential of the unit by multiplying the allowable hourly emissions limit by the 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 is also met. In order to accurately report annual emissions, the actual hours of operation and the pound per hour results from the most recent stack test may be used to calculate emissions for reporting requirements.

11. Emission Limitation:

Lead emissions shall not exceed 11.5 pounds per hour.
Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, lead (Pb) and cadmium (Cd) emissions together shall not exceed 240 ug/dscm, corrected to 7% oxygen, and 0.063 pound per hour, together (Cd & Pb).

Applicable Compliance Method:

Compliance shall be determined through emissions testing, using U.S. EPA Method 29, as required in Section A.V.24. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, Method 29 shall be used to demonstrate compliance with the combined limit for Cd and Pb.

12. Emission Limitation:

Lead emissions shall not exceed 0.76 ton per quarter.
Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, Pb and Cd emissions together shall not exceed 0.069 ton per quarter.

Applicable Compliance Method:

Compliance shall be determined by multiplying the average hourly emissions of Pb, as determined from the most recent Method 29 stack test results, by the total hours of operation during each quarter, and dividing by 2000 (lbs/ton). Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, compliance shall be determined by multiplying the average hourly emissions of Pb and Cd, as determined from the most recent Method 29 stack test results, by the total quarterly hours of operation, and dividing by 2000 (lbs/ton).

13. Emission Limitation:

Lead emissions shall not exceed 3.0 tons per year.
Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, Pb and Cd emissions together shall not exceed 0.276 ton per year.

Applicable Compliance Method:

Continuous compliance with the quarterly lead emission limitation shall demonstrate compliance with the annual lead emission limitation. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, compliance shall be determined by multiplying the average hourly emissions of Pb and Cd, as determined from the most recent Method 29 stack test results, by the total annual hours of operation, and dividing by 2000 (lbs/ton).

14. Emission Limitation:

Hydrochloric acid and chlorine gas emissions combined, expressed as hydrochloric acid equivalents, shall not exceed 32.89 pounds per hour.
In addition, following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, hydrochloric acid and chlorine gas emissions, combined, expressed as hydrochloric acid equivalents, shall not exceed 77 ppm by volume, combined, and on a dry basis, corrected to 7% oxygen.

Applicable Compliance Method:

Compliance shall be determined through emissions testing using U.S. EPA Methods 26A, 320 and/or 321 as required in Section A.V.24.

15. Emission Limitation:

Hydrochloric acid and chlorine gas emissions combined shall not exceed 144.07 tons/year.

Applicable Compliance Method:

This limit was set at the potential of the unit by multiplying the allowable hourly emissions limit by the 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 is also met. In order to accurately report annual emissions, the actual hours of operation and the pound per hour results from the most recent stack test may be used to calculate emissions for reporting requirements.

16. Emission Limitation:

Mercury emissions shall not exceed 1.85 pounds per hour on a rolling 24-hour average basis. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, mercury emissions shall not exceed 130 ug/dscm corrected to 7% oxygen, and 0.034 pound/hour.

Applicable Compliance Method:

Compliance shall be determined through emissions testing as required in Section A.V.24, using U.S. EPA Method 29.

17. Emission Limitation:

Mercury emissions shall not exceed 1.13 tons per year.
Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, Mercury emissions shall not exceed 0.149 ton per year.

Applicable Compliance Method:

Compliance shall be determined by multiplying the hourly emissions, as determined from the most recent Method 29 stack testing results, by the total annual hours of operation, and dividing by 2000 (lbs/ton).

18. Emission Limitation:

Beryllium emissions shall not exceed 10 grams per 24 hour period and 0.004 ton per year.
In addition, following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, arsenic (As), beryllium (Be) and chromium (Cr) emissions together shall not exceed 97 ug/dscm, corrected to 7% oxygen, and 0.025 pound per hour, together (As, Be, Cr).

Applicable Compliance Method:

Compliance shall be determined by emissions testing, using U.S. EPA Method 29, as required in Section A.V.24 and converting the Be testing results to the equivalent of grams per 24 hours. The limit of 0.004 ton of Be per year is the potential of the unit, calculated by multiplying the 24 hour Be limit (from 40 CFR 61, Subpart C) by 365 days of operation per year and using the appropriate conversion factors (454 grams/lb and by 2000 lbs/ton). Therefore, provided that compliance with the gram per 24 hour limit is met, compliance with the annual limit is also met. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, Method 29 shall also be used to demonstrate compliance with the combined limit for As, Be, and Cr.

19. Emission Limitation:

Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, As, Be, and Cr emissions together shall not exceed 0.110 ton/year.

Applicable Compliance Method:

Compliance shall be determined by multiplying the hourly emissions of As, Be, and Cr together, as determined from the most recent Method 29 testing results, by the by total annual hours of operation, and dividing by 2000 (lbs/ton).

20. Emission Limitation:

Dioxin and furan emissions shall not exceed 2 ng TEQ/dscm at seven percent oxygen.
Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, dioxins and furans emissions shall not exceed 0.40 ng TEQ/dscm, corrected to 7 % oxygen and 1.049 x 10^{-7} lb/hr.

Applicable Compliance Method:

Compliance shall be determined through emissions testing as required in Section A.V.24, using U.S. EPA Method 23A.

21. Emission Limitation:

Dioxin and furan emissions shall not 2.3 x 10^{-6} ton per year.
Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, dioxin and furan emissions shall not exceed 4.6 x 10^{-7} ton/year.

Applicable Compliance Method:

Compliance shall be determined by multiplying the hourly emissions of dioxin and furan, as determined from the most recent Method 23A testing results, by the total annual hours of operation, and dividing by 2000 (lbs/ton).

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 shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC Rule 3745-17-03(B)(1), conducted at the frequency and as required in Section A.III.20; or the permittee

may demonstrate compliance by installing a continuous opacity monitor.

23. Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be determined by emissions testing, using the appropriate U.S. EPA Methods, as required in Section A.V.24. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, compliance shall be determined through the stack testing requirements found in Section A.V.24, using the appropriate approved U.S. EPA method for each selected POHC.

24. Stack Test Requirements

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

a. Stack testing shall be conducted as follows:

i. Emission testing, to demonstrate compliance with the current (prior to 9/30/03) BAT limits, shall be conducted within 90 days after the issuance of this permit.

ii. In order to demonstrate compliance with the interim standards of 40 CFR 63.1203, the permittee shall conduct an initial comprehensive performance test, not later than six months after the compliance date of 9/30/03, unless:

(a) previous emission test data, which was initiated after 54 months prior to the compliance date, serves as documentation of conformance with the emissions standards of the subpart;

(b) the results meet quality assurance, such that the results demonstrate compliance with the applicable standards of the subpart; and

(c) the testing conditions meets any additional requirements of the standard.

iii. In order to demonstrate compliance with the final rule, 40 CFR 63 Subpart EEE, and following its promulgation, the following testing shall also be conducted:

(a) Comprehensive performance testing* must be conducted to demonstrate compliance with the emission standards set forth in Section 63.1203, establish limits for the operating parameters provided in Section 63.1209, and demonstrate compliance with the performance specifications for continuous monitoring systems. Testing shall commence no later than 61

months after the date of commencing the previous comprehensive performance test. If data have been submitted in lieu of the initial performance test, the permittee must commence the subsequent comprehensive performance test within 61 months of commencing the test used to provide the data in lieu of the initial performance test.

(b) Confirmatory performance testing* must be conducted to demonstrate compliance with the emission standards for dioxin and furan, as set forth in Section 63.1203. Confirmatory performance testing shall be conducted no later than 31 months after the date of commencing the previous comprehensive performance test. If data have been submitted in lieu of the initial performance test, the permittee must commence the initial confirmatory performance test within 31 months of the date six months after the compliance date. The confirmatory performance test shall be conducted approximately midway between comprehensive performance tests.

* The required testing specifications above may be modified with any changes to the final rule, 40 CFR 63, Subpart EEE, upon its promulgation. Only an initial comprehensive performance test is required under the interim standards, as described in 40 CFR 63.1207(d)(4); and the comprehensive and confirmatory performance testing shall not be required until the final rule is promulgated.

iv. If required, additional testing may be requested by the Ohio EPA Northeast District office.

b. Within 90 days following the issuance of this permit, emission testing shall be conducted to demonstrate compliance with the BAT limits for particulate emissions, sulfur dioxide, hydrochloric acid and chlorine gas, lead, mercury, beryllium, dioxin and furans, and the destruction and removal efficiency requirement for selected POHC(s).

c. Following the compliance date of the interim standards for 40 CFR 63, Subpart EEE, the emission testing shall be conducted to demonstrate compliance with the allowable emission rates for particulate emissions; lead and cadmium; hydrochloric acid and chlorine gas; mercury; arsenic, beryllium, and chromium; hydrocarbons; dioxin and furans; and the destruction and removal efficiency requirement for selected POHC(s). Compliance shall be documented based on the arithmetic average of the emissions results of each run. The destruction and removal efficiency standard must be met for each run of the performance test. During any comprehensive and confirmatory performance test,

the permittee shall establish the following operating parameters, which shall be maintained as required by the interim and final (when promulgated) standards for 40 CFR 63, Subpart EEE, after compliance has been demonstrated and upon receipt of the testing results:

i. the minimum temperature in the kiln and in main combustion chamber;

ii. the minimum water flow rate and the maximum flue gas flowrate; or the minimum liquid to gas ratio in the radial-flow venturi scrubber;

iii. minimum pressure drop across the radial-flow venturi scrubber;

iv. the maximum solids content of the radial-flow venturi and packed bed scrubbers; or the minimum blowdown rate and either the minimum scrubber tank volume or minimum liquid level;

v. the minimum pH of the scrubber liquor in gas-liquid contactor;

vi. the minimum liquid feed pressure to the packed bed scrubber;

vii. the maximum flue gas flowrate and/or maximum production/process weight rate; and

viii. the maximum waste feed rate, not to exceed 24,000 pounds per hour; and

ix. the minimum power input to each TR set of the WESP(s) (or other parameter required per the final rule).

d. 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):

Method 5 for particulate emissions;
Method 6C for $S0_2$;
Method 25 or 25A for hydrocarbons;
Methods 26A, 320, or 321 for hydrochloric acid and chlorine gas;
Method 29 for lead and cadmium;
Method 29 for arsenic, beryllium, and chromium;
Method 29 for mercury;
Method 0023A and for dioxin and furan; and
the appropriate approved U.S. EPA method for each selected POHC

e. 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 Northeast District Office.

f. In order to demonstrate compliance with the destruction and removal efficiency

requirement for POHC, the following equation shall be calculated:

DRE = [1 - (Wout/Win) x 100%]

where:

Win = mass feedrate of selected POHC in a waste feedstream
Wout = mass emission rate of the same POHC present in exhaust emissions

The permittee shall submit to the Ohio EPA North East District Office a test methodology for each selected POHC which will be burned in the incinerator, as well as each site-specific test plan and CMS performance evaluation test plan as required in Section A.IV.23 for any comprehensive and confirmatory performance test; and as required in Section A.V.24.h below, prior to the effective date of the interim standards of 40 CFR 63, Subpart EEE.

g. The permittee shall record the weight, in pounds, of all liquid, semi-solid, and solid waste charged during any stack test conducted to demonstrate compliance.

h. In addition to the notification requirements of the interim standards of 40 CFR 63, Subpart EEE, the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office not later than 30 days prior to each proposed compliance test date. 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 Northeast District Office's. refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast 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 Ohio EPA Northeast District Office within 30 days following completion of the test(s).

25. The frequency of stack testing and test methods conducted shall be determined with the promulgation of 40 CFR 63, Subpart EEE, the final rule, and/or as required by any other applicable regulation. The Notification of Compliance shall be submitted following each subsequent comprehensive and confirmatory performance test as required in 40 CFR 63.1210(b).

VI. Miscellaneous Requirements

None

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
N001 - Hazardous Waste Incinerator (Thermal Oxidizer # 7, rotary kiln and main combustion chamber) rated at 24,000 pounds per hour feed, and equipped with a quench chamber, cyclone separator, radial-flow venturi scrubber, a packed bed scrubber, two wet electrostatic precipitators, and an ash management system		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. The permit to install for this emissions unit (N001) was evaluated based on the actual materials and the design parameters of 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): 33.0

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 13.7

MAGLC (ug/m3): 131

Pollutant: Mercury

TLV (mg/m3): 0.025

Maximum Hourly Emission Rate (lbs/hr): 1.85

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 0.594

MAGLC (ug/m3): 0.595

Pollutant: Lead

TLV(mg/m3): 0.05

Maximum Hourly Emission Rate (lbs/hr): 11.5

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 1.18

MAGLC (ug/m3): 1.19

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 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 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