



State of Ohio Environmental Protection Agency

STREET ADDRESS:

Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.state.oh.us

MAILING ADDRESS:

P.O. Box 1049
Columbus, OH 43216-1049

2/5/2009

Steve Pantano
Stericycle Inc
1901 Pine Ave Se
Warren, OH 44482

Certified Mail

Facility ID: 0278080634
Permit Number: P0086292
County: Trumbull

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

The issuance of this Title V permit is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of \$70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northeast District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.state.oh.us/dapc>.

Sincerely,


Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA DAPC, Northeast District Office

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director



**State of Ohio Environmental Protection Agency
Division of Air Pollution Control**

FINAL

**Title V Permit to Control Air Pollution
OAC Chapter 3745-77**

Stericycle Inc

Facility ID: 0278080634
Permit Number: P0086292
Permit Type: Renewal
Issued: 2/5/2009
Effective: 2/26/2009
Expiration: 2/26/2014



State of Ohio Environmental Protection Agency
 Division of Air Pollution Control

Title V Permit to Control Air Pollution
OAC Chapter 3745-77
 Stericycle Inc

Table of Contents

Authorization 1

A. Standard Terms and Conditions 2

 1. Federally Enforceable Standard Terms and Conditions 3

 2. Monitoring and Related Record Keeping and Reporting Requirements..... 3

 3. Scheduled Maintenance 6

 4. Risk Management Plans 6

 5. Title IV Provisions 6

 6. Severability Clause 7

 7. General Requirements 7

 8. Fees 8

 9. Marketable Permit Programs 8

 10. Reasonably Anticipated Operating Scenarios 8

 11. Reopening for Cause 8

 12. Federal and State Enforceability 9

 13. Compliance Requirements 9

 14. Permit Shield 10

 15. Operational Flexibility..... 10

 16. Emergencies..... 11

 17. Off-Permit Changes 11

 18. Compliance Method Requirements 12

 19. Insignificant Activities or Emissions Levels..... 12

 20. Permit to Install Requirement 12

 21. Air Pollution Nuisance 12

 22. Permanent Shutdown of an Emissions Unit 12

 23. Title VI Provisions 13

 24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only 13

 25. Records Retention Requirements Under State Law Only..... 13

 26. Inspections and Information Requests 13

 27. Scheduled Maintenance/Malfunction Reporting 14

 28. Permit Transfers 14



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

- 29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 14
- B. Facility-Wide Terms and Conditions..... 15
- C. Emissions Unit Terms and Conditions 17
 - 1. N001, N001.....18



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Title V Permit
Permit Number: P0086292
Facility ID: 0278080634
Effective Date: 2/26/2009

Authorization

Facility ID: 0278080634
Facility Description:
Application Number(s): A0017012
Permit Number: P0086292
Permit Description: Medical Waste Incinerator - Title V renewal
Permit Type: Renewal
Issue Date: 2/5/2009
Effective Date: 2/26/2009
Expiration Date: 2/26/2014
Superseded Permit Number:

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

Stericycle Inc
1901 Pine Avenue SE
Warren, OH 44483

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087
(330)425-9171

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Northeast District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Title V Permit
Permit Number: P0086292
Facility ID: 0278080634
Effective Date: 2/26/2009

A. Standard Terms and Conditions



1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
 - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
 - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting
 - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))
- c) The permittee shall submit required reports in the following manner:
 - (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:



Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

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

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.



These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.
(*Authority for term: OAC rule 3745-77-07(A)(3)(c)*)

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.



If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

- (4) Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

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

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Ohio EPA DAPC, Northeast District Office.

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

3. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

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

4. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

5. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

(Authority for term: OAC rule 3745-77-07(A)(5))



6. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
(Authority for term: OAC rule 3745-77-07(A)(6))

7. General Requirements

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
 - (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
 - (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
 - (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee



shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

(Authority for term: OAC rule 3745-77-07(A)(8))

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

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

11. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.



- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.
(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.
(Authority for term: OAC rule 3745-77-07(B))

13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the 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:
 - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the



Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

(1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.

(2) Compliance certifications shall include the following:

- (a) An identification of each term or condition of this permit that is the basis of the certification.
- (b) The permittee's current compliance status.
- (c) Whether compliance was continuous or intermittent.
- (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
- (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

(3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

14. Permit Shield

a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

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

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as



soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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

16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

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

17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

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



18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.
(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.
(Authority for term: OAC rule 3745-77-07(A)(1))

20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.
(Authority for term: OAC rule 3745-77-07(A)(1))

21. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.
(Authority for term: OAC rule 3745-77-07(A)(1))

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.
(Authority for term: OAC rule 3745-77-01)



23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
(Authority for term: OAC rule 3745-77-01(H)(11))

4. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

25. Records Retention Requirements Under State Law Only

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports



pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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

27. Scheduled Maintenance/Malfunction Reporting

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

28. Permit Transfers

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

(Authority for term: OAC rule 3745-77-01(C))

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or
- c) where the company's responsible official has certified that an emissions unit has been permanently shut down.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Title V Permit
Permit Number: P0086292
Facility ID: 0278080634
Effective Date: 2/26/2009

B. Facility-Wide Terms and Conditions



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

a) B.3

2. The following insignificant emissions unit is located at this facility:

a) B001 - Natural Gas Fired Boiler, 150 HP

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.

(Authority for term: OAC rule 3745-77-07(A)(13))

3. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

a) Z003 - Parts washer;

Z004 - Caustic storage tank;

Z007 - Wastewater treatment;

Z009 - Tub wash hot water tank; and

Z010 - Small natural gas fired office boiler.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Title V Permit
Permit Number: P0086292
Facility ID: 0278080634
Effective Date: 2/26/2009

C. Emissions Unit Terms and Conditions



1. N001, N001

Operations, Property and/or Equipment Description:

Medical Waste Incineration

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-75-02	<p>Particulate emissions (PE) shall not exceed 34 mg PE/dscm (0.015 grain PE/dscf) of exhaust gases.</p> <p>Carbon monoxide (CO) emissions shall not exceed 100 parts per million (ppm) by volume as an hourly average, 40 ppm by volume as a 12-hour rolling average (not including startup and shutdown) as measured by continuous emission monitors (CEM), and 40 ppm as a 3-hour rolling average (not including startup and shutdown) as measured by 40 CFR Part 60, Appendix A, Method 10 or 10B.</p> <p>Dioxins/furans (D/F) emissions shall not exceed 125 ng/dscm (55 grains/billion dscf) of total dioxins/furans or 2.3 ng/dscm (1.0 grain/billion dscf) expressed as Toxic Equivalency Factors (TEQ).</p> <p>Hydrogen chloride (HCl) emissions shall not exceed 100 ppm by volume or 93% reduction.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 55 ppm by volume.</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 250 ppm by volume.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Lead (Pb) and Pb compound emissions shall not exceed 1.2 mg/dscm (0.52 gr/1000 dscf).</p> <p>Cadmium (Cd) and Cd compound emissions shall not exceed 0.16 mg/dscm (0.07 gr/1000 dscf).</p> <p>Mercury (Hg) and Hg compound emissions shall not exceed 0.55 mg/dscm (0.24 gr/1000 dscf).</p> <p>Arsenic (As) and As compound emissions shall not exceed 0.21 mg/dscm (0.092 gr/1000 dscf).</p> <p>Beryllium (Be) and Be compound emissions shall not exceed 0.026 mg/dscm (0.011 gr/1000 dscf).</p> <p>Chromium (Cr) and Cr compound emissions shall not exceed 0.075 mg/dscm (0.033 gr/1000 dscf).</p> <p>Nickel (Ni) and Ni compound emissions shall not exceed 0.65 mg/dscm (0.284 gr/1000 dscf).</p> <p>(all units corrected to 7% oxygen, dry basis at standard conditions)</p>
b.	OAC rule 3745-75-02(K)	Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 5% opacity except for 6 minutes in any continuous 60-minute period during which the opacity shall not exceed 10%.
c.	OAC rule 3745-17-07	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-75-02.
d.	OAC rule 3745-17-09	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-75-02.
e.	OAC rule 3745-31-05(A)(3) (PTI 02-3436)	The emission limitations required by this applicable rule are less stringent than the emission limitations established pursuant to OAC rule 3745-75-02.



- (2) Additional Terms and Conditions
 - a. None.
- c) Operational Restrictions
 - (1) The waste material feed rate to this incinerator shall be limited to 1350 pounds per hour (or a rate established during either the initial performance testing or most recent performance test as petitioned by the permittee), measured as 3-hour rolling averages.

[Authority for term: OAC rule 3745-75-01(B), and OAC rule 3745-31-05]
 - (2) All incineration shall occur in a controlled air, multi-chamber incinerator, or equivalent technology as approved by the Director, which provides complete combustion of waste, excluding non-combustible items, to carbonized or mineralized ash. Any ash that does not meet this criterion shall be re-incinerated.

[Authority for term: OAC rule 3745-75-03]
 - (3) The primary combustion chamber for this incinerator shall be maintained so that the exit gas is at a minimum temperature of 1400 degrees Fahrenheit. The secondary combustion chamber for this incinerator shall operate so that the temperature of the gas exiting the chamber is a minimum of 90% of the highest 3-hour average secondary chamber temperature (taken, at a minimum, once every minute) measured during the initial performance test or the most recent performance test as petitioned by the permittee, demonstrating compliance with the PE, CO, and D/F limits, or a minimum temperature of 1800 degrees Fahrenheit, whichever is greater.

[Authority for term: OAC rule 3745-75-03, and OAC rule 3745-31-05]
 - (4) The secondary combustion chamber of this incinerator shall allow for a 2-second retention time at 1800 degrees Fahrenheit.

[Authority for term: OAC rule 3745-75-03(D) and OAC rule 3745-31-05]
 - (5) This incinerator shall be equipped with an automatic feeder which is designed and operated so that wastes cannot be charged if the temperature of the gas exiting the secondary combustion chamber has not reached the minimum temperature established in c)(3).

[Authority for term: OAC rule 3745-75-03]
 - (6) Infectious waste shall not be loaded into the primary combustion chamber of this incinerator until the exit gas temperature has reached 1400 degrees Fahrenheit.

[Authority for term: OAC rule 3745-75-03]
 - (7) The stack(s) for this incinerator shall be designed to minimize the impact of the emissions on employees, residents, visitors, and nearby residences. The design shall meet good engineering practices so as not to cause concentrations of any air contaminant at any air intake for heating and cooling of any building or at operable windows or doors.



[Authority for term: OAC rule 3745-75-03]

- (8) If this incinerator is mechanically-fed, it must be equipped with an air lock system to prevent opening the incinerator to the room environment. The volume of the loading system shall be designed so as to prevent the overcharging of the unit to ensure complete combustion of the waste.

[Authority for term: OAC rule 3745-75-03]

- (9) This incinerator shall be equipped with an air pollution control system designed to reduce HCl emissions, D/F emissions, and Hg emissions and provide for continuous compliance with the HCl, D/F, and Hg emission limits when the unit is in operation.

[Authority for term: OAC rule 3745-75-03, and OAC rule 3745-31-05]

- (10) The permittee shall maintain the air pollution control system to aid in the control of D/F, Hg, and HCl. The applicable parameters required to be monitored under OAC rule 3745-75-04 shall be maintained at or above minimum levels and below maximum levels established during either the initial performance testing or most recent performance test as petitioned by the permittee.

[Authority for term: OAC rule 3745-75-04]

- (11) This incinerator, including all associated equipment and grounds, shall be designed, operated and maintained to prevent the emission of objectionable odors.

[Authority for term: OAC rule 3745-75-03(K)]

- (12) Under no circumstances shall radiological or radioactive waste be charged into this unit.

Medical/infectious waste that is also radioactive shall be managed in accordance with the applicable rules of the Ohio department of health and regulations of the United States nuclear regulatory commission.

[Authority for term: OAC rule 3745-75-03(L) and ORC 3743.027]

- (13) This incinerator shall be operated only by properly trained personnel. A minimum of twenty four hours of incinerator operation training shall be provided to each operator before he or she is allowed to operate this incinerator. This may include, for each operator, the successful completion of the training course for the operation and maintenance of hospital medical waste incinerators developed by the Control Technology Center, U.S. EPA, courses or instructions provided by incinerator manufacturers, professional engineering organizations, colleges or universities, corporate training programs, or the Ohio EPA. A copy of all the training records for each operator shall be maintained on file and shall be immediately available to the Director (the Ohio EPA Northeast District Office) and U.S.EPA upon request. An annual review or refresher course of at least 4 hours must be conducted annually in order to maintain their qualifications to operate the HMIWI.

[Authority for term: OAC rule 3745-75-03]

- (14) This facility may not receive or incinerate any hazardous waste materials as defined in 40 CFR Part 216, Subpart D.



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

- (15) The permittee shall have this incinerator inspected monthly using preventive maintenance procedures recommended by the equipment manufacturer. Each inspection shall include a written report identifying any needed repairs to the unit. If repairs are needed, the incinerator shall not be operated if the operation would result in any exceedance of the emission limits detailed in this permit. These repairs shall be completed within 30 days of the inspection. If a time period longer than 30 days is needed to complete the repairs, the Ohio EPA Northeast District Office shall be notified in writing. This notice shall list the repairs needed and the reason(s) the repairs could not be accomplished within the required time period. All inspection and repair reports shall be kept by the permittee for a period of 5 years and shall be made available to the Director (the Ohio EPA Northeast District Office) upon request.

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

- (16) The permittee is required to have a fully trained and qualified HMIWI operator, either at the facility or on-call. A trained and qualified HMIWI operator is defined in OAC rule 3745-75-03.

[Authority for term: OAC rule 3745-75-03]

- (17) The permittee is required to maintain a site-specific HMIWI operating procedure, as required by OAC rule 3745-75-03(T), and to review this operating information annually.

[Authority for term: OAC rule 3745-75-03(T)]

- (18) The permittee is required to have a waste management plan, as required by OAC rule 3745-75-05(F).

[Authority for term: OAC rule 3745-75-05, and OAC rule 3745-77-01(A)(1)]

- (19) During either the initial performance testing or most recent performance test as petitioned by the permittee, the permittee shall establish minimum (3-hour rolling average) operating parameter restrictions for:

- a. liquid flow rate to the venturi scrubber inlet;
- b. pressure drop across the venturi scrubber; and
- c. the pH at the inlet to the absorber scrubber.

[Authority for term: OAC rule 3745-75-01(B), and OAC rule 3745-75-03(I)]

- (20) During either the initial performance testing or most recent performance test as petitioned by the permittee, the permittee shall establish the maximum (3-hour rolling average) operating parameter restriction for the temperature at the outlet from the wet scrubber (maximum flue gas temperature).

[Authority for term: OAC rule 3745-75-01(B), and OAC rule 3745-75-03(I)]

- (21) Except during startup or shutdown (where no hospital, medical, and/or infectious wastes have been charged or the charged material has been completely incinerated) or



malfunctions, use of the bypass stack to the HMIWI shall constitute a violation of the PE, D/F, HCl, Pb, Cd, and Hg emission limitations.

[Authority for term: OAC rule 3745-75-02(L)]

- (22) Operating the HMIWI, equipped with a venturi scrubber, above the maximum charge rate, below the minimum secondary chamber temperature, and below the minimum scrubber liquor flow rate (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the dioxin/furan emission limitation.

[Authority for term: OAC rule 3745-75-02(O)]

- (23) Operating the HMIWI, equipped with a wet scrubber, above the maximum charge rate and above the maximum flue gas temperature (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the mercury emission limitation.

[Authority for term: OAC rule 3745-75-02(Q)]

- (24) Operating the HMIWI, equipped with an absorber scrubber, above the maximum charge rate and below the minimum absorber scrubber liquor pH (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the hydrogen chloride emission limitation.

[Authority for term: OAC rule 3745-75-02(R)]

- (25) Operating the HMIWI, equipped with a venturi scrubber, above the maximum charge rate and below the minimum pressure drop across the venturi scrubber (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the particulate matter emission limitation.

[Authority for term: OAC rule 3745-75-02(T)]

- (26) The HMIWI shall not be operated at any time above any of the applicable maximum operating parameters or below any of the applicable minimum operating parameters, measured as 3-hour rolling averages, except during periods of startup, shutdown, and malfunction. Operating parameter limits do not apply during the performance testing. Operating above the established maximum or below the established minimum operating parameters shall constitute a violation of established operating parameters.

[Authority for term: OAC rule 3745-75-02(I)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the primary combustion exhaust gas temperature, the secondary combustion exhaust gas temperature, and the bypass stack temperature when the incinerator is in operation. Units shall be in degrees Fahrenheit. Accuracy for each thermocouple, monitor and recorder shall be guaranteed by the manufacturer to be within 0.75 percent of the temperature being measured or 2.5 degrees Fahrenheit, whichever is greater. The temperature monitors and recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.



[Authority for term: OAC rules 3745-77-07(C)(1), 3745-75-04(A), 3745-75-04(D), and 3745-75-04(H)]

- (2) The permittee shall operate and maintain continuous monitors and recorders that measure and record the 3-hour average value, each minute when the incinerator is in operation, for the following parameters:
- a. liquid flow rate to the venturi scrubber inlet;
 - b. pressure drop across the venturi scrubber;
 - c. temperature at the outlet from the wet scrubber; and
 - d. the pH at the inlet to the absorber scrubber.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-75-04(H), and 3745-75-04(K)]

- (3) Radioactive waste shall not be charged to this incinerator. The permittee shall operate and maintain equipment to continuously monitor the radioactivity of all waste prior to combustion. This monitor shall be equipped with an alarm which sounds a warning when radioactive waste is present. For purposes of this permit, radioactive waste shall be defined as any waste which measures above ambient background levels of radiation. All radioactive infectious waste shall be managed in accordance with the applicable rules of the Ohio Department of Health and the regulations of the United States Nuclear Regulatory Commission.

[Authority for term: OAC rule 3745-75-04(C) and OAC rule 3745-77-07(C)(1)]

- (4) A scale (accurate to within one pound) shall be installed near this incinerator to weigh all of the material charged to the unit. A record of the amount of material charged to this unit, on a pounds per 3-hour rolling average basis, shall be maintained. (Alternative arrangements may be approved by the Director provided they can be shown to be of equivalent effectiveness as a method of regulating flow into the incinerator and generating a permanent record of charging rates.)

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-75-04(E), 3745-75-04(H), and 3745-75-04(K)]

- (5) A logbook shall be maintained for each continuous emissions monitoring system installed on this incinerator to document all activities involving the monitoring systems. Appropriate records should include, as a minimum, preventive maintenance, quality assurance and corrective action activities.

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

- (6) Prior to burning any infectious waste in this incinerator, the permittee shall install, operate and maintain equipment to continuously monitor and record the CO emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60, section 60.13 and Appendix B, Performance Specification 4 and OAC rule 3745-75-04. The permittee shall maintain and operate the CO continuous emissions monitoring (CEM) system in accordance with



40 CFR Part 60, Appendix F. Any new CEM system for CO shall be designed so that the requirements in 40 CFR Part 60, Appendix F can be achieved.

The permittee shall operate a CEM system to measure oxygen concentrations, for adjusting pollutant concentrations to 7 percent oxygen.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-75-04(B), and 3745-75-04(G)]

- (7) The permittee shall document all instances of CO values in excess of the limitations specified in the terms and conditions of this permit.

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

- (8) The certified CEM system for CO shall be the means by which compliance with the terms and conditions of this permit is determined. Compliance with the appropriate emission limitation shall be based upon 12-hour, rolling averages, calculated each hour as the average of the previous 12 operating hours (not including start-up, shutdown, or malfunctions.)

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

- (9) The CO CEM system shall be equipped with an alarm which shall indicate whenever concentrations exceed 150 parts per million as an instantaneous measurement.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-75-04(B)]

- (10) The permittee shall maintain the following:

- a. the names of HMIWI operators who have completed review of the documentation in OAC rule 3745-75-03 as required by OAC rule 3745-75-03, including the date of the initial and all subsequent annual reviews;
- b. the names of HMIWI operators who have completed the operator training requirements, including documentation of training and the dates of the training;
- c. the names of HMIWI operators who have met the criteria for qualification under OAC rule 3745-75-03 and the dates of their qualification; and
- d. records of calibration of any monitoring devices as required under OAC rule 3745-75-04.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-75-03, and 3745-75-04]

- (11) The permittee shall obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained and recorded for 75% of the operating hours per day and for 90% of the operating days per calendar quarter that the affected facility combusts hospital waste and/or medical/infectious waste.

[Authority for term: OAC rule 3745-77-07(C)(1), and OAC rule 3745-75-04(L)]



e) Reporting Requirements

- (1) The permittee shall submit annual reports, by January 31 of each year, that provide the total amount of waste incinerated, in tons, during the previous calendar year.
- (2) The permittee also shall submit quarterly deviation (excursion) reports that identify all periods of operation during which the average charge rate exceeded the limitation specified in c)(1) above, including the actual charge rates for all such periods of operation. The quarterly deviation reports shall be submitted in accordance with Standard Term and Condition A.2.

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

- (3) The permittee shall submit quarterly deviation (excursion) reports that provide the following information for each period during which the primary or secondary combustion chamber exhaust gas temperature falls below the applicable limitation during normal operation:
 - a. the date of the excursion;
 - b. the time interval over which the excursion occurred;
 - c. the temperature values during the excursion;
 - d. the cause(s) for the excursion; and
 - e. the corrective action which has been or will be taken to prevent similar excursions in the future.

The quarterly deviation reports shall be submitted in accordance with Standard Term and Condition A.2.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-75-05]

- (4) Pursuant to 40 CFR Part 60, section 60.7 and 60.13(h), 40 CFR Part 60, Appendix F and OAC rule 3745-75-05, the permittee shall submit quarterly reports that document all instances of CO values in excess of the limitations specified in the terms and conditions of this permit. The permittee shall submit data assessment reports in accordance with 40 CFR Part 60, Appendix F. The quarterly deviation reports shall be submitted in accordance with Standard Term and Condition A.2.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-75-05]

- (5) A comprehensive written report on the results of any emission test(s) shall be submitted within 90 days following completion of the test(s).

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-75-05]

- (6) The permittee shall submit quarterly deviation (excursion) reports identifying the following information:
 - a. the identification of calendar days during which required data on emission rates or the operating parameters were not obtained, to include an identification of the



emission rate(s) or operating parameter(s) not measured, the reason(s) for not obtaining the data, and a description of the corrective action(s) taken to prevent a reoccurrence;

- b. the identification of calendar days during which there was a malfunction of the HMIWI or its control equipment, a description of the malfunction, the time and duration of the malfunction, the corrective action(s) taken, and any measure(s) implemented to prevent a reoccurrence; and
- c. the identification of calendar days during which any emission rate or operating parameter exceeded the applicable limits, with a description of the exceedance(s), reason(s) for such exceedance(s), a description of the corrective action(s) taken, and any measure(s) implemented to prevent a reoccurrence.

These reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall cover the data obtained during the previous calendar quarters.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-75-05(B)]

- (7) The permittee shall submit semiannual reports for the HMIWI containing the information specified below:
 - a. the values for the site-specific operating parameters established during either the initial performance testing or most recent performance test as petitioned by the permittee, demonstrating the HMIWI was in compliance;
 - b. the highest maximum operating parameters for the material charge rate and temperature at the outlet from the wet scrubber (scrubber flue gas temperature); and the lowest minimum operating parameters for the HMIWI secondary chamber temperature, the pressure drop across the venturi scrubber, and the flow rate of the venturi scrubber and pH of the absorber scrubber liquor recorded for the 6-month period being reported;
 - c. the highest maximum operating parameters for the material charge rate and temperature at the outlet from the wet scrubber (scrubber flue gas temperature); and the lowest minimum operating parameters for the HMIWI secondary chamber temperature, the pressure drop across the venturi scrubber, and the flow rate of the venturi scrubber and pH of the absorber scrubber liquor recorded during the preceding three semiannual reporting periods, in order to provide the Director (Ohio EPA Northeast District Office) with a summary of the performance of the HMIWI over a 2-year period;
 - d. the identification of calendar days during the preceding 6-month reporting period during which required data on emission rates or the operating parameters were not obtained, to include an identification of the emission rates or operating parameters not measured, the reason(s) for not obtaining the data, and a description of the corrective action(s) taken to prevent a reoccurrence;
 - e. the identification of calendar days during the preceding 6-month reporting period for which there was a malfunction of the HMIWI or its control equipment, a description of the malfunction, the time and duration of the malfunction, and the corrective action(s) taken to correct it;



- f. the identification of calendar days during the preceding 6-month reporting period for which any emission rate or operating parameter exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of the corrective action(s) taken;
- g. if a performance test was conducted during the reporting period, the results of that test;
- h. if no exceedances of the emission limits or the operating parameters or no malfunctions of the HMIWI or control equipment were recorded for the semiannual reporting period, a statement that no exceedances occurred during the reporting period;
- i. the date, time, and duration of any use of the bypass stack; the reason for the malfunction, and the corrective action(s) taken; and
- j. any activation of the radioactivity alarm, the reason for the alarm, and the corrective action(s) taken.

The semiannual reports shall be submitted no more than 6 months following the previous report and all reports shall be signed by the facility manager.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-75-05(A)]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PE shall not exceed 34 mg PE/dscm (0.015 grain PE/dscf) of exhaust gases.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5 or Method 29.

b. Emission Limitation:

CO emissions shall not exceed 100 parts per million (ppm) by volume as an hourly average, 40 ppm by volume as a 12-hour rolling average (not including startup and shutdown) as measured by CEM, and 40 ppm as a 3-hour rolling average (not including startup and shutdown) as measured by 40 CFR Part 60, Appendix A, Method 10 or 10B.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the use of the continuous emissions monitoring system required in d)(6) and d)(8).

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 10 or 10B.



c. Emission Limitation:

D/F emissions shall not exceed 125 ng/dscm (55 grains/billion dscf) of total dioxins/furans or 2.3 ng/dscm (1.0 grain/billion dscf) expressed as Toxic Equivalency Factors (TEQ).

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 23.

d. Emission Limitation:

HCl emissions shall not exceed 100 ppm by volume or 93% reduction.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 26 or 26A.

e. Emission Limitation:

SO₂ emissions shall not exceed 55 ppm by volume.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6.

f. Emission Limitation:

NO_x emissions shall not exceed 250 ppm by volume.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 7.

g. Emission Limitation:

Pb and Pb compound emissions shall not exceed 1.2 mg/dscm (0.52 gr/1000 dscf) or 70% reduction.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 29.

h. Emission Limitation:

Cd and Cd compound emissions shall not exceed 0.16 mg/dscm (0.07 gr/1000 dscf) or 65% reduction.

Applicable Compliance Method:



Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 29.

i. Emission Limitation:

Hg and Hg compound emissions shall not exceed 0.55 mg/dscm (0.24 gr/1000 dscf) or 85% reduction.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 29.

j. Emission Limitation:

As and As compound emissions shall not exceed 0.21 mg/dscm (0.092 gr/1000 dscf).

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 29.

k. Emission Limitation:

Be and Be compound emissions shall not exceed 0.026 mg/dscm (0.011 gr/1000 dscf).

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 29.

l. Emission Limitation:

Cr and Cr compound emissions shall not exceed 0.075 mg/dscm (0.033 gr/1000 dscf).

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 29.

m. Emission Limitation:

Ni and Ni compound emissions shall not exceed 0.65 mg/dscm (0.284 gr/1000 dscf).

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 29.



n. Emission Limitation:

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 5% opacity except for 6-minutes in any continuous 60-minute period during which the opacity shall not exceed 10%.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-75-06, and 3745-15-04]

(2) The permittee shall conduct, or have conducted, periodic emission testing for this emissions unit in accordance with the following requirements:

- a. The initial performance test has demonstrated compliance with the limits for PE, CO, HCL, dioxin/furan, As, Be, Cd, Cr, Pb, Hg, and Ni; and the appropriate parameters have been established as required by rule during the test Methods for the appropriate pollutant(s) as required in the Additional Terms and Conditions of this permit. The tests for opacity, PE, CO and HCl shall be conducted annually (no more than 12 months following the previous performance test) using the applicable procedures and test methods listed in this permit. If all three performance tests over a three year period indicate compliance with the emission limit for PE, CO and HCl, the owner or operator may forego a performance test for that pollutant for the subsequent two years. At a minimum, a performance test for PE, CO and HCl shall be conducted every third year (no more than 36 months following the previous performance test). If a performance test conducted every third year indicates compliance with the emission limit for a pollutant (PE, CO and HCl), the owner or operator may forego a performance test for that pollutant for an additional two years. If any performance test indicates noncompliance with the respective emission limit, a performance test for that pollutant shall be conducted annually until all annual performance tests over a 3-year period indicate compliance with the emission limit. The annual test for opacity shall be conducted in any case.
- b. The following test method(s) shall be employed to determine sampling location and gas composition analysis: Method 1, 3, 3A, or 3B of 40 CFR Part 60, Appendix A.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for PE: Method 5 or 29 of 40 CFR Part 60, Appendix A.
- d. The following test method(s) shall be employed to demonstrate compliance with stack opacity: Method 9 of 40 CFR Part 60, Appendix A.
- e. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for CO: Method 10 or 10B of 40 CFR Part 60, Appendix A.



- f. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for HCl: Method 26 of 40 CFR Part 60, Appendix A. If the percentage reduction standards for HCl has been selected as the compliance method, the percentage reduction in HCl emissions (%RHCl) shall be calculated using the following formula:

$$\%RHCl = [(Ei - Eo) / Ei] \times 100$$

where:

%RHCl = percentage reduction of HCl emissions achieved;

Ei = HCl emission concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis); and

Eo = HCl emission concentration measured at the control device outlet, corrected to 7 percent oxygen (dry basis).

- g. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for dioxin/furan: Method 23 of 40 CFR Part 60, Appendix A. The minimum sample time must be 4 hours per test run. If the permittee selects the toxic equivalency standards for dioxins/furans to demonstrate compliance, the following procedures shall be used:

- i. the concentration of each dioxin/furan tetra- through octa-congener emitted shall be measured using EPA Reference Method 23;
- ii. multiply each dioxin/furan tetra- through octa-congener concentration measured by its corresponding toxic equivalency factor specified in Table 2 of 40 CFR Part 60 Subpart Ec; and
- iii. sum the products calculated above to obtain the total concentration of dioxins/furans emitted in terms of toxic equivalency.

- h. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rates for Pb, Cd, Hg, As, Be, Cr, and Ni: Method 29 of 40 CFR Part 60, Appendix A. If the percentage reduction standards for metals has been selected as the compliance method, the percentage reduction in emissions (%Rmetal) shall be calculated using the following formula:

$$\%Rmetal = [(Ei - Eo) / Ei] \times 100$$

where:

%Rmetal = percentage reduction of metal emission (Pb, Cd, Hg, As, Be, Cr, or Ni) achieved;

Ei = metal emission concentration (Pb, Cd, Hg, As, Be, Cr, or Ni) measured at the control device inlet, corrected to 7% oxygen (dry basis); and

Eo = metal emission concentration (Pb, Cd, Hg, As, Be, Cr, or Ni) measured at the control device outlet, corrected to 7% oxygen (dry basis).



- i. The test(s) shall be conducted at or near the maximum charge rate, unless otherwise specified or approved by the Ohio EPA, while burning representative waste. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of the performance test and a malfunction during testing shall invalidate the results. The permittee shall make available to the Ohio EPA Northeast District Office, upon request, any records that may be necessary to determine the conditions of the performance tests.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-75-06(F) and 3745-15-04]

- (3) The Director (Ohio EPA Northeast District Office) may request a performance test or repeat performance test at any time, if in the Director's judgment there may be a violation of any applicable emission standard or if there has been a change in the operation of the HMIWI that may cause an increase in emissions due to a change in waste streams, infectious waste generators, or other operating conditions. Therefore, following the initial compliance demonstration and if required by the Director, the permittee shall also conduct performance testing of the HMIWI for SO₂, NO_x, D/F, As, Be, Cd, Cr, Pb, Hg, and/or Ni in order to demonstrate compliance with the limitations contained in this permit. The following applicable method(s) shall be used if it is determined a compliance demonstration is required for one or more of these pollutants:

Method 6 of 40 CFR Part 60, Appendix A to measure SO₂ emissions;

Method 7 of 40 CFR Part 60, Appendix A to measure NO_x emissions;

Method 23 of 40 CFR Part 60, Appendix A to measure total dioxin/furan emissions. The minimum sample time shall be 4 hours per test run. If the permittee selected the percentage reduction standard for HCl under 40 CFR part 62.14411, the procedure in 40 CFR part 62.14452(k) must be followed; and

Method 29 of 40 CFR Part 60, Appendix A to measure Pb, Cd, Hg, As, Be, Cr, and Ni emissions.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA 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 and submitted to the Ohio EPA Northeast District Office within 90 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Title V Permit
Permit Number: P0086292
Facility ID: 0278080634
Effective Date: 2/26/2009

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-75-06, and OAC rule 3745-15-04]

g) Miscellaneous Requirements

- (1) None.