



State of Ohio Environmental Protection Agency

Street Address:

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

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

12/30/03

CERTIFIED MAIL

**RE: Preliminary Proposed Title V
Chapter 3745-77 permit**

16-77-01-0757
Akron Thermal Energy Corporation
James S. Benson Mr.
226 Opportunity Parkway
Akron, OH 44308-2232

Dear James S. Benson:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 11/06/03. The comment period for the Draft permit has ended. We are now ready to submit this permit to USEPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written, you now have the opportunity to raise your concerns. **In order to facilitate our review of all the comments or concerns you may have with the enclosed preliminary proposed permit, please provide a hand marked-up copy of the permit showing the changes you think are necessary, along with any additional summary comments, within fourteen (14) days from your receipt of this letter to:**

**Ohio EPA, Division of Air Pollution Control
Jim Orlemann, Manager, Engineering Section
Preliminary Proposed Title V Permit Correspondence
122 South Front Street
Columbus, Ohio 43215**

and

Akron Air Pollution Control
146 South High Street, Room 904
Akron, OH 44308
(330) 375-2480

Also, if you believe that it is necessary to have an informal conference with us, then, as part of your written comments, you should request a conference concerning the written comments.

If comments are not submitted within fourteen (14) days of your receipt of this letter, we will forward the proposed permit to USEPA for approval. All comments received will be carefully considered before proceeding to the proposed permit.

Sincerely,


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

cc: Akron Air Pollution Control
File, DAPC PMU



State of Ohio Environmental Protection Agency

PRELIMINARY PROPOSED TITLE V PERMIT

Issue Date: 12/30/03	Effective Date: To be entered upon final issuance	Expiration Date: To be entered upon final issuance
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This document constitutes issuance of a Title V permit for Facility ID: 16-77-01-0757 to:
Akron Thermal Energy Corporation
 226 Opportunity Parkway
 Akron, OH 44307-2232

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

B001 (Boiler #32) 220 MMBtu/hr Spreader Stoker Fired Coal Boiler	B004 (Boiler #2) 180 MMBtu/hr Solid Fuel/Gas/Oil Fired Boiler	Z003 (Fuel Oil Tank) 500,000 Gallon Fuel Oil Storage Tank
B002 (Boiler #31) 267 MMBtu/hr Gas/Oil Fired Boiler	B005 (Boiler #3) 180 MMBtu/hr Solid Fuel/Gas/Oil Fired Boiler	Z004 (Cooling Towers) Process Cooling Towers
B003 (Boiler #1) 180 MMBtu/hr Solid Fuel/Gas/Oil Fired Boiler	Z002 (Ash Removal) Ash Removal Activities	Z005 (Wood Unloading) Wood Unloading Activities

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

Akron Air Pollution Control
 146 South High Street, Room 904
 Akron, OH 44308
 (330) 375-2480

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
 Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Record Keeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.III of Part III of this Title V permit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

- i. The date, place (as defined in the permit), and time of sampling or measurements.
- ii. The date(s) analyses were performed.
- iii. The company or entity that performed the analyses.
- iv. The analytical techniques or methods used.
- v. The results of such analyses.
- vi. The operating conditions existing at the time of sampling or measurement.

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

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

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

c. The permittee shall submit required reports in the following manner:

- i. **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 by January 31, April 30, July 31, and October 31 of each year in accordance with General Term and Condition A.1.c.ii below; and each report shall cover the previous calendar quarter.

In accordance with OAC rule 3745-15-06, a malfunction 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))

- ii. **Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.IV of Part III of this Title V permit or, in some cases, in Part II 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 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 reports shall satisfy the requirements (in part) 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. OAC rule 3745-77-07(A)(3)(c) is not fully satisfied until the permittee addresses all other deviations of the federally enforceable requirements specified in the permit.

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 overrides the reporting requirements specified in this General 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 the requirements (in part) 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 General Term and Condition.

See B.6 below if no deviations occurred during the quarter.

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

- iii. **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 General Term and Condition A.1.c.ii above shall be submitted in the following manner:**

Written reports that identify all other deviations of the federally enforceable requirements contained in this permit, including the monitoring, record keeping, and reporting requirements, which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted 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.

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 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 General Term and Condition A.1.c.ii 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))

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

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

- v. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

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

2. **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 General Term and Condition A.1.c.i above.

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

3. **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))

4. **Title IV Provisions**

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

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

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

(Authority for term: OAC rule 3745-77-07(A)(6))

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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

7. Fees

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

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

8. Marketable Permit Programs

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

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

9. Reasonably Anticipated Operating Scenarios

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

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

10. Reopening for Cause

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

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.
(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

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

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

13. Permit Shield

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

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

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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

15. Emergencies

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

16. Off-Permit Changes

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

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA. 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))

17. Compliance Method Requirements

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

(This term is provided for informational purposes only.)

18. Insignificant Activities

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

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

19. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

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

20. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

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

21. 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 by the responsible official of the date on which the emissions unit was permanently shut down. Authorization to operate the affected part or activity of the stationary source shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

If 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 monitoring, record keeping, reporting, or testing 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.

B. State Only Enforceable Section

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

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

2. Records Retention Requirements

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

3. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

4. Scheduled Maintenance/Malfunction Reporting

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

5. Permit Transfers

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

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

If no 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 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 General Term and Condition A.1.c.ii;
- 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; and
- c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

MACT “Hammer” Requirements

1. The permittee may be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial & Institutional Boilers, 40 CFR Part 63, Subpart DDDDD. U.S. EPA failed to promulgate this standard by May 15, 2002, the Maximum Achievable Control Technology (MACT) hammer date. In accordance with 40 CFR Part 63, Subpart B (40 CFR Parts 63.50 through 63.56), the permittee shall submit an application to revise the permit to include equivalent emission limitations as a result of a case-by-case MACT determination. The application shall be submitted in two parts. The deadline to submit the Part I application, as specified in 40 CFR Part 63.53, was May 15, 2002.
2. If the final MACT standard is not promulgated by the deadline specified by U.S. EPA, the permittee shall submit the Part II application as specified in 40 CFR Part 63.53. The Part II application shall be submitted within 60 days after the deadline to promulgate the respective standard or by May 15, 2003, whichever is later. It must contain the following information, unless otherwise specified by future U.S. EPA regulations:
 - a. for a new affected source, the anticipated date of startup of operation;
 - b. the hazardous air pollutants (HAPs) emitted by each affected source in the relevant source category and an estimated total uncontrolled and controlled emission rate for HAPs from the affected source;
 - c. any existing federal, State, or local limitations or requirements applicable to the affected source;
 - d. for each affected emission point or group of affected emission points, an identification of control technology in place;
 - e. information relevant to establishing the MACT floor (or MACT emission limitation), and, at the option of the permittee, a recommended MACT floor; and
 - f. any other information reasonably needed by the permitting authority including, at the discretion of the permitting authority, information required pursuant to Subpart A of 40 CFR Part 63.

The Part II application for a MACT determination may, but is not required to, contain the following information:

- a. recommended emission limitations for the affected source and support information. (the permittee may recommend a specific design, equipment, work practice, or operational standard, or combination thereof, as an emission limitation);
- b. a description of the control technologies that would be applied to meet the emission limitation, including technical information on the design, operation, size, estimated control efficiency and any other information deemed appropriate by the permitting authority, and identification of the affected sources to which the control technologies must be applied; and
- c. relevant parameters to be monitored and frequency of monitoring to demonstrate continuous compliance with the MACT emission limitation over the applicable reporting period.

3. If the NESHAP is promulgated before May 15, 2004, the facility shall be subject to the rule as an existing major source with a compliance date as specified in the NESHAP. Pursuant to the Subpart, the permittee shall submit the following notifications:
- a. Within 120 days after promulgation of 40 CFR Part 63, Subpart DDDDD, the permittee shall submit an Initial Notification Report which certifies whether or not the permittee is subject to the promulgated standard. If the permittee is subject to the final standard, the following information shall also be included in the Initial Notification Report, in accordance with 40 CFR Part 63.9(b)(2):
 - i. the name and mailing address of the permittee;
 - ii. the physical location of the source if it is different from the mailing address;
 - iii. identification of the relevant MACT standard and the source's compliance date;
 - iv. a brief description of the nature, design, size, and method of operation of the source, including the operating design capacity and an identification of each emission point of each HAP; and
 - v. a statement confirming the facility is a major source for HAPs.
 - b. Within 60 days following completion of any required compliance demonstration activity specified in 40 CFR Part 63, Subpart DDDDD, the permittee shall submit a notification of compliance status that contains the following information:
 - i. the methods used to determine compliance;
 - ii. the results of any performance tests, visible emission observations, continuous monitoring systems performance evaluations, and/or other monitoring procedures or methods that were conducted;
 - iii. the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;
 - iv. the type and quantity of HAPs emitted by the source, reported in units and averaging times in accordance with the test methods specified in 40 CFR Part 63, Subpart DDDDD;
 - v. an analysis demonstrating whether the affected source is a major source or an area source;
 - vi. a description of the air pollution control equipment or method for each emission point, including each control device or method for each HAP and the control efficiency (percent) for each control device or method; and
 - vii. a statement of whether or not the permittee has complied with the requirements of 40 CFR Part 63, Subpart DDDDD.

(Authority for term: 40 CFR Part 63)

4. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.

(Authority for term: OAC rule 3745-25-03)

5. Pursuant to 40 CFR Part 64, the permittee has submitted and the Ohio EPA has approved a compliance assurance monitoring plan for emissions units B001, B003, B004, and B005 at this facility. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

(Authority for term: 40 CFR Part 64)

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

Z004 - cooling towers; and
Z006 - ash removal (wood/TDF).

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 contained in the federally-approved versions of OAC Chapters 3745-17, 3745-18, and/or 3745-21.

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

B. State Only Enforceable Section

1. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements (as defined in OAC rule 37-45-77-01(H)) or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

Z002 - ash removal (coal); and
Z003 - fuel oil tank.

Emissions Unit: Boiler #32 (B001)

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler #32 (B001)

Activity Description: 220 MMBtu/hr Spreader Stoker Fired Coal Boiler

A. State and Federally Enforceable Section

I. Applicable Emission 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 emission limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
220 million Btu per hour spreader stoker coal-fired boiler controlled with a multiclone and an electrostatic precipitator (ESP)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-10(C)(1)	0.158 pound of particulate emissions per million Btu actual heat input
	40 CFR Part 52.1881(b)(28)(viii)	7.0 pounds of sulfur dioxide per million Btu actual heat input
		See A.II.2 below.
	40 CFR Part 64	See A.II.1, A.III.1, A.III.3, A.III.5, A.IV.2, A.IV.3, and A.VI.1 below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, from any stack, except as provided by rule.

II Operational Restrictions

1. The quality of the coal burned in this emissions unit shall meet the following specifications on an as-burned wet basis:
 - a. less than 12% ash, by weight;

Emissions Unit: Boiler #32 (B001)

- b. a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 7.0 pounds of sulfur dioxide per million Btu actual heat input; and
- c. greater than 12,000 Btu per pound of coal.

Compliance with the above-mentioned specifications shall be on an "as-burned" wet basis and shall be determined by using the analytical results from the composite sample of coal collected during each calendar month.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 64.3(a)(2))

- 2. The permittee shall not operate boiler number 27 (B003) simultaneously with boiler number 32 (B001).

Because boiler number 27 (B003) has been shut down, the records necessary to demonstrate compliance with this requirement need not be maintained. This permit will be modified upon completion of any revision to 40 CFR Part 52.1881(b)(28)(viii).

(Authority for term: 40 CFR Part 52.1881(b)(28)(viii))

III Monitoring and/or Recordkeeping

- 1. The permittee shall collect representative grab samples of the coal burned in this emissions unit on a frequency of at least two days per week. A sufficient number of samples shall be collected so that each composite sample is representative of the average quality of coal burned in this emissions unit during each calendar day. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, all of the grab samples which were collected during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be the most recent version of the following ASTM methods: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D5865, Gross Calorific Value of Coal and Coke, respectively. Alternative, equivalent methods may be used upon written approval by the Akron RAQMD.

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

- 2. The permittee shall maintain monthly records of the total quantity of coal received and the results of the analyses for ash content, sulfur content, and heat content and the calculated sulfur dioxide emission rate (in lbs/mmBtu) based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all shipments of coal during a calendar month.

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

- 3. The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Emissions Unit: Boiler #32 (B001)

Each continuous emission monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 1-minute, 6-minute block, and hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments. *(Authority for term: OAC rule 3745-77-07(A)(3)(a), OAC rule 3745-77-07(A)(3)(b), 40 CFR Part 64.3(a), 40 CFR Part 64.7(b), and 40 CFR Part 64.9(b))*

4. To obtain an exemption pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the boiler exhaust gases entering the ESP during (a) all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b) all periods of shutdown until the inlet temperature of the ESP drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i). An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained.

The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

(Authority for term: OAC rule 3745-17-07(A)(3), OAC rule 3745-77-07(A)(3)(a), and OAC rule 3745-77-07(A)(3)(b))

5. The CAM plan for this emissions unit has been developed for visible particulate and particulate emissions. The CAM performance indicator for visible particulate emissions is the opacity of the visible particulate emissions from the ESP exhaust stack as measured and recorded by the certified continuous opacity monitoring system. The visible particulate emissions indicator range is 3 consecutive minutes with an average opacity value less than 20%. When the average opacity value is outside the indicator range, corrective action (including, but not limited to, an evaluation of the emissions unit and ESP operating parameters) will be required. The CAM performance indicators for particulate emissions are the opacity of the visible particulate emissions from the ESP exhaust stack as measured and recorded by the certified continuous opacity monitoring system and a predictive particulate emissions model based upon the results of site specific particulate emission testing and emissions unit and ESP parametric data collected during the emission testing. The opacity indicator range is an hourly average opacity value less than 20%. When the hourly average opacity value is outside the indicator range, there is no reporting or corrective action requirement relative to the particulate emission limitation, but the operator must enter the current ESP and emissions unit operating parameters into the site specific model to predict the particulate emissions. If the hourly average opacity does not return to a level within the indicated range, the model is run every 3 hours to evaluate emissions. If the results of the predictive model indicate that the particulate emission limitation may have been exceeded,

Emissions Unit: Boiler #32 (B001)

the permittee shall take corrective action to restore operation of the emissions unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in section A.IV.3 below. The predictive model shall be run in accordance with the approved CAM Plan or any approved revision of the Plan. Model calibration will be re-verified through periodic emission testing or if the ESP or emissions unit operating conditions change. In addition to periodic monitoring of their ESP operating parameters, the permittee also has an annual inspection and maintenance program for their ESP. Based on the results of the monitoring and inspection program, repairs to the ESP are made per the manufacturer's recommendation. If the current CAM indicators and/or the ESP maintenance program is considered inadequate, the permittee will develop a Quality Improvement Plan.

(Authority for term: OAC rule 3745-77-07(A)(3)(a), OAC rule 3745-77-07(A)(3)(b), 40 CFR Part 64.3(a), 40 CFR Part 64.6(c), 40 CFR Part 64.7(d), and 40 CFR Part 64.8)

IV Reporting Requirements

1. Quarterly reports shall be submitted concerning the quality and quantity of the coal burned in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
 - a. the total quantity of coal burned (tons);
 - b. the average ash content (percent) of the coal burned;
 - c. the average sulfur content (percent) of the coal burned;
 - d. the average heat content (Btu/pound) of the coal burned; and
 - e. the average sulfur dioxide emission rate (pounds sulfur dioxide/mmBtu actual heat input) from the coal burned.

The reports containing this information shall be submitted on a quarterly basis within 30 days following the end of each calendar quarter to the Akron RAQMD.

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

2. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Akron RAQMD documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity 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: Boiler #32 (B001)

emissions unit and the total operating time of the analyzer while the emissions unit was on line shall 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 date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. 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. *(Authority for term: OAC rule 3745-77-07(A)(3)(c) and 40 CFR Part 64.9(a))*

3. If the results of the predictive model indicate that the particulate emission limitation may have been exceeded, the permittee shall submit the results of the predictive modeling and document any corrective action taken to restore operation of the emissions unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with General Term and Condition A.1.c.iii of this permit. *(Authority for term: 40 CFR Part 64.7(d) and 40 CFR Part 64.9(a))*

V Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitations -

0.158 pound of particulate emissions per million Btu actual heat input
7.0 pounds of sulfur dioxide per million Btu actual heat input

Applicable Compliance Methods -

Compliance with the sulfur dioxide emission limitation may be demonstrated through the records required pursuant to section A.III.1. Compliance with these emission limitations shall be demonstrated through the emission testing requirements specified below.

The permittee shall conduct, or have conducted, particulate and sulfur dioxide emission testing for this emissions unit to demonstrate compliance with the particulate and sulfur dioxide emission limitations in accordance with the following requirements:

- a. the emission testing shall be conducted within 6 months prior to permit expiration;
- b. the following test methods shall be employed to demonstrate compliance with the allowable emission limitations: for particulate emissions, Methods 1 through 5 of 40 CFR Part 60, Appendix A; and for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A; and

Emissions Unit: Boiler #32 (B001)

- c. the tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Akron RAQMD.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Akron RAQMD. 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 Akron RAQMD's refusal to accept the results of the emission test(s).

Personnel from the Akron RAQMD 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Akron RAQMD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Akron RAQMD.

(Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-17-03(B)(9), OAC rule 3745-18-04(D)(1), and OAC rule 3745-77-07(A)(3)(c))

1.b Emission Limitation -

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, from any stack, except as provided by rule.

Applicable Compliance Method -

Compliance with the visible particulate emission limitation shall be determined through visible emission 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).

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-17-03(B)(1))

VI Miscellaneous Requirements

1. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

(Authority for term: OAC rule 3745-15-04(C), OAC rule 3745-77-07(A)(3)(b), 40 CFR Part 64.3(a)(1), and 40 CFR Part 64.7(c))

Emissions Unit: Boiler #32 (B001)

B. State Enforceable Section

I. Applicable Emission 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 emission limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
220 million Btu per hour spreader stoker coal-fired boiler controlled with a multiclone and an ESP	OAC rule 3745-18-83(I)	7.0 pounds of sulfur dioxide per million Btu actual heat input See B.II.1 below.

2. Additional Terms and Conditions

None

II Operational Restrictions

1. Combined average operating rates for boilers numbers 27 and 32 (OEPA emissions units B003 and B001, respectively) shall not exceed the following for any calendar day:
 - a. first quarter, 360 million Btu per hour;
 - b. second quarter, 360 million Btu per hour;
 - c. third quarter, 231 million Btu per hour; and
 - d. fourth quarter, 360 million Btu per hour.

Because boiler number 27 (B003) has been shut down and because the maximum heat input for boiler number 32 (B001) is 220 million Btu per hour, the daily combined average operating rates for the first, second, third, and fourth quarters listed above can not be exceeded. Therefore, the records necessary to demonstrate compliance with this requirement need not be maintained. This permit will be modified upon completion of any revision to OAC rule 3745-18-83(I).

III Monitoring and/or Recordkeeping

None

Emissions Unit: Boiler #32 (B001)

IV Reporting Requirements

None

V Testing Requirements

1. Compliance with the emission limitation in section B.I.1 of these terms and conditions shall be determined in accordance with the following method:

1.a Emission Limitation -

7.0 pounds of sulfur dioxide per million Btu actual heat input

Applicable Compliance Method -

Compliance with this emission limitation shall be demonstrated based upon the procedures specified in section A.V.1 above.

VI Miscellaneous Requirements

None

Emissions Unit: Boiler #31 (B002)

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler #31 (B002)
 Activity Description: 267 MMBtu/hr Gas/Oil Fired Boiler

A. State and Federally Enforceable Section

I. Applicable Emission 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 emission limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
267 million Btu per hour natural gas and oil-fired boiler	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions per million Btu actual heat input
	40 CFR Part 52.1881(b)(28)(viii)	0.51 pound of sulfur dioxide per million Btu actual heat input when firing with oil
	OAC rule 3745-18-06	Exempt pursuant to OAC rule 3745-18-06(A) when firing with natural gas.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, from any stack, except as provided by rule.

II Operational Restrictions

1. The quality of the oil burned in this emissions unit shall meet the following specifications on an "as received" basis:
 - a. a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.51 pound of sulfur dioxide per million Btu actual heat input; and

Emissions Unit: Boiler #31 (B002)

- b. greater than 139,000 Btu per gallon of oil.

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

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

III Monitoring and/or Recordkeeping

1. The permittee shall monitor and record natural gas usage for this emissions unit on a continuous basis.
(Authority for term: OAC rule 3745-77-07(A)(3)(a) and OAC rule 3745-77-07(A)(3)(b))
2. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294 for sulfur content and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Akron RAQMD.

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (lb/mmBtu).

(Authority for term: OAC rule 3745-77-07(A)(3)(a) and OAC rule 3745-77-07(A)(3)(b))

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

(Authority for term: OAC rule 3745-77-07(A)(3)(a) and OAC rule 3745-77-07(A)(3)(b))

IV Reporting Requirements

1. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The total quantity of oil in each shipment and the calculated sulfur dioxide emission rate for each shipment of oil shall also be included with the copies of the permittee's or oil supplier's analyses.

Emissions Unit: Boiler #31 (B002)

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

If no oil was burned in this emissions unit during the calendar quarter, the permittee shall indicate in the quarterly report that no oil was burned.

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

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Akron RAQMD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

V Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation -

0.020 pound of particulate emissions per million Btu actual heat input

Applicable Compliance Methods-

When firing fuel oil, compliance may be determined by dividing an emission factor of 2.0 lbs of particulate emissions per 1000 gallons of oil fired by the heating value of the of the fuel oil (139,000 Btu/gallon). This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-1 (9/98).

When firing natural gas, compliance may be determined by dividing an emission factor of 1.9 pounds of particulate emissions per million standard cubic feet by the heating value of the natural gas (1000 Btu/standard cu. ft.). This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9), while firing fuel oil.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-17-03(B)(9))

1.b Emission Limitation -

0.51 pound of sulfur dioxide per million Btu actual heat input

Applicable Compliance Method -

Emissions Unit: Boiler #31 (B002)

Compliance with this emission limitation may be demonstrated through the records required pursuant to section A.III.2.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-18-04(D)(1))

1.c Emission Limitation -

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, from any stack, except as provided by rule.

Applicable Compliance Method -

Compliance with the visible particulate emission limitation shall be determined through visible emission 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).

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-17-03(B)(1))

VI Miscellaneous Requirements

None

Emissions Unit: Boiler #31 (B002)

B. State Enforceable Section

I. Applicable Emission 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 emission limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
267 million Btu per hour natural gas and oil-fired boiler	OAC rule 3745-18-83(I)	0.50 pound of sulfur dioxide per million Btu actual heat input

2. Additional Terms and Conditions
None

II Operational Restrictions
None

III Monitoring and/or Recordkeeping
None

IV Reporting Requirements
None

V Testing Requirements

1. Compliance with the emission limitation in section B.I.1 of these terms and conditions shall be determined in accordance with the following method:
 - 1.a Emission Limitation -
0.50 pound of sulfur dioxide per million Btu actual heat input
Applicable Compliance Method -
Compliance with this emission limitation shall be demonstrated based upon the procedures specified in section A.V.1 above.

VI Miscellaneous Requirements

None

Emissions Unit: (B003)

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: (B003)

Activity Description: 180 MMBtu/hr wood, natural gas, and tire derived fuel (TDF) fired boiler

A. State and Federally Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

- 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 emission limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
B003 - Unit #1, Babcock and Wilcox 180 million Btu per hour wood, natural gas, and tire derived fuel (TDF)-fired boiler for steam generation, controlled with an electrostatic precipitator (ESP)	OAC rule 3745-31-05(A)(3) (PTI 16-02294)	<p>When burning only natural gas, particulate emissions (PE) shall not exceed 0.020 pound per million Btu of actual heat input.</p> <p>When burning a combination of natural gas, TDF and/or wood, PE shall not exceed 0.08 pound per million Btu of actual heat input and 14.4 pounds per hour.</p> <p>Nitrogen oxides (NOx) emissions shall not exceed 0.24 pound per million Btu of actual heat input and 43.2 pounds per hour.</p> <p>When burning TDF at a rate equal to or less than 15.5%, by volume, (Phase I operating scenario) sulfur dioxide (SO₂) emissions shall not exceed 0.24 pound per million Btu of actual heat input and 43.3 pounds per hour. See A.II.6 below.</p> <p>When burning TDF at a rate equal to or less than 20.0%, by volume, (Phase II operating scenario) SO₂ emissions shall not exceed 0.31 pound per million Btu of actual heat input and 55.8 pounds per hour. See A.II.6 below.</p>

Emissions Unit: (B003)

	<p>Carbon monoxide (CO) emissions shall not exceed 18.0 pounds per hour.</p> <p>Organic compound (OC) emissions shall not exceed 0.36 pound per hour and 1.58 tons per year.</p> <p>Hydrogen chloride (HCl) emissions shall not exceed 0.86 pound per hour and 3.75 tons per year.</p> <p>Sulfuric acid mist emissions shall not exceed 0.053 pound per million Btu of actual heat input and 9.56 pounds per hour.</p> <p>Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity.</p> <p>See A.I.2.a, A.II.1, A.II.3, and A.II.6 below.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), and 3745-31-13 through 3745-31-20.</p>
OAC rules 3745-31-13 through 3745-31-20	<p>SO₂ emissions from emissions units B003 and B004, combined, shall not exceed 135.46 tons per rolling, 12-month period.</p> <p>Sulfuric acid mist emissions from emissions units B003 and B004, combined, shall not exceed 23.44 tons per rolling, 12-month period.</p> <p>See A.I.2.b below.</p>
OAC rule 3745-31-05(D)	<p>The total amount of TDF/wood mix burned in emissions units B003 and B004, combined, shall not exceed 61,654 tons per rolling, 12-month period.</p> <p>See A.II.2 below.</p>

Emissions Unit: (B003)

	<p>PE from emissions units B003 and B004, combined, shall not exceed 36.22 tons per rolling, 12-month period.</p> <p>NOx emissions from emissions units B003 and B004, combined, shall not exceed 130.24 tons per rolling, 12-month period.</p> <p>CO emissions from emissions units B003 and B004, combined, shall not exceed 56.29 tons per rolling, 12-month period.</p> <p>See A.II.5 below.</p>
OAC rule 3745-17-07(A)	<p>The visible PE limitation specified in this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-17-10(B)	<p>When burning natural gas, the PE limitation specified in this rule is equivalent to the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-17-10(C)	<p>When burning a combination of natural gas, TDF and/or wood, the PE limitation specified in this rule is less stringent than the PE limitations established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-18-06(D)	<p>When burning natural gas, pursuant to OAC rule 3745-18-06(A), this emissions unit is exempt from the emission limitation specified in this rule.</p>
OAC rule 3745-21-07(B) OAC rule 3745-21-08(B) OAC rule 3745-23-06(B)	<p>See A.I.2.c below</p>
40 CFR Part 60, Subpart Db	<p>The applicable emission limitations specified in this Subpart are either equivalent to or less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).</p>

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40 CFR Part 64

See A.III.5, A.III.7, AIV.1, A.IV.5, and AVI.2 below.

2. Additional Terms and Conditions

- 2.a The hourly emission limitations for PE, NO_x, SO₂, CO, HCl, and sulfuric acid mist are based upon the emissions unit's restricted potential to emit and, therefore, no additional monitoring, record keeping, or reporting requirements are necessary to demonstrate compliance with these emission limitations.
- 2.b The following Best Available Control Technology (BACT) determinations have been made for SO₂ and sulfuric acid mist:
- SO₂ - restricting the amount of TDF burned in this emissions unit and compliance with the rolling, 12-month emission limitation;
- sulfuric acid mist - restricting the amount of TDF burned in this emissions unit and compliance with the rolling, 12-month emission limitation; and
- compliance with the Phase I/Phase II operating scenario restrictions specified in Section A.II.6.
- 2.c The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 16-02294.
- On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 16-02294.
- 2.d All particulate matter less than 10 microns (PM₁₀) is considered to be PE.

II. Operational Restrictions

1. The permittee shall only burn natural gas, TDF, or wood, or a combination of these fuels in this emissions unit. The permittee shall not burn any oil in this emissions unit.

Emissions Unit: (B003)

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

2. In order to avoid the applicability of the federal Prevention of Significant Deterioration requirements and the provisions of OAC rules 3745-31-13 through 3745-31-20 for PE/PM10, NO_x, and CO, the permittee shall restrict the use of the fuels burned in emissions units B003 and B004, combined, in accordance with the following formula:

$$\left(\frac{X \text{ lbs. of wood burned}}{\text{rolling, 12 - month period}} \right) \left(\frac{0.04 \text{ lb. of PE}}{10^6 \text{ Btu}} \right) \left(\frac{5,500 \text{ Btu}}{\text{lb. of wood}} \right) +$$
$$\left(\frac{Y \text{ lbs. of TDF/ wood burned}}{\text{rolling, 12 - month period}} \right) \left(\frac{0.08 \text{ lb. of PE}}{10^6 \text{ Btu}} \right) \left(\frac{7,161 \text{ Btu}}{\text{lb. of TDF/ wood}} \right) +$$
$$\left(\frac{Z \text{ cu. ft. natural gas burned}}{\text{rolling, 12 - month period}} \right) \left(\frac{7.6 \text{ lbs. of PE}}{10^6 \text{ cu. ft. of natural gas}} \right) \leq$$
$$\left(\frac{72440 \text{ lbs. of PE}}{\text{rolling, 12 - month period}} \right)$$

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$$\left(\frac{X \text{ lbs. of wood burned}}{\text{rolling, 12-month period}} \right) \left(\frac{0.24 \text{ lb. of NO}_x}{10^6 \text{ Btu}} \right) \left(\frac{5,500 \text{ Btu}}{\text{lb. of wood}} \right) +$$

$$\left(\frac{Y \text{ lbs. of TDF/ wood burned}}{\text{rolling, 12-month period}} \right) \left(\frac{0.22 \text{ lb. of NO}_x}{10^6 \text{ Btu}} \right) \left(\frac{7,161 \text{ Btu}}{\text{lb. of TDF/ wood}} \right) +$$

$$\left(\frac{Z \text{ cu. ft. natural gas burned}}{\text{rolling, 12-month period}} \right) \left(\frac{280 \text{ lbs. of NO}_x}{10^6 \text{ cu. ft. of natural gas}} \right) \leq$$

$$\left(\frac{260,480 \text{ lbs. of NO}_x}{\text{rolling, 12-month period}} \right)$$

$$\left(\frac{X \text{ lbs. of wood burned}}{\text{rolling, 12-month period}} \right) \left(\frac{0.10 \text{ lb. of CO}}{10^6 \text{ Btu}} \right) \left(\frac{5,500 \text{ Btu}}{\text{lb. of wood}} \right) +$$

$$\left(\frac{Y \text{ lbs. of TDF/ wood burned}}{\text{rolling, 12-month period}} \right) \left(\frac{0.08 \text{ lb. of CO}}{10^6 \text{ Btu}} \right) \left(\frac{7,161 \text{ Btu}}{\text{lb. of TDF/ wood}} \right) +$$

$$\left(\frac{Z \text{ cu. ft. natural gas burned}}{\text{rolling, 12-month period}} \right) \left(\frac{84 \text{ lbs. of CO}}{10^6 \text{ cu. ft. of natural gas}} \right) \leq$$

$$\left(\frac{112,580 \text{ lbs. of CO}}{\text{rolling, 12-month period}} \right)$$

Where:

X is the pounds of wood burned per rolling, 12-month period

Y is the pounds of TDF/ wood mix burned per rolling, 12-month period

(The monthly TDF/ wood mix burned values shall be used during the first 12 months following the issuance of PTI 16-02294.)

Z is the cubic feet of natural gas burned per rolling, 12-month period

The Btu per pound of wood and pound of TDF/ wood mix emission factors are based upon wood with a moisture content equal to or greater than 20%.

Should more accurate PE, NO_x, CO, and/or wood emission factors (in pound per million Btu, pounds per million cubic feet, or Btu per pound of wood or TDF/wood mix) be developed through emission testing or fuel analyses, the permittee shall use them, provided the new emission factors are mutually agreeable to the Ohio EPA, Akron RAQMD, and the permittee.

In addition, during the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, the permittee shall not exceed the limitations for the amount of TDF/wood mix burned as specified in the following table:

Month	Maximum Allowable TDF Mix Burned (B003 - B004) (tons)
1	12,330
1 - 2	12,330
1 - 3	24,660
1 - 4	24,660

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1 - 5	36,990
1 - 6	36,990
1 - 7	49,230
1 - 8	49,230
1 - 9	61,654
1 - 10	61,654
1 - 11	61,654
1 - 12	61,654

After the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, compliance with the annual limitation of the amount of TDF/wood mix burned shall be based upon a rolling, 12-month summation of TDF/wood mix burned, in tons.

The permittee has existing natural gas and wood usage records such that the permittee does not need to be limited on a monthly basis for the first year following the issuance of Permit to Install 16-02294.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

3. The permittee shall only burn tree trimmings and chipped trees from area land clearing operations. The permittee shall not burn wood or wood waste derived from any manufacturing operations or any other operation which coats, treats, or otherwise contaminates the wood or wood waste.
(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))
4. The average total combined power input (in kilowatts) to all fields of the ESP, for any 3-hour block of time when the emissions unit is in operation, shall be no less than 90% of the total combined power input, as a 3-hour average, during the most recent emission tests that demonstrated the emissions unit was in compliance with the particulate emission limitation.

The permittee shall operate the ESP during any operation of this emissions unit, except the ESP may not be operated during periods of start-up until the exhaust gases have achieved a temperature of 250 degrees Fahrenheit at the inlet of the ESP or during periods of shutdown when the temperature of the exhaust gases has dropped below 250 degrees Fahrenheit at the inlet of the ESP.

The operation of the control equipment outside of the restrictions established above may or may not indicate a mass emission violation. If required by the Ohio EPA, compliance with the mass emission limitations shall be determined by performing concurrent mass emission tests and parameter readings, using US EPA-approved methods and procedures. The results of any required emission tests and parameter readings shall be used in determining whether or not the

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operation of the control equipment outside of the restrictions specified above is indicative of a possible violation of the mass emission limitations.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

5. The maximum annual natural gas capacity factor for this emissions unit shall not exceed 10% based upon a rolling, 12-month calculation of the annual capacity factor.

To ensure enforceability during the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, the permittee shall not exceed the monthly natural gas capacity factor limitations specified in the following table:

<u>Month</u>	<u>Maximum Allowable Monthly Natural Gas Capacity Factor</u>
1	10%
1-2	10%
1-3	10%
1-4	10%
1-5	10%
1-6	10%
1-7	10%
1-8	10%
1-9	10%
1-10	10%
1-11	10%
1-12	10%

After the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, compliance with the annual capacity factor limitation shall be based upon a rolling, 12-month summation of the capacity factors.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

6. In order to comply with the air dispersion modeling requirements listed in both federal Prevention of Significant Deterioration requirements and the provisions of OAC rules 3745-31-13 through 3745-31-20, the permittee shall comply with the following operating scenario restrictions. The permittee shall operate this emissions unit at a maximum of 15.5%, by volume, TDF burned with waste wood (Phase I). Once the permittee receives written approval from the Director, the permittee may operate this emissions unit at a maximum of 20%, by volume, TDF burned with waste wood (Phase II). But in no case shall the permittee operate this emissions unit without complying with the air dispersion modeling requirements listed in both federal Prevention of Significant Deterioration requirements and the provisions of OAC rules 3745-31-13 through 3745-31-20.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

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III. Monitoring and/or Record keeping Requirements

1. The permittee shall monitor and record the following on an hourly basis during any operation of the ESP:
 - a. the secondary voltage, in kilovolts, and the secondary current in amps, for each transformer rectifier (TR) set in the ESP;
 - b. the power input (in kilowatts) of each TR set for each hour (calculated by multiplying the secondary voltage (in kilovolts) by the secondary current (in amps) for each TR set); and
 - c. the total power input to the ESP for each hour (add together the power inputs for the TR sets operating during the hour).
(Authority for term: OAC rule 3745-77-07(A)(3)(a) and OAC rule 3745-77-07(A)(3)(b))

2. The permittee shall monitor and record the following information on a daily basis:
 - a. all 3-hour blocks of time during which the average total combined power input to the ESP, when the emissions unit was in operation, was less than 90% of the total combined power input, as a 3-hour average, during the most recent emission tests that demonstrated the emissions unit was in compliance with the particulate emission limitation;
 - b. the duration of any downtime for the ESP monitoring equipment for secondary voltage and current specified above, the ESP sections that are out of service, and the duration of the downtime for each section, when the associated emissions unit was in operation;
 - c. the quantity of wood burned, in pounds;
 - d. the quantity of TDF burned, in pounds;
 - e. the quantity of wood burned in conjunction with TDF (TDF/wood mixture), in pounds;
 - f. the ratio of TDF burned as a mixture with wood, i.e., (d) / [(d) + (e)], in percent (average).
 - g. the quantity of natural gas burned, in thousand standard cubic feet; and
 - h. the total actual heat input to the emissions unit, in million Btu, calculated as follows:

$$DI = DI_g + DI_w + DI_t$$

- DI = total heat input for each day, in million Btu
DI_g = daily heat input rate from natural gas
DI_w = daily heat input rate from wood
DI_t = daily heat input rate from TDF

When the unit is burning natural gas, use the following equation to calculate the heat input rate:

$$DI_g = (Q_g * GCV_g) / 10^3$$

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Where:

- DI_g = daily heat input rate from pipeline natural gas, in million Btu
- Q_g = metered flow rate of natural gas burned, in thousand standard cubic feet per day
- GCV_g = Gross calorific value of natural gas, in Btu per standard cubic foot, as determined by sampling (for each monthly sample of pipeline natural gas, or as verified by the contractual supplier at least once every month pipeline natural gas is combusted) using ASTM D1826-88, ASTM D3588-91, ASTM D4891-89, GPA Standard 2172-86 "Calculation of Gross Heating Value, Relative Density and Compressibility Factor for Natural Gas Mixtures from Compositional Analysis," or GPA Standard 2261-90 "Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography"
- 10^3 = conversion of thousand Btu to million Btu

When the unit is burning wood, use the following equation to calculate heat input rate:

$$DI_w = V_w * GCV_w / 10^6$$

Where:

- DI_w = daily heat input rate from wood, in million Btu
- V_w = quantity of wood burned per day, in pounds
- GCV_w = gross calorific value of wood, as measured by ASTM D2015 during most recent emission tests, in Btu per pound
- 10^6 = conversion of Btu to million Btu

When the unit is burning TDF, use the following equation to calculate heat input rate:

$$DI_t = V_t * GCV_t / 10^6$$

Where:

- DI_t = daily heat input rate from TDF, in million Btu
- V_t = quantity of TDF burned per day, in pounds
- GCV_t = gross calorific value of TDF, as measured by ASTM E711 during most recent emission tests, in Btu per pound
- 10^6 = conversion of Btu to million Btu

(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(3)(a), and OAC rule 3745-77-07(A)(3)(b))

3. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the quantity of wood burned, in pounds;
 - b. the quantity of TDF/wood mix burned, in pounds;
 - c. the quantity of natural gas burned, in cubic feet;

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- d. the natural gas capacity factor, in percent, calculated pursuant to 40 CFR Part 60.49b(d);
 - e. the rolling, 12-month natural gas capacity factor, in percent; and
 - f. the total particulate, NO_x, CO, OC, HCl, SO₂, and sulfuric acid emissions, in pounds or tons.
(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(3)(a), and OAC rule 3745-77-07(A)(3)(b))
4. The permittee shall maintain monthly records of the following information for emissions units B003 and B004:
- a. the total quantity of wood burned, in pounds;
 - b. the rolling, 12-month summation of the quantity of wood burned, in pounds;
 - c. the total quantity of TDF/wood mix burned, in pounds;
 - d. beginning after the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, the rolling, 12-month summation of the quantity of TDF/wood mix burned, in pounds;
 - e. the total quantity of natural gas burned, in cubic feet;
 - f. the rolling, 12-month summation of the quantity of natural gas burned, in cubic feet;
 - g. the total particulate, NO_x, CO, SO₂, and sulfuric acid emissions, in pounds or tons; and
 - h. the rolling, 12-month summations of the particulate, NO_x, CO, SO₂, and sulfuric acid emissions, in tons.
(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(3)(a), and OAC rule 3745-77-07(A)(3)(b))
5. The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Each continuous emission monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 1-minute, 6-minute block, and hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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(Authority for term: OAC rule 3745-77-07(A)(3)(a), OAC rule 3745-77-07(A)(3)(b), 40 CFR Part 64.3(a)(1), 40 CFR Part 64.7(b), and 40 CFR Part 64.9(b))

6. The permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the emissions unit exhaust gases entering the ESP as follows:
 - a. during all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves a temperature of 250 degrees Fahrenheit; and
 - b. during all periods of shutdown until the inlet temperature to the ESP drops below 250 degrees Fahrenheit.

The temperature monitor and recorder 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 temperature of the emissions unit exhaust gases in degrees Fahrenheit.

(Authority for term: OAC rule 3745-17-07(A)(3), OAC rule 3745-77-07(A)(3)(a), and OAC rule 3745-77-07(A)(3)(b))

7. The CAM plan for this emissions unit has been developed for visible particulate and particulate emissions. The CAM performance indicator for visible particulate emissions is the opacity of the visible particulate emissions from the ESP exhaust stack as measured and recorded by the certified continuous opacity monitoring system. The visible particulate emissions indicator range is 3 consecutive minutes with an average opacity value less than 20%. When the average opacity value is outside the indicator range, corrective action (including, but not limited to, an evaluation of the emissions unit and ESP operating parameters) will be required. The CAM performance indicators for particulate emissions are the opacity of the visible particulate emissions from the ESP exhaust stack as measured and recorded by the certified continuous opacity monitoring system and a predictive particulate emissions model based upon the results of site specific particulate emission testing and emissions unit and ESP parametric data collected during the emission testing. The opacity indicator range is an hourly average opacity value less than 20%. When the hourly average opacity value is outside the indicator range, there is no reporting or corrective action requirement relative to the particulate emission limitation, but the operator must enter the current ESP and emissions unit operating parameters into the site specific model to predict the particulate emissions. If the hourly average opacity does not return to a level within the indicated range, the model is run every 3 hours to evaluate emissions. If the results of the predictive model indicate that the particulate emission limitation may have been exceeded, the permittee shall take corrective action to restore operation of the emissions unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in section A.IV.5 below. The predictive model shall be run in accordance with the approved CAM Plan or any approved revision of the Plan. Model calibration will be re-verified through periodic emission testing or if the ESP or emissions unit operating conditions change. In addition to periodic monitoring of their ESP operating parameters, the permittee also has an annual inspection and maintenance program for their ESP. Based on the results of the monitoring and inspection program, repairs to the ESP are made per the manufacturer's recommendation. If the

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current CAM indicators and/or the ESP maintenance program is considered inadequate, the permittee will develop a Quality Improvement Plan.

(Authority for term: OAC rule 3745-77-07(A)(3)(a), OAC rule 3745-77-07(A)(3)(b), 40 CFR Part 64.3(a), 40 CFR Part 64.6(c), 40 CFR Part 64.7(d), and 40 CFR Part 64.8)

IV. Reporting Requirements

1. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Akron RAQMD documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity 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 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 date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. 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. *(Authority for term: OAC rule 3745-77-07(A)(3)(c) and 40 CFR Part 64.9(a))*

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all periods of time during start-up and shutdown of the emissions unit when the ESP was not in operation and the temperature of the emissions unit exhaust gases exceeded 250 degrees Fahrenheit;
 - b. all 3-hour blocks of time during which the average total combined power input to all fields of the ESP does not comply with the operational restriction specified in Section A.II of this permit;
 - c. the sections of the ESP that were out of service, when the emissions unit was in operation and the ESP was required to be in service, along with the time period(s) involved;
 - d. during the Phase II operating scenario, all periods in which the TDF/wood mix exceeded 20%, by volume, TDF and the actual composition for that time period; and

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- e. during the Phase I operating scenario, all periods in which the TDF/wood mix exceeded 15.5%, by volume, TDF and the actual composition for that time period;
- f. during the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, all exceedances of the maximum allowable cumulative natural gas capacity factor limitations;
- g. after the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, all exceedances of the rolling, 12-month limitation for the natural gas capacity factor;
- h. during the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, all exceedances of the maximum allowable cumulative TDF/wood mix burned limitations for emissions units B003 and B004, combined;
- i. after the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, all exceedances of the rolling, 12-month limitation for the quantity of TDF/wood mix burned for emissions units B003 and B004, combined; and
- j. all exceedances of rolling, 12-month emission limitations for particulates, NO_x, CO, SO₂, and sulfuric acid mist for emissions units B003 and B004, combined.

The quarterly deviation reports shall be submitted as specified in General Term and Condition A.1.c.ii of this permit.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(3)(c))

- 3. The permittee shall submit quarterly reports that specify the total quantity of each fuel combusted in this emissions unit for each calendar month during the calendar quarter, the monthly capacity factors for wood, TDF, and TDF/wood mix, and the rolling, 12-month summations of the wood, TDF, and TDF/wood mix capacity factors. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.
(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(3)(c))
- 4. The permittee shall also submit annual reports that specify the total OC and HCl emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(3)(c))
- 5. If the results of the predictive model indicate that the particulate emission limitation may have been exceeded, the permittee shall submit the results of the predictive modeling and document any corrective action taken to restore operation of the emissions unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with General Term and Condition A.1.c.iii of this permit.
(Authority for term: 40 CFR Part 64.7(d) and 40 CFR Part 64.9(a))

Emissions Unit: (B003)

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted approximately 2.5 years after the effective date of this permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable emission limitations for particulates, NO_x, SO₂, CO, OC, HCl and sulfuric acid mist.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

for PE, Methods 1 through 5 of 40 CFR Part 60, Appendix A (while firing 20% TDF and wood mix);
for NO_x, Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A (while firing only wood);
for SO₂, Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A (while firing 20% TDF and wood mix);
for CO, Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A (while firing only wood);
for OC, Methods 1 through 4 and 25A of 40 CFR Part 60, Appendix A (while firing 20% TDF and wood mix);
for HCl, Methods 1 through 4 and 26 of 40 CFR Part 60, Appendix A (while firing 20% TDF and wood mix); and
for sulfuric acid mist, Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A (while firing 20% TDF and wood mix).

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Akron RAQMD.
(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Akron RAQMD. 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 Akron RAQMD's refusal to accept the results of the emission test(s).
(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))
3. Personnel from the Akron RAQMD 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.

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(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

4. A comprehensive written report on the results of the emission tests shall be signed by the person or persons responsible for the tests and submitted to the Akron RAQMD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Akron RAQMD.

(Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(A)(3)(c))

5. The reported OC mass emission value shall have been converted from "as carbon" to actual OC emission rate. The determination of the weight fraction of carbon may be based on standard analytical techniques or material formulation data.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(3)(c))

6. The permittee shall demonstrate the maximum heat input capacity of the steam generating unit by operating it as maximum capacity for 24 hours. The permittee shall determine the maximum heat input capacity using the heat loss method described in section 5 and 7.3 of the ASME Power Test Codes 4.1. This demonstration of maximum heat input capacity shall be made during the initial performance test. It shall be made within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit. Subsequent demonstrations may be required by the Administrator at any other time. If this demonstration indicates that the maximum heat input capacity of the emissions unit is less than that stated by the manufacturer of the emissions unit, the maximum heat input capacity determined during this demonstration shall be used to determine the capacity utilization rate for the emissions unit. Otherwise, the maximum heat input capacity provided by the manufacturer is used.

(Authority for term: OAC rule 3745-31-05(A)(3))

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

- a. Emission Limitation:

When burning only natural gas, PE shall not exceed 0.020 pound per million Btu of actual heat input.

Applicable Compliance Method:

Compliance with this emission limitation may be determined by dividing an emission factor of 7.6 lbs of particulate emissions per million standard cubic feet by the heating value of the natural gas (1020 Btu/standard cu. ft.). This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

Compliance with this emission limitation shall be demonstrated through the emission testing requirements specified in Section A.V.1 above.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

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b. Emission Limitations:

When burning a combination of natural gas, TDF and/or wood, PE shall not exceed 0.08 pound per million Btu of actual heat input and 14.4 pounds per hour.

Applicable Compliance Method:

These emission limitations were established based upon the results of emission tests extrapolated to reflect the Phase II operating scenario. Compliance shall be determined through the emission testing requirements specified in Section A.V.1.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

c. Emission Limitations:

NO_x emissions shall not exceed 0.24 pound per million Btu of actual heat input and 43.2 pounds per hour.

Applicable Compliance Method:

These emission limitations were established based upon the results of emission tests extrapolated to reflect the Phase II operating scenario. Compliance shall be determined through the emission testing requirements specified in Section A.V.1.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

d. Emission Limitations:

When burning TDF at a rate equal to or less than 15.5%, by volume, (Phase I operating scenario) SO₂ emissions shall not exceed 0.24 pound per million Btu of actual heat input and 43.3 pounds per hour.

When burning TDF at a rate equal to or less than 20.0%, by volume, (Phase II operating scenario) SO₂ emissions shall not exceed 0.31 pound per million Btu of actual heat input and 55.8 pounds per hour.

Applicable Compliance Method:

These emission limitations were established based upon the results of emission tests extrapolated to reflect the Phase II operating scenario. Compliance shall be determined through the emission testing requirements specified in Section A.V.1.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

e. Emission Limitation:

CO emissions shall not exceed 18.0 pounds per hour.

Applicable Compliance Method:

Emissions Unit: (B003)

This emission limitation was established based upon the results of emission tests extrapolated to reflect the Phase II operating scenario. Compliance shall be determined through the emission testing requirements specified in Section A.V.1.
(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

f. Emission Limitations:

OC emissions shall not exceed 0.36 pound per hour and 1.58 tons per year.

Applicable Compliance Method:

The hourly emission limitation was established based upon the results of emission tests extrapolated to reflect the Phase II operating scenario. Compliance with the hourly emission limitation shall be determined through the emission testing requirements specified in Section A.V.1. The annual emission limitation was established by multiplying the hourly emission limitation by 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided the permittee demonstrates compliance with the hourly emission limitation, compliance with the annual emission limitation will also be demonstrated.
(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

g. Emission Limitations:

HCl emissions shall not exceed 0.86 pound per hour and 3.75 tons per year.

Applicable Compliance Method:

The hourly emission limitation was established based upon the results of emission tests extrapolated to reflect the Phase II operating scenario. Compliance with the hourly emission limitation shall be determined through the emission testing requirements specified in Section A.V.1. The annual emission limitation was established by multiplying the hourly emission limitation by 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided the permittee demonstrates compliance with the hourly emission limitation, compliance with the annual emission limitation will also be demonstrated.
(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

h. Emission Limitations:

Sulfuric acid mist emissions shall not exceed 0.053 pound per million Btu of actual heat input and 9.56 pounds per hour.

Applicable Compliance Method:

These emission limitations were established based upon the results of emission tests extrapolated to reflect the Phase II operating scenario. Compliance shall be determined through the emission testing requirements specified in Section A.V.1.
(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

i. Emission Limitation:

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Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

j. Emission Limitation:

SO₂ emissions from emissions units B003 and B004, combined, shall not exceed 135.46 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated based upon the records required pursuant to Section A.III.

(Authority for term: OAC rule 3745-31-05(A)(3))

k. Emission Limitation:

Sulfuric acid mist emissions from emissions units B003 and B004, combined, shall not exceed 23.44 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated based upon the records required pursuant to Section A.III.

(Authority for term: OAC rule 3745-31-05(A)(3))

l. Emission Limitations:

PE from emissions units B003 and B004, combined, shall not exceed 36.22 tons per rolling, 12-month period.

NO_x emissions from emissions units B003 and B004, combined, shall not exceed 130.24 tons per rolling, 12-month period.

CO emissions from emissions units B003 and B004, combined, shall not exceed 56.29 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with these emission limitations shall be demonstrated based upon the records required pursuant to Section A.III.

(Authority for term: OAC rule 3745-31-05(A)(3))

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VI. Miscellaneous Requirements

1. The permittee shall submit for approval within 360 days of startup a plan that identifies the operating conditions to be monitored to demonstrate compliance with the nitrogen oxides emission limitations. The plan shall:
 - a. identify the specific operating conditions to be monitored and the relationship between these operating conditions and nitrogen oxides emission rates (i.e., ng/J or lbs/million Btu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas oxygen level);
 - b. include the data and information that the owner or operator used to identify the relationship between nitrogen oxides emission rates and these operating conditions; and
 - c. identify how these operating conditions, including steam generating unit load, will be monitored on an hourly basis by the permittee during the period of operating of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the permittee.
(Authority for term: OAC rule 3745-31-05(A)(3))

2. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.
(Authority for term: OAC rule 3745-15-04(C), OAC rule 3745-77-07(A)(3)(b), and 40 CFR Part 64.3(a)(1))

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B. State Only Enforceable Section

I. Applicable Emission 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 emission limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
B003 - Unit #1, Babcock and Wilcox 180 million Btu per hour wood, natural gas, and tire derived fuel (TDF)-fired boiler for steam generation, controlled with an electrostatic precipitator (ESP)		See B.III.1 below.

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. The permit to install for these emissions units (B003 and B004) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the 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 SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 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: Manganese
 TLV (mg/m3): 0.2
 Maximum Hourly Emission Rate (lbs/hr): 0.12
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.022

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MAGLC (ug/m3): 0.714

Pollutant: Acrolein

TLV (mg/m3): 0.23

Maximum Hourly Emission Rate (lbs/hr): 0.89

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.167

MAGLC (ug/m3): 4.02

Pollutant: Benzene

TLV (mg/m3): 32

Maximum Hourly Emission Rate (lbs/hr): 0.37

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.070

MAGLC (ug/m3): 37.95

Pollutant: Biphenyl

TLV (mg/m3): 1.3

Maximum Hourly Emission Rate (lbs/hr): 3.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.264

MAGLC (ug/m3): 29.97

Pollutant: 1,3-Butadiene

TLV (mg/m3): 4.4

Maximum Hourly Emission Rate (lbs/hr): 1.40

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.264

MAGLC (ug/m3): 105.13

Pollutant: Ethylbenzene

TLV (mg/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 0.37

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.070

MAGLC (ug/m3): 10,316.81

Pollutant: Formaldehyde

TLV (mg/m3): 0.27

Maximum Hourly Emission Rate (lbs/hr): 0.97

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.184

MAGLC (ug/m3): 6.45

Pollutant: Naphthalene

TLV (mg/m3): 52

Maximum Hourly Emission Rate (lbs/hr): 0.37

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.070

MAGLC (ug/m3): 1,245.77

Pollutant: Phenol

TLV (mg/m3): 19

Maximum Hourly Emission Rate (lbs/hr): 0.40

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.075
MAGLC (ug/m3): 457.29

Pollutant: Styrene
TLV (mg/m3): 213
Maximum Hourly Emission Rate (lbs/hr): 0.37
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.070
MAGLC (ug/m3): 2,024.49

Pollutant: Toluene
TLV (mg/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 0.20
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.038
MAGLC (ug/m3): 4,476.68

Pollutant: Sulfuric Acid Mist
TLV (mg/m3): 1
Maximum Hourly Emission Rate (lbs/hr): 19.11
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3.607
MAGLC (ug/m3): 23.81

Pollutant: Hydrogen Chloride
TLV (mg/m3): 5
Maximum Hourly Emission Rate (lbs/hr): 0.86
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.161
MAGLC (ug/m3): 130.60

Pollutant: Lead
TLV (mg/m3): 0.05
Maximum Hourly Emission Rate (lbs/hr): 0.04
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.01
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;

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- 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.

- 2. 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

Emissions Unit: (B004)

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: (B004)

Activity Description: 180 MMBtu/hr wood, natural gas, and tire derived fuel (TDF) fired boiler

A. State and Federally Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

- 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 emission limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
B004 - Unit #2, Babcock and Wilcox 180 million Btu per hour wood, natural gas, and tire derived fuel (TDF)-fired boiler for steam generation, controlled with an electrostatic precipitator (ESP)	OAC rule 3745-31-05(A)(3) (PTI 16-02294)	<p>When burning only natural gas, particulate emissions (PE) shall not exceed 0.020 pound per million Btu of actual heat input.</p> <p>When burning a combination of natural gas, TDF and/or wood, PE shall not exceed 0.08 pound per million Btu of actual heat input and 14.4 pounds per hour.</p> <p>Nitrogen oxides (NOx) emissions shall not exceed 0.24 pound per million Btu of actual heat input and 43.2 pounds per hour.</p> <p>When burning TDF at a rate equal to or less than 15.5%, by volume, (Phase I operating scenario) sulfur dioxide (SO₂) emissions shall not exceed 0.24 pound per million Btu of actual heat input and 43.3 pounds per hour. See A.II.6 below.</p> <p>When burning TDF at a rate equal to or less than 20.0%, by volume, (Phase II operating scenario) SO₂ emissions shall not exceed 0.31 pound per million Btu of actual heat input and 55.8 pounds per hour. See A.II.6 below.</p>

Emissions Unit: (B004)

	<p>Carbon monoxide (CO) emissions shall not exceed 18.0 pounds per hour.</p> <p>Organic compound (OC) emissions shall not exceed 0.36 pound per hour and 1.58 tons per year.</p> <p>Hydrogen chloride (HCl) emissions shall not exceed 0.86 pound per hour and 3.75 tons per year.</p> <p>Sulfuric acid mist emissions shall not exceed 0.053 pound per million Btu of actual heat input and 9.56 pounds per hour.</p> <p>Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity.</p> <p>See A.I.2.a, A.II.1, A.II.3, and A.II.6 below.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), and 3745-31-13 through 3745-31-20.</p>
OAC rules 3745-31-13 through 3745-31-20	<p>SO₂ emissions from emissions units B003 and B004, combined, shall not exceed 135.46 tons per rolling, 12-month period.</p> <p>Sulfuric acid mist emissions from emissions units B003 and B004, combined, shall not exceed 23.44 tons per rolling, 12-month period.</p> <p>See A.I.2.b below.</p>
OAC rule 3745-31-05(D)	<p>The total amount of TDF/wood mix burned in emissions units B003 and B004, combined, shall not exceed 61,654 tons per rolling, 12-month period.</p> <p>See A.II.2 below.</p>

Emissions Unit: (B004)

	<p>PE from emissions units B003 and B004, combined, shall not exceed 36.22 tons per rolling, 12-month period.</p> <p>NOx emissions from emissions units B003 and B004, combined, shall not exceed 130.24 tons per rolling, 12-month period.</p> <p>CO emissions from emissions units B003 and B004, combined, shall not exceed 56.29 tons per rolling, 12-month period.</p>
OAC rule 3745-17-07(A)	<p>See A.II.5 below.</p> <p>The visible PE limitation specified in this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-17-10(B)	<p>When burning natural gas, the PE limitation specified in this rule is equivalent to the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-17-10(C)	<p>When burning a combination of natural gas, TDF and/or wood, the PE limitation specified in this rule is less stringent than the PE limitations established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-18-06(D)	<p>When burning natural gas, pursuant to OAC rule 3745-18-06(A), this emissions unit is exempt from the emission limitation specified in this rule.</p>
OAC rule 3745-21-07(B) OAC rule 3745-21-08(B) OAC rule 3745-23-06(B)	<p>See A.I.2.c below</p>
40 CFR Part 60, Subpart Db	<p>The applicable emission limitations specified in this Subpart are either equivalent to or less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).</p>

Emissions Unit: (B004)

40 CFR Part 64

See A.III.5, A.III.7, A.IV.1, A.IV.5, and AVI.2 below.

2. Additional Terms and Conditions

- 2.a The hourly emission limitations for PE, NO_x, SO₂, CO, HCl, and sulfuric acid mist are based upon the emissions unit's restricted potential to emit and, therefore, no additional monitoring, record keeping, or reporting requirements are necessary to demonstrate compliance with these emission limitations.
- 2.b The following Best Available Control Technology (BACT) determinations have been made for SO₂ and sulfuric acid mist:
- SO₂ - restricting the amount of TDF burned in this emissions unit and compliance with the rolling, 12-month emission limitation;
- sulfuric acid mist - restricting the amount of TDF burned in this emissions unit and compliance with the rolling, 12-month emission limitation; and
- compliance with the Phase I/Phase II operating scenario restrictions specified in Section A.II.6.
- 2.c The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 16-02294.
- On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 16-02294.
- 2.d All particulate matter less than 10 microns (PM₁₀) is considered to be PE.

II. Operational Restrictions

1. The permittee shall only burn natural gas, TDF, or wood, or a combination of these fuels in this emissions unit. The permittee shall not burn any oil in this emissions unit.

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(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

2. In order to avoid the applicability of the federal Prevention of Significant Deterioration requirements and the provisions of OAC rules 3745-31-13 through 3745-31-20 for PE/PM10, NO_x, and CO, the permittee shall restrict the use of the fuels burned in emissions units B003 and B004, combined, in accordance with the following formula:

$$\left(\frac{X \text{ lbs. of wood burned}}{\text{rolling, 12 - month period}} \right) \left(\frac{0.04 \text{ lb. of PE}}{10^6 \text{ Btu}} \right) \left(\frac{5,500 \text{ Btu}}{\text{lb. of wood}} \right) +$$
$$\left(\frac{Y \text{ lbs. of TDF/ wood burned}}{\text{rolling, 12 - month period}} \right) \left(\frac{0.08 \text{ lb. of PE}}{10^6 \text{ Btu}} \right) \left(\frac{7,161 \text{ Btu}}{\text{lb. of TDF/ wood}} \right) +$$
$$\left(\frac{Z \text{ cu. ft. natural gas burned}}{\text{rolling, 12 - month period}} \right) \left(\frac{7.6 \text{ lbs. of PE}}{10^6 \text{ cu. ft. of natural gas}} \right) \leq$$
$$\left(\frac{72440 \text{ lbs. of PE}}{\text{rolling, 12 - month period}} \right)$$

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$$\left(\frac{X \text{ lbs. of wood burned}}{\text{rolling, 12-month period}} \right) \left(\frac{0.24 \text{ lb. of NOx}}{10^6 \text{ Btu}} \right) \left(\frac{5,500 \text{ Btu}}{\text{lb. of wood}} \right) +$$

$$\left(\frac{Y \text{ lbs. of TDF/ wood burned}}{\text{rolling, 12-month period}} \right) \left(\frac{0.22 \text{ lb. of NOx}}{10^6 \text{ Btu}} \right) \left(\frac{7,161 \text{ Btu}}{\text{lb. of TDF/ wood}} \right) +$$

$$\left(\frac{Z \text{ cu. ft. natural gas burned}}{\text{rolling, 12-month period}} \right) \left(\frac{280 \text{ lbs. of NOx}}{10^6 \text{ cu. ft. of natural gas}} \right) \leq$$

$$\left(\frac{260,480 \text{ lbs. of NOx}}{\text{rolling, 12-month period}} \right)$$

$$\left(\frac{X \text{ lbs. of wood burned}}{\text{rolling, 12-month period}} \right) \left(\frac{0.10 \text{ lb. of CO}}{10^6 \text{ Btu}} \right) \left(\frac{5,500 \text{ Btu}}{\text{lb. of wood}} \right) +$$

$$\left(\frac{Y \text{ lbs. of TDF/ wood burned}}{\text{rolling, 12-month period}} \right) \left(\frac{0.08 \text{ lb. of CO}}{10^6 \text{ Btu}} \right) \left(\frac{7,161 \text{ Btu}}{\text{lb. of TDF/ wood}} \right) +$$

$$\left(\frac{Z \text{ cu. ft. natural gas burned}}{\text{rolling, 12-month period}} \right) \left(\frac{84 \text{ lbs. of CO}}{10^6 \text{ cu. ft. of natural gas}} \right) \leq$$

$$\left(\frac{112,580 \text{ lbs. of CO}}{\text{rolling, 12-month period}} \right)$$

Where:

X is the pounds of wood burned per rolling, 12-month period

Y is the pounds of TDF/ wood mix burned per rolling, 12-month period

(The monthly TDF/ wood mix burned values shall be used during the first 12 months following the issuance of PTI 16-02294.)

Z is the cubic feet of natural gas burned per rolling, 12-month period

The Btu per pound of wood and pound of TDF/ wood mix emission factors are based upon wood with a moisture content equal to or greater than 20%.

Should more accurate PE, NOx, CO, and/or wood emission factors (in pound per million Btu, pounds per million cubic feet, or Btu per pound of wood or TDF/wood mix) be developed through emission testing or fuel analyses, the permittee shall use them, provided the new emission factors are mutually agreeable to the Ohio EPA, Akron RAQMD, and the permittee.

In addition, during the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, the permittee shall not exceed the limitations for the amount of TDF/wood mix burned as specified in the following table:

Month	Maximum Allowable TDF Mix Burned (B003 - B004) (tons)
1	12,330
1 - 2	12,330
1 - 3	24,660
1 - 4	24,660

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1 - 5	36,990
1 - 6	36,990
1 - 7	49,230
1 - 8	49,230
1 - 9	61,654
1 - 10	61,654
1 - 11	61,654
1 - 12	61,654

After the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, compliance with the annual limitation of the amount of TDF/wood mix burned shall be based upon a rolling, 12-month summation of TDF/wood mix burned, in tons.

The permittee has existing natural gas and wood usage records such that the permittee does not need to be limited on a monthly basis for the first year following the issuance of Permit to Install 16-02294.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

3. The permittee shall only burn tree trimmings and chipped trees from area land clearing operations. The permittee shall not burn wood or wood waste derived from any manufacturing operations or any other operation which coats, treats, or otherwise contaminates the wood or wood waste.
(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))
4. The average total combined power input (in kilowatts) to all fields of the ESP, for any 3-hour block of time when the emissions unit is in operation, shall be no less than 90% of the total combined power input, as a 3-hour average, during the most recent emission tests that demonstrated the emissions unit was in compliance with the particulate emission limitation.

The permittee shall operate the ESP during any operation of this emissions unit, except the ESP may not be operated during periods of start-up until the exhaust gases have achieved a temperature of 250 degrees Fahrenheit at the inlet of the ESP or during periods of shutdown when the temperature of the exhaust gases has dropped below 250 degrees Fahrenheit at the inlet of the ESP.

The operation of the control equipment outside of the restrictions established above may or may not indicate a mass emission violation. If required by the Ohio EPA, compliance with the mass emission limitations shall be determined by performing concurrent mass emission tests and parameter readings, using US EPA-approved methods and procedures. The results of any required emission tests and parameter readings shall be used in determining whether or not the

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operation of the control equipment outside of the restrictions specified above is indicative of a possible violation of the mass emission limitations.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

5. The maximum annual natural gas capacity factor for this emissions unit shall not exceed 10% based upon a rolling, 12-month calculation of the annual capacity factor.

To ensure enforceability during the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, the permittee shall not exceed the monthly natural gas capacity factor limitations specified in the following table:

<u>Month</u>	<u>Maximum Allowable Monthly Natural Gas Capacity Factor</u>
1	10%
1-2	10%
1-3	10%
1-4	10%
1-5	10%
1-6	10%
1-7	10%
1-8	10%
1-9	10%
1-10	10%
1-11	10%
1-12	10%

After the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, compliance with the annual capacity factor limitation shall be based upon a rolling, 12-month summation of the capacity factors.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

6. In order to comply with the air dispersion modeling requirements listed in both federal Prevention of Significant Deterioration requirements and the provisions of OAC rules 3745-31-13 through 3745-31-20, the permittee shall comply with the following operating scenario restrictions. The permittee shall operate this emissions unit at a maximum of 15.5%, by volume, TDF burned with waste wood (Phase I). Once the permittee receives written approval from the Director, the permittee may operate this emissions unit at a maximum of 20%, by volume, TDF burned with waste wood (Phase II). But in no case shall the permittee operate this emissions unit without complying with the air dispersion modeling requirements listed in both federal Prevention of Significant Deterioration requirements and the provisions of OAC rules 3745-31-13 through 3745-31-20.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

III. Monitoring and/or Record keeping Requirements

1. The permittee shall monitor and record the following on an hourly basis during any operation of the ESP:

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- a. the secondary voltage, in kilovolts, and the secondary current in amps, for each transformer rectifier (TR) set in the ESP;
- b. the power input (in kilowatts) of each TR set for each hour (calculated by multiplying the secondary voltage (in kilovolts) by the secondary current (in amps) for each TR set); and
- c. the total power input to the ESP for each hour (add together the power inputs for the TR sets operating during the hour).

(Authority for term: OAC rule 3745-77-07(A)(3)(a) and OAC rule 3745-77-07(A)(3)(b))

2. The permittee shall monitor and record the following information on a daily basis:

- a. all 3-hour blocks of time during which the average total combined power input to the ESP, when the emissions unit was in operation, was less than 90% of the total combined power input, as a 3-hour average, during the most recent emission tests that demonstrated the emissions unit was in compliance with the particulate emission limitation;
- b. the duration of any downtime for the ESP monitoring equipment for secondary voltage and current specified above, the ESP sections that are out of service, and the duration of the downtime for each section, when the associated emissions unit was in operation;
- c. the quantity of wood burned, in pounds;
- d. the quantity of TDF burned, in pounds;
- e. the quantity of wood burned in conjunction with TDF (TDF/wood mixture), in pounds;
- f. the ratio of TDF burned as a mixture with wood, i.e., (d) / [(d) + (e)], in percent (average).
- g. the quantity of natural gas burned, in thousand standard cubic feet; and
- h. the total actual heat input to the emissions unit, in million Btu, calculated as follows:

$$DI = DI_g + DI_w + DI_t$$

- DI = total heat input for each day, in million Btu
- DI_g = daily heat input rate from natural gas
- DI_w = daily heat input rate from wood
- DI_t = daily heat input rate from TDF

When the unit is burning natural gas, use the following equation to calculate the heat input rate:

$$DI_g = (Q_g * GCV_g) / 10^3$$

Where:

- DI_g = daily heat input rate from pipeline natural gas, in million Btu
- Q_g = metered flow rate of natural gas burned, in thousand standard cubic feet per day

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$GCV_g =$ Gross calorific value of natural gas, in Btu per standard cubic foot, as determined by sampling (for each monthly sample of pipeline natural gas, or as verified by the contractual supplier at least once every month pipeline natural gas is combusted) using ASTM D1826-88, ASTM D3588-91, ASTM D4891-89, GPA Standard 2172-86 "Calculation of Gross Heating Value, Relative Density and Compressibility Factor for Natural Gas Mixtures from Compositional Analysis," or GPA Standard 2261-90 "Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography"

$10^3 =$ conversion of thousand Btu to million Btu

When the unit is burning wood, use the following equation to calculate heat input rate:

$$DI_w = V_w * GCV_w / 10^6$$

Where:

$DI_w =$ daily heat input rate from wood, in million Btu
 $V_w =$ quantity of wood burned per day, in pounds
 $GCV_w =$ gross calorific value of wood, as measured by ASTM D2015 during most recent emission tests, in Btu per pound
 $10^6 =$ conversion of Btu to million Btu

When the unit is burning TDF, use the following equation to calculate heat input rate:

$$DI_t = V_t * GCV_t / 10^6$$

Where:

$DI_t =$ daily heat input rate from TDF, in million Btu
 $V_t =$ quantity of TDF burned per day, in pounds
 $GCV_t =$ gross calorific value of TDF, as measured by ASTM E711 during most recent emission tests, in Btu per pound
 $10^6 =$ conversion of Btu to million Btu

(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(3)(a), and OAC rule 3745-77-07(A)(3)(b))

3. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the quantity of wood burned, in pounds;
 - b. the quantity of TDF/wood mix burned, in pounds;
 - c. the quantity of natural gas burned, in cubic feet;
 - d. the natural gas capacity factor, in percent, calculated pursuant to 40 CFR Part 60.49b(d);
 - e. the rolling, 12-month natural gas capacity factor, in percent; and

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- f. the total particulate, NO_x, CO, OC, HCl, SO₂, and sulfuric acid emissions, in pounds or tons.
(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(3)(a), and OAC rule 3745-77-07(A)(3)(b))
4. The permittee shall maintain monthly records of the following information for emissions units B003 and B004:
- a. the total quantity of wood burned, in pounds;
- b. the rolling, 12-month summation of the quantity of wood burned, in pounds;
- c. the total quantity of TDF/wood mix burned, in pounds;
- d. beginning after the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, the rolling, 12-month summation of the quantity of TDF/wood mix burned, in pounds;
- e. the total quantity of natural gas burned, in cubic feet;
- f. the rolling, 12-month summation of the quantity of natural gas burned, in cubic feet;
- g. the total particulate, NO_x, CO, SO₂, and sulfuric acid emissions, in pounds or tons; and
- h. the rolling, 12-month summations of the particulate, NO_x, CO, SO₂, and sulfuric acid emissions, in tons.
(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(3)(a), and OAC rule 3745-77-07(A)(3)(b))
5. The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Each continuous emission monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 1-minute, 6-minute block, and hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
(Authority for term: OAC rule 3745-77-07(A)(3)(a), OAC rule 3745-77-07(A)(3)(b), 40 CFR Part 64.3(a)(1), 40 CFR Part 64.7(b), and 40 CFR Part 64.9(b))

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6. The permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the emissions unit exhaust gases entering the ESP as follows:
 - a. during all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves a temperature of 250 degrees Fahrenheit; and
 - b. during all periods of shutdown until the inlet temperature to the ESP drops below 250 degrees Fahrenheit.

The temperature monitor and recorder 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 temperature of the emissions unit exhaust gases in degrees Fahrenheit.

(Authority for term: OAC rule 3745-17-07(A)(3), OAC rule 3745-77-07(A)(3)(a), and OAC rule 3745-77-07(A)(3)(b))

7. The CAM plan for this emissions unit has been developed for visible particulate and particulate emissions. The CAM performance indicator for visible particulate emissions is the opacity of the visible particulate emissions from the ESP exhaust stack as measured and recorded by the certified continuous opacity monitoring system. The visible particulate emissions indicator range is 3 consecutive minutes with an average opacity value less than 20%. When the average opacity value is outside the indicator range, corrective action (including, but not limited to, an evaluation of the emissions unit and ESP operating parameters) will be required. The CAM performance indicators for particulate emissions are the opacity of the visible particulate emissions from the ESP exhaust stack as measured and recorded by the certified continuous opacity monitoring system and a predictive particulate emissions model based upon the results of site specific particulate emission testing and emissions unit and ESP parametric data collected during the emission testing. The opacity indicator range is an hourly average opacity value less than 20%. When the hourly average opacity value is outside the indicator range, there is no reporting or corrective action requirement relative to the particulate emission limitation, but the operator must enter the current ESP and emissions unit operating parameters into the site specific model to predict the particulate emissions. If the hourly average opacity does not return to a level within the indicated range, the model is run every 3 hours to evaluate emissions. If the results of the predictive model indicate that the particulate emission limitation may have been exceeded, the permittee shall take corrective action to restore operation of the emissions unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in section A.IV.5 below. The predictive model shall be run in accordance with the approved CAM Plan or any approved revision of the Plan. Model calibration will be re-verified through periodic emission testing or if the ESP or emissions unit operating conditions change. In addition to periodic monitoring of their ESP operating parameters, the permittee also has an annual inspection and maintenance program for their ESP. Based on the results of the monitoring and inspection program, repairs to the ESP are made per the manufacturer's recommendation. If the current CAM indicators and/or the ESP maintenance program is considered inadequate, the permittee will develop a Quality Improvement Plan.

(Authority for term: OAC rule 3745-77-07(A)(3)(a), OAC rule 3745-77-07(A)(3)(b), 40 CFR Part 64.3(a), 40 CFR Part 64.6(c), 40 CFR Part 64.7(d), and 40 CFR Part 64.8)

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IV. Reporting Requirements

1. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Akron RAQMD documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity 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 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 date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. 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. *(Authority for term: OAC rule 3745-77-07(A)(3)(c) and 40 CFR Part 64.9(a))*

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all periods of time during start-up and shutdown of the emissions unit when the ESP was not in operation and the temperature of the emissions unit exhaust gases exceeded 250 degrees Fahrenheit;
 - b. all 3-hour blocks of time during which the average total combined power input to all fields of the ESP does not comply with the operational restriction specified in Section A.II of this permit;
 - c. the sections of the ESP that were out of service, when the emissions unit was in operation and the ESP was required to be in service, along with the time period(s) involved;
 - d. during the Phase II operating scenario, all periods in which the TDF/wood mix exceeded 20%, by volume, TDF and the actual composition for that time period; and
 - e. during the Phase I operating scenario, all periods in which the TDF/wood mix exceeded 15.5%, by volume, TDF and the actual composition for that time period;

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- f. during the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, all exceedances of the maximum allowable cumulative natural gas capacity factor limitations;
- g. after the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, all exceedances of the rolling, 12-month limitation for the natural gas capacity factor;
- h. during the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, all exceedances of the maximum allowable cumulative TDF/wood mix burned limitations for emissions units B003 and B004, combined;
- i. after the first 12 calendar months of operation following the issuance of Permit to Install 16-02294, all exceedances of the rolling, 12-month limitation for the quantity of TDF/wood mix burned for emissions units B003 and B004, combined; and
- j. all exceedances of rolling, 12-month emission limitations for particulates, NO_x, CO, SO₂, and sulfuric acid mist for emissions units B003 and B004, combined.

The quarterly deviation reports shall be submitted as specified in General Term and Condition A.1.c.ii of this permit.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(3)(c))

- 3. The permittee shall submit quarterly reports that specify the total quantity of each fuel combusted in this emissions unit for each calendar month during the calendar quarter, the monthly capacity factors for wood, TDF, and TDF/wood mix, and the rolling, 12-month summations of the wood, TDF, and TDF/wood mix capacity factors. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.
(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(3)(c))
- 4. The permittee shall also submit annual reports that specify the total OC and HCl emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(3)(c))
- 5. If the results of the predictive model indicate that the particulate emission limitation may have been exceeded, the permittee shall submit the results of the predictive modeling and document any corrective action taken to restore operation of the emissions unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with General Term and Condition A.1.c.iii of this permit.
(Authority for term: 40 CFR Part 64.7(d) and 40 CFR Part 64.9(a))

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V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted approximately 2.5 years after the effective date of this permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable emission limitations for particulates, NO_x, SO₂, CO, OC, HCl and sulfuric acid mist.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

for PE, Methods 1 through 5 of 40 CFR Part 60, Appendix A (while firing 20% TDF and wood mix);
for NO_x, Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A (while firing only wood);
for SO₂, Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A (while firing 20% TDF and wood mix);
for CO, Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A (while firing only wood);
for OC, Methods 1 through 4 and 25A of 40 CFR Part 60, Appendix A (while firing 20% TDF and wood mix);
for HCl, Methods 1 through 4 and 26 of 40 CFR Part 60, Appendix A (while firing 20% TDF and wood mix); and
for sulfuric acid mist, Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A (while firing 20% TDF and wood mix).

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Akron RAQMD.
(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Akron RAQMD. 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 Akron RAQMD's refusal to accept the results of the emission test(s).
(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))
3. Personnel from the Akron RAQMD 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.

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(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

4. A comprehensive written report on the results of the emission tests shall be signed by the person or persons responsible for the tests and submitted to the Akron RAQMD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Akron RAQMD.

(Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(A)(3)(c))

5. The reported OC mass emission value shall have been converted from "as carbon" to actual OC emission rate. The determination of the weight fraction of carbon may be based on standard analytical techniques or material formulation data.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(3)(c))

6. The permittee shall demonstrate the maximum heat input capacity of the steam generating unit by operating it as maximum capacity for 24 hours. The permittee shall determine the maximum heat input capacity using the heat loss method described in section 5 and 7.3 of the ASME Power Test Codes 4.1. This demonstration of maximum heat input capacity shall be made during the initial performance test. It shall be made within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit. Subsequent demonstrations may be required by the Administrator at any other time. If this demonstration indicates that the maximum heat input capacity of the emissions unit is less than that stated by the manufacturer of the emissions unit, the maximum heat input capacity determined during this demonstration shall be used to determine the capacity utilization rate for the emissions unit. Otherwise, the maximum heat input capacity provided by the manufacturer is used.

(Authority for term: OAC rule 3745-31-05(A)(3))

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

- a. Emission Limitation:

When burning only natural gas, PE shall not exceed 0.020 pound per million Btu of actual heat input.

Applicable Compliance Method:

Compliance with this emission limitation may be determined by dividing an emission factor of 7.6 lbs of particulate emissions per million standard cubic feet by the heating value of the natural gas (1020 Btu/standard cu. ft.). This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

Compliance with this emission limitation shall be demonstrated through the emission testing requirements specified in Section A.V.1 above.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

Emissions Unit: (B004)

b. Emission Limitations:

When burning a combination of natural gas, TDF and/or wood, PE shall not exceed 0.08 pound per million Btu of actual heat input and 14.4 pounds per hour.

Applicable Compliance Method:

These emission limitations were established based upon the results of emission tests extrapolated to reflect the Phase II operating scenario. Compliance shall be determined through the emission testing requirements specified in Section A.V.1.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

c. Emission Limitations:

NO_x emissions shall not exceed 0.24 pound per million Btu of actual heat input and 43.2 pounds per hour.

Applicable Compliance Method:

These emission limitations were established based upon the results of emission tests extrapolated to reflect the Phase II operating scenario. Compliance shall be determined through the emission testing requirements specified in Section A.V.1.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

d. Emission Limitations:

When burning TDF at a rate equal to or less than 15.5%, by volume, (Phase I operating scenario) SO₂ emissions shall not exceed 0.24 pound per million Btu of actual heat input and 43.3 pounds per hour.

When burning TDF at a rate equal to or less than 20.0%, by volume, (Phase II operating scenario) SO₂ emissions shall not exceed 0.31 pound per million Btu of actual heat input and 55.8 pounds per hour.

Applicable Compliance Method:

These emission limitations were established based upon the results of emission tests extrapolated to reflect the Phase II operating scenario. Compliance shall be determined through the emission testing requirements specified in Section A.V.1.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

e. Emission Limitation:

CO emissions shall not exceed 18.0 pounds per hour.

Applicable Compliance Method:

Emissions Unit: (B004)

This emission limitation was established based upon the results of emission tests extrapolated to reflect the Phase II operating scenario. Compliance shall be determined through the emission testing requirements specified in Section A.V.1.
(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

f. Emission Limitations:

OC emissions shall not exceed 0.36 pound per hour and 1.58 tons per year.

Applicable Compliance Method:

The hourly emission limitation was established based upon the results of emission tests extrapolated to reflect the Phase II operating scenario. Compliance with the hourly emission limitation shall be determined through the emission testing requirements specified in Section A.V.1. The annual emission limitation was established by multiplying the hourly emission limitation by 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided the permittee demonstrates compliance with the hourly emission limitation, compliance with the annual emission limitation will also be demonstrated.
(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

g. Emission Limitations:

HCl emissions shall not exceed 0.86 pound per hour and 3.75 tons per year.

Applicable Compliance Method:

The hourly emission limitation was established based upon the results of emission tests extrapolated to reflect the Phase II operating scenario. Compliance with the hourly emission limitation shall be determined through the emission testing requirements specified in Section A.V.1. The annual emission limitation was established by multiplying the hourly emission limitation by 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided the permittee demonstrates compliance with the hourly emission limitation, compliance with the annual emission limitation will also be demonstrated.
(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

h. Emission Limitations:

Sulfuric acid mist emissions shall not exceed 0.053 pound per million Btu of actual heat input and 9.56 pounds per hour.

Applicable Compliance Method:

These emission limitations were established based upon the results of emission tests extrapolated to reflect the Phase II operating scenario. Compliance shall be determined through the emission testing requirements specified in Section A.V.1.
(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

Emissions Unit: (B004)

i. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

j. Emission Limitation:

SO₂ emissions from emissions units B003 and B004, combined, shall not exceed 135.46 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated based upon the records required pursuant to Section A.III.

(Authority for term: OAC rule 3745-31-05(A)(3))

k. Emission Limitation:

Sulfuric acid mist emissions from emissions units B003 and B004, combined, shall not exceed 23.44 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated based upon the records required pursuant to Section A.III.

(Authority for term: OAC rule 3745-31-05(A)(3))

l. Emission Limitations:

PE from emissions units B003 and B004, combined, shall not exceed 36.22 tons per rolling, 12-month period.

NO_x emissions from emissions units B003 and B004, combined, shall not exceed 130.24 tons per rolling, 12-month period.

CO emissions from emissions units B003 and B004, combined, shall not exceed 56.29 tons per rolling, 12-month period.

Applicable Compliance Method:

Emissions Unit: (B004)

Compliance with these emission limitations shall be demonstrated based upon the records required pursuant to Section A.III.

(Authority for term: OAC rule 3745-31-05(A)(3))

VI. Miscellaneous Requirements

1. The permittee shall submit for approval within 360 days of startup a plan that identifies the operating conditions to be monitored to demonstrate compliance with the nitrogen oxides emission limitations. The plan shall:
 - a. identify the specific operating conditions to be monitored and the relationship between these operating conditions and nitrogen oxides emission rates (i.e., ng/J or lbs/million Btu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas oxygen level);
 - b. include the data and information that the owner or operator used to identify the relationship between nitrogen oxides emission rates and these operating conditions; and
 - c. identify how these operating conditions, including steam generating unit load, will be monitored on an hourly basis by the permittee during the period of operating of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the permittee.
(Authority for term: OAC rule 3745-31-05(A)(3))

2. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.
(Authority for term: OAC rule 3745-15-04(C), OAC rule 3745-77-07(A)(3)(b), and 40 CFR Part 64.3(a)(1))

Emissions Unit: (B004)

B. State Only Enforceable Section

I. Applicable Emission 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 emission limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
B004 - Unit #2, Babcock and Wilcox 180 million Btu per hour wood, natural gas, and tire derived fuel (TDF)-fired boiler for steam generation, controlled with an electrostatic precipitator (ESP)		See B.III.1 below.

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. The permit to install for these emissions units (B003 and B004) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the 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 SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 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: Manganese
 TLV (mg/m3): 0.2
 Maximum Hourly Emission Rate (lbs/hr): 0.12
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.022

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MAGLC (ug/m3): 0.714

Pollutant: Acrolein

TLV (mg/m3): 0.23

Maximum Hourly Emission Rate (lbs/hr): 0.89

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.167

MAGLC (ug/m3): 4.02

Pollutant: Benzene

TLV (mg/m3): 32

Maximum Hourly Emission Rate (lbs/hr): 0.37

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.070

MAGLC (ug/m3): 37.95

Pollutant: Biphenyl

TLV (mg/m3): 1.3

Maximum Hourly Emission Rate (lbs/hr): 3.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.264

MAGLC (ug/m3): 29.97

Pollutant: 1,3-Butadiene

TLV (mg/m3): 4.4

Maximum Hourly Emission Rate (lbs/hr): 1.40

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.264

MAGLC (ug/m3): 105.13

Pollutant: Ethylbenzene

TLV (mg/m3): 434

Maximum Hourly Emission Rate (lbs/hr): 0.37

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.070

MAGLC (ug/m3): 10,316.81

Pollutant: Formaldehyde

TLV (mg/m3): 0.27

Maximum Hourly Emission Rate (lbs/hr): 0.97

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.184

MAGLC (ug/m3): 6.45

Pollutant: Naphthalene

TLV (mg/m3): 52

Maximum Hourly Emission Rate (lbs/hr): 0.37

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.070

MAGLC (ug/m3): 1,245.77

Pollutant: Phenol

TLV (mg/m3): 19

Maximum Hourly Emission Rate (lbs/hr): 0.40

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.075
MAGLC (ug/m3): 457.29

Pollutant: Styrene
TLV (mg/m3): 213
Maximum Hourly Emission Rate (lbs/hr): 0.37
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.070
MAGLC (ug/m3): 2,024.49

Pollutant: Toluene
TLV (mg/m3): 188
Maximum Hourly Emission Rate (lbs/hr): 0.20
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.038
MAGLC (ug/m3): 4,476.68

Pollutant: Sulfuric Acid Mist
TLV (mg/m3): 1
Maximum Hourly Emission Rate (lbs/hr): 19.11
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3.607
MAGLC (ug/m3): 23.81

Pollutant: Hydrogen Chloride
TLV (mg/m3): 5
Maximum Hourly Emission Rate (lbs/hr): 0.86
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.161
MAGLC (ug/m3): 130.60

Pollutant: Lead
TLV (mg/m3): 0.05
Maximum Hourly Emission Rate (lbs/hr): 0.04
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.01
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;

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- 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.

- 2. 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

Emissions Unit: (B005)

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: (B005)

Activity Description: 180 MMBtu/hr wood, natural gas, No.2 fuel oil, and used oil-fired boiler

A. State and Federally Enforceable Section

I. Applicable Emission Limitations and/or Control Requirements

- 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 emission limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
B005-Unit #3, Babcock and Wilcox 180 million Btu per hour wood, natural gas, No. 2 fuel oil, and on-specification used oil-fired boiler for steam generation, controlled with an electrostatic precipitator (ESP)	OAC rule 3745-31-05(A)(3) (PTI 16-02187)	<p>When burning natural gas or No. 2 fuel oil, particulate emissions (PE) shall not exceed 0.020 pound per million Btu of actual heat input.</p> <p>When burning a combination of natural gas, No. 2 fuel oil, on-specification used oil, and/or wood, PE shall not exceed 0.11 pound per million Btu of actual heat input, 19.8 pounds per hour, and 86.72 tons per year.</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 70.3 pounds per hour and 307.9 tons per year.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 101 pounds per hour.</p> <p>Carbon monoxide (CO) emissions shall not exceed 27.0 pounds per hour and 118.3 tons per year.</p> <p>Organic compound (OC) emissions shall not exceed 42 pounds per hour and 183.96 tons per year.</p> <p>Lead (Pb) emissions shall not exceed</p>

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	<p>0.0843 pounds per hour and 0.4 ton per year.</p> <p>Visible PE shall not exceed 20% opacity as a 6-minute average, except during periods of startup, shutdown or malfunction.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).</p> <p>See A.II.2 and A.II.4 below.</p>
OAC rule 3745-31-05(D)	<p>The permittee shall only burn natural gas, No. 2 fuel oil, wood, on-specification used oil or a combination of these fuels in this emissions unit.</p> <p>The permittee shall burn no more than 1,000,000 gallons of on-specification used oil in this emissions unit per rolling, 12-month period.</p> <p>SO₂ emissions shall not exceed 48.5 tons per rolling, 12-month period.</p>
OAC rule 3745-17-07(A)	<p>The visible PE limitation specified in this rule is equivalent to the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-17-10(B)	<p>When burning natural gas and/or No. 2 fuel oil, the PE limitation specified in this rule is equivalent to the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-17-10(C)	<p>When burning a combination of natural gas, No. 2 fuel oil, on-specification used oil, and/or wood, the PE limitation specified in this rule is less stringent than the PE limitations established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-18-06(D)	<p>When burning No. 2 fuel oil, the sulfur dioxide emission limitation specified in</p>

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<p>OAC rule 3745-21-07(B) OAC rule 3745-21-08(B) OAC rule 3745-23-06(B) 40 CFR Part 64</p>	<p>this rule is less stringent than the sulfur dioxide emission limitation established pursuant to OAC rule 3745-31-05(A)(3). When burning natural gas, pursuant to OAC rule 3745-18-06(A), this emissions unit is exempt from the emission limitation specified in this rule.</p> <p>See A.I.2.a below.</p> <p>See A.III.6, A.III.8, AIV.3, A.IV.7, and AVI.1 below.</p>
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2. Additional Terms and Conditions

- 2.a The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 16-02187.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 16-02187.

II. Operational Restrictions

1. All used oil burned in this emissions unit shall be "on-specification used oil" in accordance with the definitions specified in 40 CFR Part 279 and OAC rule 3745-279-11. On-specification used oil shall not be burned during emissions unit start-ups or shutdowns. On-specification used oil shall not be burned until the emissions unit reaches normal operating temperatures.

All on-specification used oil burned in this emissions unit shall meet the following specifications:

Contaminants/Property	Allowable Specifications
arsenic	5 ppm, maximum

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cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
PCB's	50 ppm, maximum
total halogens	4000 ppm, maximum
mercury	1 ppm, maximum
flash point	100 degrees Fahrenheit, minimum
heat content	100,000 Btu/gallon, minimum
sulfur	0.5%, by weight, maximum

Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under OAC Chapter 3745-279. Therefore, the permittee may receive and burn used oil exceeding 1000 ppm of total halogens (but less than 4000 ppm, maximum) only if the permittee or supplier has demonstrated to the Ohio EPA's Division of Solid and Hazardous Waste Management that the used oil does not contain any hazardous waste.

(Authority for term: OAC rule 3745-77-07(A)(1), OAC rule 3745-31-05(A)(3), 40 CFR Part 279 and OAC rule 3745-279-11)

- In order to avoid applicability of the Prevention of Significant Deterioration rules, the permittee shall restrict the use of fuels burned in this emissions unit in accordance with the following formula:

$$\left(\frac{W \text{ gal. of No. 2 fuel oil burned}}{\text{rolling, 12-month period}} \right) \left(\frac{157(S_1) \text{ lbs. of SO}_2}{1,000 \text{ gal. of No. 2 fuel oil}} \right) +$$

$$\left(\frac{X \text{ gal. of used oil burned}}{\text{rolling, 12-month period}} \right) \left(\frac{157(S_2) \text{ lbs. of SO}_2}{1,000 \text{ gal of used oil}} \right) +$$

$$\left(\frac{Y \text{ lbs. of wood burned}}{\text{rolling, 12-month period}} \right) \left(\frac{0.025 \text{ lb. of SO}_2}{10^6 \text{ Btu}} \right) \left(\frac{5,500 \text{ Btu}}{\text{lb. of wood}} \right) +$$

$$\left(\frac{Z \text{ cu. ft. natural gas burned}}{\text{rolling, 12-month period}} \right) \left(\frac{0.6 \text{ lb. of SO}_2}{10^6 \text{ cu. ft. of natural gas}} \right) \leq$$

$$\left(\frac{97,000 \text{ lbs. of SO}_2}{\text{rolling, 12-month period}} \right)$$

Where:

W is the number of gallons of No. 2 fuel oil burned per rolling, 12-month period

X is the number of gallons of on-specification used oil burned per rolling, 12-month period

Y is the pounds of wood burned per rolling, 12-month period

Z is the cubic feet of natural gas burned per rolling, 12-month period

S₁ is the rolling, 12-month weight percent sulfur in the No. 2 fuel oil

S₂ is the rolling, 12-month weight percent sulfur in the on-specification used oil

The Btu per pound of wood emission factor is based upon wood with a moisture content equal to or greater than 20%.

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Should more accurate SO₂ and/or wood emission factors (in pound per million Btu, pounds per million cubic feet, pounds per thousand gallons, or Btu per pound of wood) be developed through emission testing or fuel analyses, the permittee shall use them, provided the new emission factors are mutually agreeable to the Ohio EPA, Akron RAQMD, and the permittee.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

3. The permittee shall only burn tree trimmings and chipped trees from area land clearing operations. The permittee shall not burn wood or wood waste derived from any manufacturing operations or any other operation which coats, treats, or otherwise contaminates the wood or wood waste.
(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))
4. The sulfur content of any oil fired in this emissions unit shall not exceed 0.50 weight percent.
(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))
5. The average total combined power input (in kilowatts) to all fields of the ESP, for any 3-hour block of time when the emissions unit is in operation, shall be no less than 90 percent of the total combined power input, as a 3-hour average, during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation.

The permittee shall operate the ESP during any operation of this emissions unit, except the ESP may not be operated during periods of start-up until the exhaust gases have achieved a temperature of 250 degrees Fahrenheit at the inlet of the ESP or during periods of shutdown when the temperature of the exhaust gases has dropped below 250 degrees Fahrenheit at the inlet of the ESP.

The operation of the control equipment outside of the restrictions established above may or may not indicate a mass emission violation. If required by the Ohio EPA, compliance with the mass emission limitations shall be determined by performing concurrent mass emission tests and parameter readings, using US EPA-approved methods and procedures. The results of any required emission tests and parameter readings shall be used in determining whether or not the operation of the control equipment outside of the restrictions specified above is indicative of a possible violation of the mass emission limitations.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall monitor and record the following on an hourly basis during any operation of the ESP:
 - a. the secondary voltage, in kilovolts, and the secondary current in amps, for each transformer rectifier (TR) set in the ESP;
 - b. the power input (in kilowatts) of each TR set for each hour (calculated by multiplying the secondary voltage (in kilovolts) by the secondary current (in amps) for each TR set); and

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- c. the total power input to the ESP for each hour (add together the power inputs for the TR sets operating during the hour).
(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(3)(a), and OAC rule 3745-77-07(A)(3)(b))
2. The permittee shall record the following information for each day:
 - a. all 3-hour blocks of time during which the average total combined power input to the ESP, when the emissions unit was in operation, was less than 90 percent of the total combined power input, as a 3-hour average, during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation; and
 - b. the duration of any downtime for the ESP monitoring equipment for secondary voltage and current specified above, the ESP sections that are out of service, and the duration of the downtime for each section, when the associated emissions unit was in operation.
(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(3)(a), and OAC rule 3745-77-07(A)(3)(b))
3. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the quantity of No. 2 fuel oil burned, in gallons;
 - b. the quantity of on-specification used oil burned, in gallons;
 - c. the quantity of wood burned, in pounds;
 - d. the quantity of natural gas burned, in cubic feet;
 - e. the rolling, 12-month summation of each fuel used;
 - f. the SO₂ emissions, in pounds and tons;
 - g. the rolling, 12-month summation of the SO₂ emissions, in tons;
 - h. the total operating hours for this emissions unit; and
 - i. the average SO₂ emission rate, in pounds per hour (i.e., (f)/(h)).
(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(3)(a), and OAC rule 3745-77-07(A)(3)(b))
4. The permittee shall receive a chemical analysis with each shipment of on-specification used oil from the supplier. The analysis shall identify the name and address of the supplier, the supplier's USEPA identification number, and the following information:
 - a. date of shipment or delivery;
 - b. quantity of used oil received;
 - c. the Btu value of the used oil;
 - d. the flash point of the used oil;

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- e. the arsenic content;
- f. the cadmium content;
- g. the chromium content;
- h. the lead content;
- i. the PCB content;
- j. the total halogen content;
- k. the mercury content; and
- l. the sulfur content.

The Director or any authorized representative of the Director may require or may conduct periodic, detailed chemical analyses through an independent laboratory of any used oil shipment received by the facility, of any used oil stored at this facility, or of any used oil sampled at the emissions unit.

The permittee shall conduct or have performed an analysis of a representative sample of used oil from any used oil storage tank located at the facility on an annual basis. The analysis shall be performed to determine conformance with the contaminant specifications identified in section A.II.1.

(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(3)(a), OAC rule 3745-77-07(A)(3)(b), 40 CFR Part 279 and OAC rule 3745-279-11)

5. For each shipment of No. 2 fuel oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).)

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of No. 2 fuel oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Akron RAQMD.

(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(3)(a), and OAC rule 3745-77-07(A)(3)(b))

6. The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Each continuous emission monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

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The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 1-minute, 6-minute block, and hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments. *(Authority for term: OAC rule 3745-77-07(A)(3)(a), OAC rule 3745-77-07(A)(3)(b), 40 CFR Part 64.3(a)(1), 40 CFR Part 64.7(b), and 40 CFR Part 64.9(b))*

7. The permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the boiler exhaust gases entering the ESP as follows:
 - a. during all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves 250 degrees Fahrenheit; and
 - b. during all periods of shutdown until the inlet temperature to the ESP drops below 250 degrees Fahrenheit.

The temperature monitor and recorder 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 temperature of the emissions unit exhaust gases in degrees Fahrenheit.

(Authority for term: OAC rule 3745-17-07(A)(3), OAC rule 3745-77-07(A)(3)(a), and OAC rule 3745-77-07(A)(3)(b))

8. The CAM plan for this emissions unit has been developed for visible particulate and particulate emissions. The CAM performance indicator for visible particulate emissions is the opacity of the visible particulate emissions from the ESP exhaust stack as measured and recorded by the certified continuous opacity monitoring system. The visible particulate emissions indicator range is 3 consecutive minutes with an average opacity value less than 20%. When the average opacity value is outside the indicator range, corrective action (including, but not limited to, an evaluation of the emissions unit and ESP operating parameters) will be required. The CAM performance indicators for particulate emissions are the opacity of the visible particulate emissions from the ESP exhaust stack as measured and recorded by the certified continuous opacity monitoring system and a predictive particulate emissions model based upon the results of site specific particulate emission testing and emissions unit and ESP parametric data collected during the emission testing. The opacity indicator range is an hourly average opacity value less than 20%. When the hourly average opacity value is outside the indicator range, there is no reporting or corrective action requirement relative to the particulate emission limitation, but the operator must enter the current ESP and emissions unit operating parameters into the site specific model to predict the particulate emissions. If the hourly average opacity does not return to a level within the indicated range, the model is run every 3 hours to evaluate emissions. If the results of the predictive model indicate that the particulate emission limitation may have been exceeded, the permittee shall take corrective action to restore operation of the emissions unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in section A.IV.7 below. The predictive model shall be run in accordance with the approved CAM Plan or any approved revision of the Plan. Model calibration will be re-verified through periodic emission testing or if the ESP or emissions unit operating conditions change. In addition to periodic monitoring of their ESP operating parameters, the permittee also has an annual inspection and maintenance program for their ESP. Based on the results of the monitoring and

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inspection program, repairs to the ESP are made per the manufacturer's recommendation. If the current CAM indicators and/or the ESP maintenance program is considered inadequate, the permittee will develop a Quality Improvement Plan.

(Authority for term: OAC rule 3745-77-07(A)(3)(a), OAC rule 3745-77-07(A)(3)(b), 40 CFR Part 64.3(a), 40 CFR Part 64.6(c), 40 CFR Part 64.7(d), and 40 CFR Part 64.8)

IV. Reporting Requirements

1. The permittee shall notify the USEPA and the Ohio EPA in writing if on-specification used oil, which exceeds the specifications in A.II.1, is burned in this emissions unit. The notification shall include a copy of the on-specification used oil analysis and shall be sent to the USEPA and the Ohio EPA within 30 days of the exceedance.
(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07(A)(3)(c), 40 CFR Part 279 and OAC rule 3745-279-11)

2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The total quantity of oil in each shipment and the calculated sulfur dioxide emission rate for each shipment of oil shall also be included with the copies of the permittee's or oil supplier's analyses.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the No. 2 fuel oil shipments received during the previous calendar quarters.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(3)(c))

3. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Akron RAQMD documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity 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 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 date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. 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.

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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. *(Authority for term: OAC rule 3745-77-07(A)(3)(c) and 40 CFR Part 64.9(a))*

4. The permittee shall submit deviation (excursion) reports that identify the following:
 - a. all exceedances of the rolling, 12-month limitation for on-specification used oil;
 - b. all exceedances of the rolling, 12-month limitation for SO₂;
 - c. all exceedances of the fuel oil sulfur content restriction;
 - d. all periods of time during start-up and shutdown of the emissions unit when the ESP was not in operation and the temperature of the emissions unit exhaust gases exceeded 250 degrees Fahrenheit;
 - e. all 3-hour blocks of time during which the average total combined power input to all fields of the ESP does not comply with the operational restriction specified in Section A.II of this permit; and
 - f. the sections of the ESP that were out of service, when the emissions unit was in operation and the ESP was required to be in service, along with the time period(s) involved;

The quarterly deviation reports shall be submitted as specified in General Condition A.1.c.ii of this permit.

(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(3)(c))

5. The permittee shall submit quarterly reports that specify the total quantity of each fuel combusted in this emissions unit for each calendar month during the calendar quarter. 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. *(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(3)(c))*
6. The permittee shall also submit annual reports that specify the total NO_x, CO, OC and Pb emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report. *(Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(3)(c))*
7. If the results of the predictive model indicate that the particulate emission limitation may have been exceeded, the permittee shall submit the results of the predictive modeling and document any corrective action taken to restore operation of the emissions unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with General Term and Condition A.1.c.iii of this permit. *(Authority for term: 40 CFR Part 64.7(d) and 40 CFR Part 64.9(a))*

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V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted approximately 2.5 years after the effective date of this permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for PE, NO_x, OC, and CO. The emission testing shall be conducted while the emissions unit is combusting the worst case fuel for each pollutant.
 - c. The following test methods shall be employed to demonstrate compliance with the following allowable emission limitations:

for PE, Methods 1 through 5 of 40 CFR Part 60, Appendix A (while firing wood);
for NO_x, Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A (while firing wood);
for OC, Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A (while firing wood);
and
for CO, Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A (while firing wood).

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
 - d. The emission tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Akron RAQMD.
(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Akron RAQMD. 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 Akron RAQMD's refusal to accept the results of the emission test(s).
(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))
3. Personnel from the Akron RAQMD 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.
(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))
4. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Akron RAQMD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Akron RAQMD.
(Authority for term: OAC rule 3745-15-04(A), OAC rule 3745-31-05(A)(3), and OAC rule 3745-77-07(A)(3)(c))

Emissions Unit: (B005)

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

a. Emission Limitations:

When burning a combination of natural gas, No. 2 fuel oil, on-specification used oil, and/or wood, PE shall not exceed 0.11 pound per million Btu of actual heat input, 19.8 pounds per hour, and 86.72 tons per year.

Applicable Compliance Method:

Compliance with the pound per million Btu and pounds per hour emission limitations shall be determined through the emission testing requirements specified in Section A.V.1. The annual emission limitation was established by multiplying the hourly emission limitation by 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided the permittee demonstrates compliance with the hourly emission limitation, compliance with the annual emission limitation will also be demonstrated.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

b. Emission Limitation:

When burning natural gas or No. 2 fuel oil, PE shall not exceed 0.020 pound per million Btu of actual heat input.

Applicable Compliance Method:

When burning natural gas, compliance with this emission limitation may be determined by dividing an emission factor of 7.6 pounds of particulate emissions per million standard cubic feet by the heating value of the natural gas (1020 Btu/standard cu. ft.). This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

When burning No. 2 fuel oil, compliance may be determined by multiplying an emission factor of 2.0 pounds of particulate emissions per thousand gallons of oil fired by the emissions unit's maximum hourly fuel oil firing capacity (1286 gallons/hr at 140,000 Btu/gal) and dividing by the emissions unit's rated heat input capacity (180 MMBtu/hr). This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-1 (9/98).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while burning No. 2 fuel oil.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

c. Emission Limitations:

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NO_x emissions shall not exceed 70.3 pounds per hour and 307.9 tons per year.

Applicable Compliance Method:

Compliance with the pounds per hour emission limitation shall be determined through the emission testing requirements specified in Section A.V.1. The annual emission limitation was established by multiplying the hourly emission limitation by 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided the permittee demonstrates compliance with the hourly emission limitation, compliance with the annual emission limitation will also be demonstrated.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

SO₂ emissions shall not exceed 101 pounds per hour.

Applicable Compliance Method:

The permittee may demonstrate compliance with this emission limitation based upon the records required pursuant to Section A.III.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while burning on-specification used oil.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

e. Emission Limitations:

CO emissions shall not exceed 27.0 pounds per hour and 118.3 tons per year.

Applicable Compliance Method:

Compliance with the pounds per hour emission limitation shall be determined through the emission testing requirements specified in Section A.V.1. The annual emission limitation was established by multiplying the hourly emission limitation by 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided the permittee demonstrates compliance with the hourly emission limitation, compliance with the annual emission limitation will also be demonstrated.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

g. Emission Limitations:

OC emissions shall not exceed 42 pounds per hour and 183.96 tons per year.

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Applicable Compliance Method:

Compliance with the pounds per hour emission limitation shall be determined through the emission testing requirements specified in Section A.V.1. The annual emission limitation was established by multiplying the hourly emission limitation by 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided the permittee demonstrates compliance with the hourly emission limitation, compliance with the annual emission limitation will also be demonstrated.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

h. Emission Limitations:

Pb emissions shall not exceed 0.0843 pound per hour and 0.4 ton per year.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying an emission factor of 55*L pound(s) per thousand gallons of on-specification used oil burned (L= maximum lead content of fuel in wt%) by the emissions unit's maximum hourly on-specification used oil firing capacity (1286 gallons/hr at 140,000 Btu/gal) and applying the ESP emission reduction factor determined during the most recent emission tests that demonstrated the emissions unit was in compliance. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.11, Table 1.11-1 (10/96). The annual emission limitation was established by multiplying the hourly emission limitation by 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided the permittee demonstrates compliance with the hourly emission limitation, compliance with the annual emission limitation will also be demonstrated.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 12 or 29.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

i. Emission Limitation:

Visible PE shall not exceed 20% opacity as a 6-minute average, except during periods of startup, shutdown or malfunction.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

j. Emission Limitation:

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SO₂ emissions shall not exceed 48.5 tons per rolling, 12-month period.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon the records required pursuant to Section A.III.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-31-05(A)(3))

VI. Miscellaneous Requirements

1. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.
(Authority for term: OAC rule 3745-15-04(C), OAC rule 3745-77-07(A)(3)(b), and 40 CFR Part 64.3(a)(1))

Emissions Unit: (B005)

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B005-Unit #3, Babcock and Wilcox 180 million Btu per hour wood, natural gas, No. 2 fuel oil, and on-specification used oil-fired boiler for steam generation, controlled with an ESP		See B.III.1 below.

2. Additional Terms and Conditions
 - 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for these emissions units (B003 through B005) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the 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 SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 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: lead

TLV (ug/m3): 50
 Maximum Hourly Emission Rate (lbs/hr): 0.525
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.3204
 MAGLC (ug/m3): 1.19

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Pollutant: arsenic

TLV (ug/m3): 10
Maximum Hourly Emission Rate (lbs/hr): 0.102
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.0621
MAGLC (ug/m3): 0.24

Pollutant: cadmium

TLV (ug/m3): 10
Maximum Hourly Emission Rate (lbs/hr): 0.102
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.0625
MAGLC (ug/m3): 0.24

Pollutant: chromium

TLV (ug/m3): 10
Maximum Hourly Emission Rate (lbs/hr): 0.104
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.0636
MAGLC (ug/m3): 0.24

Pollutant: cobalt

TLV (ug/m3): 20
Maximum Hourly Emission Rate (lbs/hr): 0.0000
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.0001
MAGLC (ug/m3): 0.48

Pollutant: manganese

TLV (ug/m3): 200
Maximum Hourly Emission Rate (lbs/hr): 0.04
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.024
MAGLC (ug/m3): 4.76

Pollutant: mercury

TLV (ug/m3): 10
Maximum Hourly Emission Rate (lbs/hr): 0.086
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.0521
MAGLC (ug/m3): 0.24

Pollutant: nickel

TLV (ug/m3): 100
Maximum Hourly Emission Rate (lbs/hr): 0.063
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.0388

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MAGLC (ug/m3): 2.38

Pollutant: hydrogen chloride

TLV (ug/m3): 5,496

Maximum Hourly Emission Rate (lbs/hr): 127.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 77.73

MAGLC (ug/m3): 130.87

Pollutant: PCB

TLV (ug/m3): 500

Maximum Hourly Emission Rate (lbs/hr): 0.011

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.0068

MAGLC (ug/m3): 11.90

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.

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2. 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

Emissions Unit: (F001)

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: F001

Activity Description: Coal Unloading

A. State and Federally Enforceable Section

I. Applicable Emission 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 emission limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
coal unloading from trucks (see Section A.I.2.a); coal conveyors (see Section A.I.2.b); coal handling (see Section A.I.2.c); and coal transfer points (see Section A.I.2.d)	OAC rule 3745-17-08(B)(7)(b)	Visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B), (B)(6)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.I.2.e through A.I.2.g.)

2. Additional Terms and Conditions
 - 2.a The coal unloading stations for barges, railcars, or trucks that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

all coal unloading stations at the facility
 - 2.b The coal conveyors that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

all coal conveyors at the facility
 - 2.c The coal handling operations that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

all coal handling operations at the facility

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- 2.d The coal transfer points that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:
- all coal transfer points at the facility
- 2.e The permittee shall employ reasonably available control measures on all coal unloading stations for trucks, coal conveyors, coal handling operations, and coal transfer points for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the coal unloading stations, coal conveyors, coal handling operations, and coal transfer points with suitable dust suppression chemicals at sufficient treatment frequencies and use adequate enclosures to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.f For each coal unloading station, coal conveyor, coal handling operation, and coal transfer point that is not enclosed, such unloading station, conveyor, handling operation or transfer point shall be treated with suitable dust suppression chemicals if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during operation of any coal unloading station, coal conveyor, coal handling, or coal transfer point until further observation confirms that use of the control measures is unnecessary.
- 2.g Implementation of the above-mentioned control measures in accordance with the terms and conditions of this is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. Except as otherwise provided in this section and for coal unloading stations that are not adequately enclosed, the permittee shall perform inspections of such coal unloading stations in accordance with the following frequencies:

coal unloading station identification: all coal unloading stations at the facility
minimum inspection frequency: weekly

(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(a))

2. Except as otherwise provided in this section and for coal conveyors that are not adequately enclosed, the permittee shall perform inspections of such coal conveyors in accordance with the following frequencies:

coal conveyor identification: all coal conveyors at the facility

Emissions Unit: (F001)

minimum inspection frequency: weekly

(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(a))

3. Except as otherwise provided in this section and for coal handling operations that are not adequately enclosed, the permittee shall perform inspections of such coal handling operations in accordance with the following frequencies:

coal handling operation identification: all coal handling operations at the facility

minimum inspection frequency: weekly

(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(a))

4. Except as otherwise provided in this section and for coal transfer points that are not adequately enclosed, the permittee shall perform inspections of such coal transfer points in accordance with the following frequencies:

coal transfer point identification: all coal transfer points at the facility

minimum inspection frequency: weekly

(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(a))

5. The above-mentioned inspections shall be performed during representative, normal operating conditions.

(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(a))

6. The permittee may, upon receipt of written approval from the Akron RAQMD, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified inspection frequencies would be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(a))

7. The permittee shall maintain records of the following information:

- a. the date and reason any required inspection was not performed;

- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

- c. the dates the control measures were implemented; and

- d. on a calendar quarter basis, the total number of days the control measures were implemented.

The information in 7.d. shall be kept separately for (i) the coal unloading stations, (ii) the coal conveyors, (iii) the coal handling operations, and (iv) the coal transfer points, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(b))

Emissions Unit: (F001)

IV Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(c))

V Testing Requirements

1. Compliance with the emission limitations for coal unloading, conveyors, handling operations, and transfer points identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-17-03(B)(3))

VI Miscellaneous Requirements

None

Emissions Unit: (F001)

A. State Enforceable Section

I. Applicable Emission 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 emission limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
coal unloading from trucks (see Section A.I.2.a); coal conveyors (see Section A.I.2.b); coal handling (see Section A.I.2.c); and coal transfer points (see Section A.I.2.d)	None	None

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Emissions Unit: (F002)

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: F002

Activity Description: Material Unloading (Wood & TDF)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
material unloading (wood and TDF) from trucks (see Section A.I.2.a); conveyors (see Section A.I.2.b); material handling (see Section A.I.2.c); and material transfer points (see Section A.I.2.d)	OAC rule 3745-17-08(B)(7)(b)	Visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B), (B)(6)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.I.2.e through A.I.2.g.)

2. Additional Terms and Conditions

- 2.a The material unloading stations for barges, railcars, or trucks that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

all material unloading stations at the facility

- 2.b The conveyors that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

all conveyors at the facility

- 2.c The material handling operations that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

all material handling operations at the facility

Emissions Unit: (F002)

- 2.d The material transfer points that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:
- all material transfer points at the facility
- 2.e The permittee shall employ reasonably available control measures on all material unloading stations for trucks, conveyors, material handling operations, and material transfer points for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the material unloading stations, material conveyors, material handling operations, and material transfer points with suitable dust suppression chemicals at sufficient treatment frequencies and use adequate enclosures to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.f For each material unloading station, material conveyor, material handling operation, and material transfer point that is not enclosed, such unloading station, conveyor, handling operation or transfer point shall be treated with suitable dust suppression chemicals if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during operation of any material unloading station, material conveyor, material handling, or material transfer point until further observation confirms that use of the control measures is unnecessary.
- 2.g Implementation of the above-mentioned control measures in accordance with the terms and conditions of this is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. Except as otherwise provided in this section and for material unloading stations that are not adequately enclosed, the permittee shall perform inspections of such material unloading stations in accordance with the following frequencies:
- material unloading station identification: all material unloading stations at the facility
minimum inspection frequency: weekly
(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(a))
2. Except as otherwise provided in this section and for material conveyors that are not adequately enclosed, the permittee shall perform inspections of such material conveyors in accordance with the following frequencies:

Emissions Unit: (F002)

material conveyor identification: all material conveyors at the facility

minimum inspection frequency: weekly

(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(a))

3. Except as otherwise provided in this section and for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such material handling operations in accordance with the following frequencies:

material handling operation identification: all material handling operations at the facility

minimum inspection frequency: weekly

(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(a))

4. Except as otherwise provided in this section and for material transfer points that are not adequately enclosed, the permittee shall perform inspections of such material transfer points in accordance with the following frequencies:

material transfer point identification: all material transfer points at the facility

minimum inspection frequency: weekly

(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(a))

5. The above-mentioned inspections shall be performed during representative, normal operating conditions.

(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(a))

6. The permittee may, upon receipt of written approval from the Akron RAQMD, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified inspection frequencies would be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(a))

7. The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

c. the dates the control measures were implemented; and

d. on a calendar quarter basis, the total number of days the control measures were implemented.

The information in 7.d. shall be kept separately for (i) the material unloading stations, (ii) the material conveyors, (iii) the material handling operations, and (iv) the material transfer points,

Emissions Unit: (F002)

and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(b))

IV Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

(Authority for term: OAC rule 3745-17-08(B) and OAC rule 3745-77-07(A)(3)(c))

V Testing Requirements

1. Compliance with the emission limitations for material unloading, conveyors, handling operations, and transfer points identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

(Authority for term: OAC rule 3745-15-04(A) and OAC rule 3745-17-03(B)(3))

VI Miscellaneous Requirements

None

Emissions Unit: (F002)

A. State Enforceable Section

I. Applicable Emission 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 emission limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emission Limitations/Control Measures</u>
material unloading (wood and TDF) from trucks (see Section A.I.2.a); conveyors (see Section A.I.2.b); material handling (see Section A.I.2.c); and material transfer points (see Section A.I.2.d)	None	None

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None