



State of Ohio Environmental Protection Agency

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Columbus, OH 43216-1049

08/18/00

**CERTIFIED MAIL**

**RE: Draft Title V Chapter 3745-77 permit**

03-69-00-0025  
Pro-tec Coating Co.  
Rick K. Rupert  
5000 County Rd. #5  
Leipsic, OH 45856-9234

Dear Rick K. Rupert:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Northwest District Office within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

**If you have any questions or comments concerning this draft Title V permit, please contact Northwest District Office.**

Very truly yours,

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

cc: USEPA  
Jim Orlemann, DAPC Engineering  
Michael Ahern, DAPC PMU  
Northwest District Office  
Indiana  
Michigan



## Ohio EPA

State of Ohio Environmental Protection Agency

### TITLE V PERMIT

Issue Date: 08/18/00

### DRAFT

Effective Date:

Expiration Date:

This document constitutes issuance to:

Pro-tec Coating Co.  
5000 County Rd. #5  
Leipsic, OH 45856-9234

of a Title V permit for Facility ID: 03-69-00-0025

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

B001 (B1-CGL)  
Hot Water Boiler #1

B002 (B2-CGL)  
Hot Water Boiler #2

B043 (B3-CGL2)  
Hot Water Boiler #3 (20.9 MMBTU/hr)

B044 (B4-CGL2)  
Hot Water Boiler #4 (20.9 MMBTU/hr)

K001 (RC-CGL)  
Dry Film Lube Horizontal Roll Coater with infrared oven

P001 (AF-CGL)  
81.1 MMBtu/hr Continuous Annealing Furnace

P010 (AF-CGL2)  
76.8 MMBTU/hr Continuous Annealing Furnace

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

Northwest District Office  
347 North Dunbridge Road

(419) 352-8461

**OHIO ENVIRONMENTAL PROTECTION AGENCY**

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Director

# PART I - GENERAL TERMS AND CONDITIONS

## A. State and Federally Enforceable Section

### 1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
  - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting

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

- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

## **2. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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

## **3. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

## **4. Title IV Provisions**

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

## **5. Severability Clause**

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

## **6. General Requirements**

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

## **7. Fees**

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

## **8. Marketable Permit Programs**

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

## **9. Reasonably Anticipated Operating Scenarios**

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

## **10. Reopening for Cause**

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

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

## **11. Federal and State Enforceability**

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

## **12. Compliance Requirements**

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

the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:

- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
- ii. Compliance certifications shall include the following:
  - (a) An identification of each term or condition of this permit that is the basis of the certification.
  - (b) The permittee's current compliance status.
  - (c) Whether compliance was continuous or intermittent.
  - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
  - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
- iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

### **13. Permit Shield**

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

### **14. Operational Flexibility**

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

### **15. Emergencies**

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

## **16. Off Permit Changes**

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

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

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

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

## **17. Compliance Method Requirements**

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

## **B. State Only Enforceable Section**

### **1. Permit to Install Requirement**

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

### **2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements**

The permittee shall submit required reports in the following manner:

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

### **3. Records Retention Requirements**

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

### **4. Inspections and Information Requests**

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

## **5. Scheduled Maintenance/Malfunction Reporting**

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

## **6. Permit Transfers**

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

## **7. Air Pollution Nuisance**

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

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

## Part II - Specific Facility Terms and Conditions

### A. State and Federally Enforcable Section

None

### B. State Only Enforceable Section

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

natural gas fired make-up air heater #1-process building (B016);  
natural gas fired make-up air heater #2-process building (B017);  
natural gas fired make-up air heater #3-process building (B018);  
natural gas fired make-up air heater #4-process building (B019);  
natural gas fired make-up air heater #5-process building (B020);  
natural gas fired make-up air heater #6-process building (B021);  
natural gas fired make-up air heater #7-process building (B022);  
natural gas fired make-up air heater #8-process building (B031);  
natural gas fired make-up air heater #9-process building (B032);  
natural gas fired make-up air heater #10-process building (B033);  
natural gas fired make-up air heater #11-process building (B034);  
natural gas fired make-up air heater #12-process building (B035);  
natural gas fired make-up air heater #13-process building (B036);  
precleaner strip dryer #1 (P002);  
cleaner strip dryer #2 (P003);  
tension leveler strip dryer #4 (P004);  
chromating strip dryer #5 (P005);  
chromating unit (P006);  
zinc induction pot (P007);  
galvanneal induction furnace (P008);  
continuous alkaline cleaner with packer tower scrubber (P009);  
electrostatic oiler-CGL (Z001);  
electrostatic oiler-SST (Z002);  
telesis coil ink jet marker (Z003);  
matthews strip ink jet printer (Z004); and  
strip dryer #1 cleaner section (Z011).

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations as well as any emission limitations and/or control requirements contained within a PTI for the emissions unit.

2. A Consent Decree was issued to the permittee on February 11, 1998. It established requirements for emission units B001, B002, B043, B044, P001 and P010.

## Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** B1-CGL (B001)  
**Activity Description:** Hot Water Boiler #1

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
20.9 mm Btu/hr natural gas-fired boiler, with low NOx burners	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	0.020 lb PE/mmBtu of actual heat input
	OAC rule 3745-31-05 (PTI 03-06093)	0.42 lb PE/hr 1.84 tons PE/yr
	40 CFR Part 60, subpart Dc	0.033 lb NOx/mmBtu (see A.I.2.a)  0.69 lb NOx/hr 3.02 tons NOx/yr  0.23 lb CO/hr 1.01 tons CO/yr  0.11 lb VOC/hr 0.48 ton VOC/yr  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B) and 3745-17-07(A).  Exempt, see A.II.1.

#### 2. Additional Terms and Conditions

- 2.a The permittee shall operate and maintain natural gas-fired low-NOx burners to achieve, on a continuous basis, an emission rate not to exceed 0.033 lb NOx/mmBtu of actual heat input for this emissions unit.
- 2.b Since natural gas is the only fuel fired in this emissions unit, no SO2 emission limitation is established by OAC Chapter 3745-18 for this emissions unit.

### II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

### III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

### 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 within 3 months after issuance of the permit, unless emission testing demonstrating compliance with the Consent Decree has already been completed, in which case initial emission testing is not required. Emission testing shall also be conducted within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NO<sub>x</sub> and CO.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - i. NO<sub>x</sub> - Method 7 of 40 CFR Part 60, Appendix A; and
    - ii. CO - Method 10 of 40 CFR Part 60, Appendix A.

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 appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):

## V. Testing Requirements (continued)

- 3.a** Emission Limitation:  
Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:  
OAC rule 3745-17-03(B)(1)

- 3.b** Emission Limitation:  
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:  
The permittee shall determine compliance with the lb PE/mmBtu limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 1.9 lbs PE (filterable)/mm cu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcu ft./hr), and then dividing by the emissions unit's maximum heat input capacity (mmBtu/hr).

If required, the permittee shall demonstrate compliance with the particulate emission limitation above in accordance with the procedures and methods specified in OAC 3745-17-03(B)(9).

- 3.c** Emission Limitations:  
0.42 lb PE/hr and 1.84 TPY

Applicable Compliance Method:  
As long as compliance with the lb PE/mmBtu limitation is maintained, compliance with the hourly PE limitation shall be assumed [the hourly PE limitation was calculated by multiplying the lb PE/mmBtu limitation by the maximum rated capacity of the boiler (mmBtu/hr)].

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly PE limitation in accordance with the procedures and methods specified in Methods 1 - 5 of 40 CFR Part 60, Appendix A.

- 3.d** Emission Limitations:  
0.69 lb NO<sub>x</sub>/hr and 3.02 TPY

Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

- 3.e** Emission Limitations:  
0.23 lb CO/hr and 1.01 TPY

Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 10.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

## **V. Testing Requirements (continued)**

**3.f** Emission Limitation:  
0.033 lb NOx/mmBtu

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

**3.g** Emission Limitations:  
0.11 lb VOC/hr and 0.48 TPY

Applicable Compliance Method:

The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 5.5 lbs VOC/mm<sup>3</sup>cu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mm<sup>3</sup>cu ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, compliance with the hourly limitation shall be determined using the test methods and procedures described in Method 18, Method 25, or Method 25A of 40 CFR Part 60, Appendix A.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** B2-CGL (B002)  
**Activity Description:** Hot Water Boiler #2

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
20.9 mm Btu/hr natural gas-fired boiler, with low NOx burners	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	0.020 lb PE/mmBtu of actual heat input
	OAC rule 3745-31-05 (PTI 03-06093)	0.42 lb PE/hr 1.84 tons PE/yr
		0.033 lb NOx/mmBtu (see A.I.2.a)
		0.69 lb NOx/hr 3.02 tons NOx/yr
		0.23 lb CO/hr 1.01 tons CO/yr
		0.11 lb VOC/hr 0.48 ton VOC/yr
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B) and 3745-17-07(A).
	40 CFR Part 60, subpart Dc	Exempt, see A.II.1.

##### 2. Additional Terms and Conditions

- The permittee shall operate and maintain natural gas-fired low-NOx burners to achieve, on a continuous basis, an emission rate not to exceed 0.033 lb NOx/mmBtu of actual heat input for this emissions unit.
- Since natural gas is the only fuel fired in this emissions unit, no SO2 emission limitation is established by OAC Chapter 3745-18 for this emissions unit.

##### II. Operational Restrictions

- The permittee shall burn only natural gas in this emissions unit.

### III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

### 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 within 3 months after issuance of the permit, unless emission testing demonstrating compliance with the Consent Decree has already been completed, in which case initial emission testing is not required. Emission testing shall also be conducted within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NO<sub>x</sub> and CO.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - i. NO<sub>x</sub> - Method 7 of 40 CFR Part 60, Appendix A; and
    - ii. CO - Method 10 of 40 CFR Part 60, Appendix A.

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 appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):

## V. Testing Requirements (continued)

- 3.a** Emission Limitation:  
Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:  
OAC rule 3745-17-03(B)(1)

- 3.b** Emission Limitation:  
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:  
The permittee shall determine compliance with the lb PE/mmBtu limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 1.9 lbs PE (filterable)/mm cu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcu ft./hr), and then dividing by the emissions unit's maximum heat input capacity (mmBtu/hr).

If required, the permittee shall demonstrate compliance with the particulate emission limitation above in accordance with the procedures and methods specified in OAC 3745-17-03(B)(9).

- 3.c** Emission Limitations:  
0.42 lb PE/hr and 1.84 TPY

Applicable Compliance Method:  
As long as compliance with the lb PE/mmBtu limitation is maintained, compliance with the hourly PE limitation shall be assumed [the hourly PE limitation was calculated by multiplying the lb PE/mmBtu limitation by the maximum rated capacity of the boiler (mmBtu/hr)].

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly PE limitation in accordance with the procedures and methods specified in Methods 1 - 5 of 40 CFR Part 60, Appendix A.

- 3.d** Emission Limitations:  
0.69 lb NO<sub>x</sub>/hr and 3.02 TPY

Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

- 3.e** Emission Limitations:  
0.23 lb CO/hr and 1.01 TPY

Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 10.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

## **V. Testing Requirements (continued)**

**3.f** Emission Limitation:  
0.033 lb NOx/mmBtu

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

**3.g** Emission Limitations:  
0.11 lb VOC/hr and 0.48 TPY

Applicable Compliance Method:

The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 5.5 lbs VOC/mm<sup>3</sup>cu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mm<sup>3</sup>cu ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, compliance with the hourly limitation shall be determined using the test methods and procedures described in Method 18, Method 25, or Method 25A of 40 CFR Part 60, Appendix A.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** B3-CGL2 (B043)  
**Activity Description:** Hot Water Boiler #3 (20.9 MMBTU/hr)

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
20.9 mm Btu/hr natural gas-fired boiler, with low NOx burners	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	0.020 lb PE/mmBtu of actual heat input
	OAC rule 3745-31-05 (PTI 03-0957)	0.02 lb PE/hr 0.087 ton PE/yr
		0.033 lb NOx/mmBtu (see A.I.2.a)
		0.69 lb NOx/hr 3.02 tons NOx/yr
		0.23 lb CO/hr 1.01 tons CO/yr
		0.11 lb VOC/hr 0.48 ton VOC/yr
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B) and 3745-17-07(A).
	40 CFR Part 60, subpart Dc	Exempt, see A.II.1.

##### 2. Additional Terms and Conditions

- The permittee shall operate and maintain natural gas-fired low-NOx burners to achieve, on a continuous basis, an emission rate not to exceed 0.033 lb NOx/mmBtu of actual heat input for this emissions unit.
- Since natural gas is the only fuel fired in this emissions unit, no SO2 emission limitation is established by OAC Chapter 3745-18 for this emissions unit.

##### II. Operational Restrictions

- The permittee shall burn only natural gas in this emissions unit.

### III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

### 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 within 3 months after issuance of the permit, unless emission testing demonstrating compliance with the Consent Decree has already been completed, in which case initial emission testing is not required. Emission testing shall also be conducted within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NO<sub>x</sub> and CO.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - i. NO<sub>x</sub> - Method 7 of 40 CFR Part 60, Appendix A; and
    - ii. CO - Method 10 of 40 CFR Part 60, Appendix A.

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 appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):

**V. Testing Requirements (continued)**

**3.a** Emission Limitation:  
Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:  
OAC rule 3745-17-03(B)(1)

**3.b** Emission Limitation:  
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:  
The permittee shall determine compliance with the lb PE/mmBtu limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 1.9 lbs PE (filterable)/mm cu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcu ft./hr), and then dividing by the emissions unit's maximum heat input capacity (mmBtu/hr).

If required, the permittee shall demonstrate compliance with the particulate emission limitation above in accordance with the procedures and methods specified in OAC 3745-17-03(B)(9).

**3.c** Emission Limitations:  
0.02 lb PE/hr and 0.087 TPY

Applicable Compliance Method:  
The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 1.9 lbs PE (filterable)/mmcu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcu ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly PE limitation in accordance with the procedures and methods specified in Methods 1 - 5 of 40 CFR Part 60, Appendix A.

**3.d** Emission Limitations:  
0.69 lb NO<sub>x</sub>/hr and 3.02 TPY

Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

**3.e** Emission Limitations:  
0.23 lb CO/hr and 1.01 TPY

Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 10.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

## **V. Testing Requirements (continued)**

**3.f** Emission Limitation:  
0.033 lb NOx/mmBtu

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

**3.g** Emission Limitations:  
0.11 lb VOC/hr and 0.48 TPY

Applicable Compliance Method:

The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 5.5 lbs VOC/mm<sup>3</sup> of natural gas by the emissions unit's maximum hourly fuel consumption rate (mm<sup>3</sup> ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, compliance with the hourly limitation shall be determined using the test methods and procedures described in Method 18, Method 25, or Method 25A of 40 CFR Part 60, Appendix A.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** B4-CGL2 (B044)  
**Activity Description:** Hot Water Boiler #4 (20.9 MMBTU/hr)

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
20.9 mm Btu/hr natural gas-fired boiler, with low NOx burners	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	0.020 lb PE/mmBtu of actual heat input
	OAC rule 3745-31-05 (PTI 03-0957)	0.02 lb PE/hr 0.087 ton PE/yr
	40 CFR Part 60, subpart Dc	0.033 lb NOx/mmBtu (see A.I.2.a)  0.69 lb NOx/hr 3.02 tons NOx/yr  0.23 lb CO/hr 1.01 tons CO/yr  0.11 lb VOC/hr 0.48 ton VOC/yr  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B) and 3745-17-07(A).  Exempt, see A.II.1.

**2. Additional Terms and Conditions**

- 2.a The permittee shall operate and maintain natural gas-fired low-NOx burners to achieve, on a continuous basis, an emission rate not to exceed 0.033 lb NOx/mmBtu of actual heat input for this emissions unit.
- 2.b Since natural gas is the only fuel fired in this emissions unit, no SO2 emission limitation is established by OAC Chapter 3745-18 for this emissions unit.

**II. Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.

### III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

### 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 within 3 months after issuance of the permit, unless emission testing demonstrating compliance with the Consent Decree has already been completed, in which case initial emission testing is not required. Emission testing shall also be conducted within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NO<sub>x</sub> and CO.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - i. NO<sub>x</sub> - Method 7 of 40 CFR Part 60, Appendix A; and
    - ii. CO - Method 10 of 40 CFR Part 60, Appendix A.

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 appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):

**V. Testing Requirements (continued)**

**3.a** Emission Limitation:  
Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:  
OAC rule 3745-17-03(B)(1)

**3.b** Emission Limitation:  
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:  
The permittee shall determine compliance with the lb PE/mmBtu limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 1.9 lbs PE (filterable)/mm cu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcu ft./hr), and then dividing by the emissions unit's maximum heat input capacity (mmBtu/hr).

If required, the permittee shall demonstrate compliance with the particulate emission limitation above in accordance with the procedures and methods specified in OAC 3745-17-03(B)(9).

**3.c** Emission Limitations:  
0.02 lb PE/hr and 0.087 TPY

Applicable Compliance Method:  
The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 1.9 lbs PE (filterable)/mmcu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcu ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly PE limitation in accordance with the procedures and methods specified in Methods 1 - 5 of 40 CFR Part 60, Appendix A.

**3.d** Emission Limitations:  
0.69 lb NO<sub>x</sub>/hr and 3.02 TPY

Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

**3.e** Emission Limitations:  
0.23 lb CO/hr and 1.01 TPY

Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 10.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

**V. Testing Requirements (continued)**

**3.f** Emission Limitation:  
0.033 lb NOx/mmBtu

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

**3.g** Emission Limitations:  
0.11 lb VOC/hr and 0.48 TPY

Applicable Compliance Method:

The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 5.5 lbs VOC/mm<sup>3</sup>cu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mm<sup>3</sup>cu ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, compliance with the hourly limitation shall be determined using the test methods and procedures described in Method 18, Method 25, or Method 25A of 40 CFR Part 60, Appendix A.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** RC-CGL (K001)

**Activity Description:** Dry Film Lube Horizontal Roll Coater with infrared oven

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
dry film lube horizontal roll coater, with infrared oven	OAC rule 3745-17-07(A)	See A.I.2.a.
	OAC rule 3745-17-11(B)(2)	See A.I.2.b.
	OAC rule 3745-21-09(E)	2.6 pounds of volatile organic compounds (VOC) per gallon of coating, excluding water and exempt solvent
	OAC rule 3745-31-05 (PTI 03-9977)	42 lbs VOC/hr 24.44 tons VOC/yr See A.I.2.c. 0.10 lb particulate emissions (PE)/hr 0.44 ton PE/year
	40 CFR Part 60, subpart TT	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(E) and 40 CFR Part 60, subpart TT. 0.28 kilogram VOC per liter of coating solids applied (based on a monthly volume-weighted average)

**2. Additional Terms and Conditions**

- 2.a The emission unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

## 2. Additional Terms and Conditions (continued)

- 2.b** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Williams County, which is identified as a P-2 county.
- 2.c** The 42 lbs VOC/hr emission limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limitation.

## II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit that is a liquid organic material. The emissions unit shall employ only water and alkaline cleaner, or a cleaning agent that does not result in the emissions of organic compounds. "Liquid organic material" is defined in OAC rule 3745-21-01(C)(3).

## III. Monitoring and/or Record Keeping Requirements

1. Each month, the permittee shall determine the monthly volume-weighted average of the total mass of VOCs emitted to the atmosphere per volume of applied coating solids, in kilogram per liter, as follows, and record the results:

- 1.a** Calculate the mass of VOCs consumed ( $M_o + M_d$ ) during the calendar month by the following equation:

$$M_o + M_d = [\text{summation of } (L_{ci} \times D_{ci} \times W_{oi}) \text{ for } i = 1, 2, \dots, n + \text{summation of } (L_{dj} \times D_{dj}) \text{ for } j = 1, 2, \dots, m]$$

where:

$M_o$  = the total VOC emissions, in kilograms, from all the coatings consumed, as received

$M_d$  = the total VOC emissions, in kilograms, from all the solvents added to the coatings

$L_{ci}$  = the total volume, in liters, of coating  $i$  consumed, as received

$L_{dj}$  = the total volume, in liters, of solvent  $j$  added to coatings

$D_{ci}$  = density of coating  $i$ , as received (kilograms per liter)

$D_{dj}$  = density of solvent  $j$  added to coatings (kilograms per liter)

$W_{oi}$  = the fraction, by weight, of the VOCs in coating  $i$ , as received

$n$  = the number of different coatings used during the calendar month

$m$  = the number of different solvents added to coatings during the calendar month

- 1.b** Calculate the total volume of coatings solids used ( $L_s$ ) in the calendar month by the following equation:

$$L_s = \text{summation of } (L_{ci} \times V_{si}) \text{ for } i = 1, 2, \dots, n$$

where:

$L_s$  = the volume of all the coatings solids consumed (liters)

$L_{ci}$  = the volume of coating  $i$  consumed, as received (liters)

$V_{si}$  = the fraction, by volume, of the solids in coating  $i$ , as received

$n$  = the number of different coatings used during the calendar month

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

- 1.c Calculate the volume-weighted average mass of VOCs consumed per unit volume of coating solids applied during the calendar month by the following equation:

$$G = (M_o + M_d) / (L_s)$$

where:

G = the volume-weighted average mass of VOCs in coatings consumed in a calendar month per unit volume of applied coating solids (kilograms per liter)

2. The permittee shall collect and record the following information each month for the line:
- The name and identification number of each coating and cleanup material employed.
  - Documentation on whether or not each cleanup material employed is a liquid organic material.
  - The VOC content of each coating employed, in lbs/gallon and in lbs/gallon excluding water and exempt solvents, as applied.
  - The number of gallons of each coating employed.
  - The total VOC emissions for all the coatings employed [summation of (c x d) for all coatings], in pounds.
3. The permittee shall collect and record each year the total VOC emissions for all the coatings employed (this is determined by adding all the monthly VOC emissions (from section 2.e) for the calendar year).

### IV. Reporting Requirements

- The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the VOC content limitation of 0.28 kg VOC/liter of coating solids (based on a monthly volume-weighted average).
- The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings (i.e., for VOC content). The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
- The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying cleanup materials (i.e., liquid organic cleanup materials). The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
- The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

### V. Testing Requirements

- Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):
  - Emission Limitation:  
2.6 lbs of VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitation above through the monitoring and record keeping requirements required in section A.III.2 of this permit.

## V. Testing Requirements (continued)

- 1.b** Emission Limitation:  
0.28 kilogram VOC per liter of coating solids applied (based on a monthly volume-weighted average)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitation above through the monitoring and record keeping requirements required in section A.III.1 of this permit.

- 1.c** Emission Limitation:  
42.0 lbs VOC/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly emission limitation above by multiplying the maximum coating usage rate (gallons/hr) by the maximum VOC content of all the coatings employed (lbs/gallon).

If required, the permittee shall demonstrate compliance with the above emission limit pursuant to Method 25 of 40 CFR Part 60, Appendix A.

- 1.d** Emission Limitation:  
24.44 tons VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above through the monitoring and record keeping requirements required in sections A.III.2 and 3. of this permit.

- 1.e** Emission Limitations:  
0.10 lb PE/hr  
0.44 ton PE/year

Applicable Compliance Method:

To determine the actual worst case PE rate (E), the following equation may be used for the paint spraying operation:

$E = \text{particulates emission rate (lbs/hr)}$

$E = \text{maximum coating solids usage rate, in pounds per hour} \times (1-TE) \times (1-CE)$

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, the permittee shall demonstrate compliance with the hourly emission limit pursuant to OAC rule 3745-17-03(B)(10).

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

- 2.** Formulation data or USEPA Method 24 shall be used to determine the VOC contents of all the coatings employed.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
dry film lube horizontal roll coater with infrared oven	none	none

**2. Additional Terms and Conditions**

**None**

**II. Operational Restrictions**

**None**

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit K001 was evaluated based on the actual materials (coatings) 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: Ethyl Alcohol

TLV (mg/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 34.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 407.1

MAGLC (ug/m3): 44,761.90

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

2. 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 (coatings), 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.

3. 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

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** AF-CGL (P001)  
**Activity Description:** 81.1 MMBtu/hr Continuous Annealing Furnace

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
92.0 mm Btu/hr natural gas-fired continuous annealing furnace, with 16 mmBtu/hr auxiliary natural gas burners [the burners are used to maintain the selective catalytic reduction (SCR) control device operating temperature within recommended range]	OAC rule 3745-17-07(A)	See A.I 2.a.
	OAC rule 3745-17-11(B)(2)	See A.I.2.b.
	OAC rule 3745-31-05 (PTI 03-06093)	0.10 lb nitrogen oxides (NOx)/mmBtu (see A.I.2.c)  9.2 lbs NOx/hr (see A.I.2.c)  40.3 tons NOx/yr  13.6 lbs carbon monoxide (CO)/hr and 59.6 tons CO/yr  0.50 lb volatile organic compounds (VOC)/hr and 2.19 tons VOC/yr  0.69 lb particulate emissions (PE)/hr and 3.02 tons PE/yr

**2. Additional Terms and Conditions**

- 2.a** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.b** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Putnam County, which is identified as a P-2 county.

## **2. Additional Terms and Conditions (continued)**

- 2.c** The permittee shall employ Hauck/LBE radiant tube burners with flue gas recirculation and a NOx OUT SCR system for NOx emissions reduction. The NOx emissions shall be limited to 0.10 lb NOx/mmBtu when this emissions unit is in operation. For this requirement, "in operation" shall mean that the main burners are firing and the product is moving through the continuous annealing furnace. "In operation" shall not include low fuel flow/low temperature furnace conditions, such as idle and furnace temperature ramp-up and ramp-down. During times that the furnace is not "in operation" and the main burners are idling or only the pilot burners are operating, NOx emissions shall not exceed 9.2 lbs/hr.

## **II. Operational Restrictions**

1. The permittee shall burn only natural gas in this emissions unit.
2. The permittee shall continuously maintain the urea/gas ratio, when the emissions unit is in operation, at a value that is within +/- 10 percent of the average value established during the most recent emission testing that demonstrated that the emissions unit was in compliance.
3. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

## **III. Monitoring and/or Record Keeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The urea/gas ratio shall be determined and adjusted on a continuous basis by a primary control circuit based on natural gas flow rate, which shall determine the appropriate urea flow rate to each SCR unit. Additionally, a secondary control circuit shall be utilized consisting of two NOx monitors which shall increase or decrease the urea flow rate according to NOx concentrations observed at the discharge of each SCR unit. The purpose of the secondary control circuit is to optimize the efficiency of each SCR control system and minimize ammonia slip to the atmosphere.
3. The permittee shall operate and maintain equipment necessary to continuously monitor the following parameters for the SCR NOx control unit while this emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the desired parameters. The monitoring and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee:
  - a. the urea flow rate, in gallons per hour;
  - b. the natural gas flow rate, in standard cubic feet per hour;
  - c. the SCR inlet temperature, in degrees Fahrenheit;
  - d. the NOx emission rate at the outlet of the SCR unit, in pounds per hour;
  - e. the number of hours the SCR unit was in operation; and
  - f. the number of hours this emissions unit was in operation.

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

4. The permittee shall collect and record the following information each month for this emissions unit:
  - a. the total urea usage, in gallons;
  - b. the total natural gas usage, in standard cubic feet;
  - c. the daily urea to natural gas flow ratio (3.a/3.b), in gallons of urea per each standard cubic feet of natural gas;
  - d. the monthly average Btu content of fuel (Btu per standard cubic foot) as specified by the natural gas supplier;
  - e. the heat input rate (b x d), in mmBtu;
  - f. the number of hours and specific hours the emissions unit was "in operation;"
  - g. the number of hours and specific hours the emissions unit was not "in operation;"
  - h. the average hourly heat input rate for this emissions unit (e/f), in mmBtu/hr;
  - i. the number of hours the SCR system associated with this emissions unit was in operation;
  - j. the total number of three-hour average periods during which the temperature was monitored at the inlet of the SCR unit;
  - k. all 3-hour blocks of time during which the average temperature of the flue gases at the inlet to the SCR unit, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;
  - l. all 3-hour periods during which the NOx emission rate was monitored at the outlet of the SCR unit;
  - m. all 3-hour periods during which the average NOx emission rate was greater than 9.2 pounds NOx per hour; and
  - n. all 3-hour periods during which the average NOx emission rate was greater that 0.10 pound NOx per mmBtu.
5. The permittee shall maintain daily records of the following information for this emissions unit:
  - a. the total number of hours the emissions unit was in operation;
  - b. the total natural gas fuel usage, in mmcu ft.; and
  - c. the firing rate, in mmBtu/hr, using the following equation:  
  
firing rate (mmBtu/hr) = [total daily natural gas usage (mmcu ft./day) x (the Btu value from section A.III.3.d) / the total number of hours the emissions unit was in operation (from section 4.c above)].
6. A statement of certification of the existing continuous NOx monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 6 and/or 40 CFR Part 75. Proof of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

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

7. The permittee shall operate and maintain existing equipment to continuously monitor and record NO<sub>x</sub> from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75.

The permittee shall maintain records of all data obtained by the continuous NO<sub>x</sub> monitoring system including, but not limited to, parts per million NO<sub>x</sub> on an instantaneous (one-minute) basis, emissions of NO<sub>x</sub> in units of the applicable standard in the appropriate averaging period (i.e., pounds/hour and pounds/mmBtu for each rolling 3-hour period), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

8. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NO<sub>x</sub> monitoring system designed to ensure continuous valid and representative readings of NO<sub>x</sub> emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F and/or 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NO<sub>x</sub> monitoring system must be kept on site and available for inspection during regular office hours.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following:
  - a. the NO<sub>x</sub> emission rate of 9.2 lbs/hr;
  - b. the NO<sub>x</sub> emission rate of 0.1 lb/mmBtu; and
  - c. the 3-hour average SCR inlet temperature required by A.II.3.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all days during which the urea/gas ratio was not within +/- 10 percent of the average value measured during the most recent emission testing that demonstrated that the emissions unit was in compliance.
4. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(l) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO<sub>x</sub> values in excess of the applicable limits specified in 40 CFR Part 76 or any limitations specified in the terms and conditions of this permit. These reports shall also contain the total NO<sub>x</sub> emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous NO<sub>x</sub> monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

#### IV. Reporting Requirements (continued)

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

Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

#### 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 within 3 months after issuance of the permit, unless emission testing demonstrating compliance with the consent decree has already been completed, in which case initial emission testing is not required. Emission testing shall also be conducted within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NO<sub>x</sub> and CO.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - i. NO<sub>x</sub> - Method 7 of 40 CFR Part 60, Appendix A; and
    - ii. CO - Method 10 of 40 CFR Part 60, Appendix A.

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 appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

## V. Testing Requirements (continued)

3. During the emission testing, the permittee shall also record the following parameters for each run:

- i. the hourly average urea flow rate, in gallons/hr (average);
- ii. the hourly average natural gas flow rate, in standard cubic feet/hr (average); and
- iii. the urea/natural gas ratio (i/ii).

4. Compliance Methods: Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):

4.a Emission Limitations:  
0.69 lb PE/hr and 3.02 TPY PE

Applicable Compliance Method:

The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 1.9 lbs PE (filterable)/mm cu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcu ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly particulate emission limitation in accordance with the procedures and methods specified in Methods 1 - 5 of 40 CFR Part 60, Appendix A.

4.b Emission Limitations:  
9.2 lbs NO<sub>x</sub>/hr and 40.30 TPY NO<sub>x</sub>

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

Also, the permittee shall demonstrate compliance with the hourly limitation above based on the record keeping requirements specified in section A.III.2 of this permit.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

4.c Emission Limitations:  
0.50 lb VOC/hr and 2.19 TPY VOC

Applicable Compliance Method:

The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 5.5 lbs VOC/mmcu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcu ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, compliance with the hourly limitation shall be determined using the test methods and procedures described in Method 18, Method 25, or Method 25A of 40 CFR Part 60, Appendix A.

**V. Testing Requirements (continued)**

**4.d** Emission Limitation:  
0.10 lb NO<sub>x</sub>/mmBtu

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

Also, the permittee shall demonstrate compliance with the hourly limitation above based on the record keeping requirements specified in section A.III.2 of this permit.

**4.e** Emission Limitation:  
13.6 lbs CO/hr and 59.6 TPY CO

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 10.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
92.0 mm Btu/hr natural gas-fired continuous annealing furnace, with 16 mmBtu/hr auxiliary natural gas burners [the burners are used to maintain the selective catalytic reduction (SCR) control device operating temperature within recommended range]	none	none

**2. Additional Terms and Conditions**

**None**

**II. Operational Restrictions**

**None**

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit P001 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: Ammonia

TLV (ug/m3): 17,000

Maximum Hourly Emission Rate (lbs/hr): 1.82

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.5

MAGLC (ug/m3): 404,800

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

2. 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.

3. 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

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** AF-CGL2 (P010)

**Activity Description:** 76.8 MMBTU/hr Continuous Annealing Furnace

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
76.8 mm Btu/hr natural gas fired continuous annealing furnace, with five 1.0 mm Btu/hr auxiliary natural gas burners [the burners are used to maintain the selective catalytic reduction (SCR) control device operating temperature within recommended range]	OAC rule 3745-17-07(A)	See A.I 2.a.
	OAC rule 3745-17-11(B)(2)	See A.I 2.b.
	OAC rule 3745-31-05 (PTI 03-0957)	0.06 lb nitrogen oxides (NOx)/mmBtu (see A.I.2.c)  4.61 lbs NOx/hr (see A.I.2.c)  20.18 tons NOx/yr  4.45 lbs carbon monoxide (CO)/hr and 19.49 tons CO/yr  0.21 lb volatile organic compounds (VOC)/hr and 0.9 ton VOC/yr  1.03 lbs particulate emissions (PE)/hr and 4.5 tons PE/yr  3.99 tons ammonia/yr  See A.II.3.

\*All PE is assumed to be PM10

**2. Additional Terms and Conditions**

- 2.a This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

## 2. Additional Terms and Conditions (continued)

- 2.b** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Putnam County, which is identified as a P-2 county.
- 2.c** The permittee shall employ the Bloom Model 2320-063 recuperative radiant tube furnace burners with all "air staged air nozzles," and two NOx OUT SCR systems for NOx emissions reduction. The air staged nozzle design along with the two NOx OUT SCR systems shall limit NOx emissions to 0.06 pound NOx/mmBtu of actual heat input, based on a 3-hour rolling average, when this emissions unit is in operation (including lance pilot). "In operation" shall mean that the main burners are firing and the product is moving through the continuous annealing furnace. "In operation" shall not include low fuel flow/low temperature furnace conditions, such as idle and furnace temperature ramp-up and ramp-down. During times that the furnace is not "in operation" and the main burners are idling or only the pilot burners are operating, the 4.61\* lbs/hr NOx limit shall be met at all times.

\* The 4.61 pounds NOx per hour limitation shall be based on a 3-hour rolling average.

## II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.
2. The maximum heat input (including the lance pilot) shall not exceed 76.8 mm Btu per hour.
3. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 700 degrees Fahrenheit.
4. The permittee shall continuously maintain the urea/gas ratio, when the emissions unit is in operation, at a value that is within +/- 10 percent of the average value established during the most recent emission testing that demonstrated that the emissions unit was in compliance.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall operate and maintain equipment necessary to continuously monitor the following parameters for the SCR NOx control unit while this emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the desired parameters. The monitoring and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee:
  - a. the urea flow rate, in gallons per hour;
  - b. the natural gas flow rate, in standard cubic feet per hour;
  - c. the SCR inlet temperature, in degrees Fahrenheit;
  - d. the NOx emission rate at the outlet of the SCR unit, in pounds per hour;
  - e. the number of hours the SCR unit was in operation; and
  - f. the number of hours this emissions unit was in operation.

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

3. The permittee shall collect and record the following information each month for this emissions unit:
  - a. the total urea usage, in gallons;
  - b. the total natural gas usage, in standard cubic feet;
  - c. the daily urea to natural gas flow ratio (3.a/3.b), in gallons of urea per each standard cubic feet of natural gas;
  - d. the monthly average Btu content of fuel (Btu per standard cubic foot) as specified by the natural gas supplier;
  - e. the heat input rate (b x d), in mmBtu;
  - f. the number of hours and specific hours the emissions unit was "in operation;"
  - g. the number of hours and specific hours the emissions unit was not "in operation;"
  - h. the average hourly heat input rate for this emissions unit (e/f), in mmBtu/hr;
  - i. the number of hours the SCR system associated with this emissions unit was in operation;
  - j. the total number of three-hour average periods during which the temperature was monitored at the inlet of the SCR unit;
  - k. all 3-hour blocks of time during which the average temperature of the flue gases at the inlet to the SCR unit, when the emissions unit was in operation, was less than 700 degrees Fahrenheit;
  - l. all 3-hour periods during which the NOx emission rate was monitored at the outlet of the SCR unit;
  - m. all 3-hour periods during which the average NOx emission rate was greater than 4.61 pounds NOx per hour; and
  - n. all 3-hour periods during which the average NOx emission rate was greater that 0.06 pound NOx per mmBtu.
4. The urea/gas ratio shall be determined and adjusted on a continuous basis by a primary control circuit based on natural gas flow rate, which shall determine the appropriate urea flow rate to each SCR unit. Additionally, a secondary control circuit shall be utilized consisting of two NOx monitors which shall increase or decrease the urea flow rate according to NOx concentrations observed at the discharge of each SCR unit. The purpose of the secondary control circuit is to optimize the efficiency of each SCR control system and minimize ammonia slip to the atmosphere.
5. A statement of certification of the existing continuous NOx monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 6 and/or 40 CFR Part 75. Proof of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.
6. The permittee shall operate and maintain existing equipment to continuously monitor and record NOx from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75.

The permittee shall maintain records of all data obtained by the continuous NOx monitoring system including, but not limited to, parts per million NOx on an instantaneous (one-minute) basis, emissions of NOx in units of the applicable standard in the appropriate averaging period (i.e., pounds/hour and pounds/mmBtu for each rolling 3-hour period), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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

7. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NO<sub>x</sub> monitoring system designed to ensure continuous valid and representative readings of NO<sub>x</sub> emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F and/or 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NO<sub>x</sub> monitoring system must be kept on site and available for inspection during regular office hours.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following:
  - a. the NO<sub>x</sub> emission rate of 4.61 lbs/hr;
  - b. the NO<sub>x</sub> emission rate of 0.06 lb/mmBtu; and
  - c. the 3-hour average SCR inlet temperature required by A.II.3.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all days during which the urea/gas ratio was not within +/- 10 percent of the average value measured during the most recent emission testing that demonstrated that the emissions unit was in compliance.
4. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO<sub>x</sub> values in excess of the applicable limits specified in 40 CFR Part 76 or any limitations specified in the terms and conditions of this permit. These reports shall also contain the total NO<sub>x</sub> emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous NO<sub>x</sub> monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

## 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 within 3 months after issuance of the permit, unless emission testing demonstrating compliance with the consent decree has already been completed, in which case initial emission testing is not required. Emission testing shall also be conducted within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NO<sub>x</sub> and CO.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - i. NO<sub>x</sub> - Method 7 of 40 CFR Part 60, Appendix A; and
    - ii. CO - Method 10 of 40 CFR Part 60, Appendix A.

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 appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. During the emission testing, the permittee shall also record the following parameters for each run:
  - i. the hourly average urea flow rate, in gallons/hr (average);
  - ii. the hourly average natural gas flow rate, in standard cubic feet/hr (average); and
  - iii. the urea/natural gas ratio (i/ii).
4. Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):
  - 4.a Emission Limitation:  
Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:  
OAC rule 3745-17-03(B)(1)

**V. Testing Requirements (continued)**

**4.b** Emission Limitation:  
0.06 lb NOx/mmBtu

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

**4.c** Emission Limitation:  
4.61 lbs NOx/hr and 20.18 tons/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

Also, the permittee shall demonstrate compliance with the hourly limitation above based on the record keeping requirements specified in section A.III.2 of this permit.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

**4.d** Emission Limitation:  
1.03 lb PE/hr and 4.5 ton/yr

Applicable Compliance Method:

The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 1.9 lbs PE (filterable)/mm cu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcu ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly particulate emission limitation in accordance with the procedures and methods specified in Methods 1 - 5 of 40 CFR Part 60, Appendix A.

**4.e** Emission Limitation:  
4.45 lbs CO/hr and 19.49 tons/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 10.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

## V. Testing Requirements (continued)

**4.f** Emission Limitation:  
0.21 lb VOC/hr and 0.9 ton/yr

Applicable Compliance Method:

The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 5.5 lbs VOC/mmcf of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcf ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, compliance with the hourly limitation shall be determined using the test methods and procedures described in Method 18, Method 25, or Method 25A of 40 CFR Part 60, Appendix A.

**4.g** Emission Limitation:  
3.99 tons ammonia/yr

The permittee shall determine compliance with the limitation above as follows:

ammonia emissions (tons/year) = FGR x (0.0442\*/1000000) x (8760 /2000)\*\*

where:

FGR = total flue gas flow rate, in dscfh

SLP = maximum ammonia slip (12.5 ppmd)

\* conversion factor from grams/liter to lbs/cubic foot

\*\* conversion factor (to convert from lbs/hr to tons/year)

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
76.8 mm Btu/hr natural gas fired continuous annealing furnace, with five 1.0 mm Btu/hr auxiliary natural gas burners [the burners are used to maintain the selective catalytic reduction (SCR) control device operating temperature within recommended range]	none	none

**2. Additional Terms and Conditions**

**None**

**II. Operational Restrictions**

**None**

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit 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: Ammonia

TLV (mg/m3): 17,000

Maximum Hourly Emission Rate (lbs/hr): 0.91

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.4172

MAGLC (ug/m3): 404.8

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

2. 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.

3. 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

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