John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

10/15/2013

Genevieve Damico *Via E-Mail Notification*
United States Environmental Protection Agency
Mail Code: AR-18J
77 West Jackson Blvd.
Chicago, IL 60604-3507

RE: PROPOSED AIR POLLUTION TITLE V PERMIT
Facility Name: PRO-TEC Coating Company
Facility ID: 0369000025
Permit Type: Renewal
Permit Number: P0114299

Dear Ms. Damico:

A proposed OAC Chapter 3745-77 Title V permit for the referenced facility has been issued for review by U.S. EPA. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. If U.S. EPA does not object to this proposed permit, the permit will be processed for issuance as a final action not less than 45 days from the date of this letter. Please contact me at (614) 644-3631 by the end of the 45 day review period if you wish to object to the proposed permit.

Sincerely,

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

Cc: Ohio EPA DAPC, Northwest District Office

PROPOSED

Division of Air Pollution Control
Title V Permit
for
PRO-TEC Coating Company

Facility ID:	0369000025
Permit Number:	P0114299
Permit Type:	Renewal
Issued:	10/15/2013
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Division of Air Pollution Control
Title V Permit
for
PRO-TEC Coating Company

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Authorization

Facility ID:	0369000025
Facility Description:	Steel Finishing Mill
Application Number(s):	A0047391
Permit Number:	P0114299
Permit Description:	Renewal Title V operating permit for a steel finishing mill.
Permit Type:	Renewal
Issue Date:	10/15/2013
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance
Superseded Permit Number:	P0087443

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

PRO-TEC Coating Company
5000 County Rd. #5
Leipsic, OH 45856-9234

Ohio Environmental Protection Agency (EPA)District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions

(2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting

(4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

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

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

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

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

(1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

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

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

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

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

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

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

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive

measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

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

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

See A.29 below if no deviations occurred during the quarter.

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

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

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

insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

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

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

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

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

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

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

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

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

3. Scheduled Maintenance

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

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

4. Risk Management Plans

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

a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

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

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

5. Title IV Provisions

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

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

6. Severability Clause

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

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

7. General Requirements

a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the

Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

(1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

(2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

(3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

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

8. Fees

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

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

9. Marketable Permit Programs

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

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

10. Reasonably Anticipated Operating Scenarios

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

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

11. Reopening for Cause

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

a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

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

d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. Federal and State Enforceability

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

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

13. Compliance Requirements

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

b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c) The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

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

(2) Compliance certifications shall include the following:

a. An identification of each term or condition of this permit that is the basis of the certification.

b. The permittee's current compliance status.

c. Whether compliance was continuous or intermittent.

d. The method(s) used for determining the compliance status of the source currently and over the required reporting period.

e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

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

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

14. Permit Shield

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

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

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

15. Operational Flexibility

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

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

16. Emergencies

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

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

17. Off-Permit Changes

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

a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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

18. Compliance Method Requirements

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

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

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

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

20. Permit to Install Requirement

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

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

21. Air Pollution Nuisance

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

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

22. Permanent Shutdown of an Emissions Unit

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

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

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

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

23. Title VI Provisions

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

a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11))

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

The permittee shall submit required reports in the following manner:

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

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

25. Records Retention RequirementsUnder State Law Only

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

26. Inspections and Information Requests

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

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

27. Scheduled Maintenance/Malfunction Reporting

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

28. Permit Transfers

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

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

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

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

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

a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or

b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or

c) where the company's responsible official has certified that an emissions unit has been permanently shut down.

B. Facility-Wide Terms and Conditions

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

   a) None.

2. Pursuant to 40 CFR Part 64, the permittee has submitted, and the Ohio EPA has approved a compliance assurance monitoring plan for emissions units P001 and P010 at this facility. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

   [Authority for term: 40 CFR Part 64]

3. The following emissions units located at this facility are subject to all applicable requirements as outlined in OAC rule 3745-31-03(A)(4)(b):

EU ID	Operations, Property and/or Equipment Description
P014	CAL1 Emergency Generator 600 kW distillate oil diesel engine/emergency power generator [PBR07821]
P015	143 Horsepower Distillate Oil-Powered Water Pump FWP-CAL1, Fire Water Pump CAL [PBR09965]
P016	Emergency Electricity Generator CGL, Caterpillar 3412 800 kW with distillate oil diesel engine [PBR09965]
P017	Emergency Electricity Generator CGL2, Caterpillar 3412 800 kW with distillate oil diesel engine [PBR09965]
P018	Firewater Pump Distillate Oil Diesel Engine, Cummins 6BTA 208 HP [PBR09965]

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

4. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit-to-install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, 3745-21, and 3745-31, and/or 40 CFR Part 60 or 63:

EU ID	Operations, Property and/or Equipment Description
B016	4.3 mmBtu/hr NG Direct Fired Space Heater #1 in the Process Bay, ID 097MAU D1 [PTI 03-6093]
B017	4.3 mmBtu/hr NG Direct Fired Space Heater #2 in the Process Bay, ID 097MAU D3 [PTI 03-6093]
B018	7.3 mmBtu/hr NG Direct Fired Space Heater #3 in the Process Bay, ID 097MAU D5 [PTI 03-6093]
B019	7.3 mmBtu/hr NG Direct Fired Space Heater #4 in the Process Bay, ID 097MAU D9 [PTI 03-6093]
B020	7.3 mmBtu/hr NG Direct Fired Space Heater #5 in the Process Bay, ID 097MAU D11 [PTI 03-6093]
B021	7.3 mmBtu/hr NG Direct Fired Space Heater #6 in the Process Bay, ID 097MAU D13 [PTI 03-6093]
B022	7.3 mmBtu/hr NG Direct Fired Space Heater #7 in the Process Bay, ID 097MAU D17 [PTI 03-6093]
B031	6.3 mmBtu/hr NG Direct Fired Space Heater #8 in the Process Bay, ID 097MAU D18 [PTI

EU ID	Operations, Property and/or Equipment Description
	03-6093]
B032	6.3 mmBtu/hr NG Direct Fired Make-up Air Heater #9 in the Process Bay, ID 097MAU D19 [PTI 03-6093]
B033	5.9 mmBtu/hr NG Direct Fired Make-up Air Heater #10 in the Process Bay, ID 097MAU D20 [PTI 03-6093]
B034	5.9 mmBtu/hr NG Direct Fired Make-up Air Heater #11 in the Process Bay, ID 097MAU D21 [PTI 03-6093]
B035	5.0 mmBtu/hr NG Direct Fired Make-up Air Heater #12 in the Process Bay, ID 097MAU D22 [PTI 03-6093]
B036	5.0 mmBtu/hr NG Direct Fired Make-up Air Heater #13 in the Process Bay, ID 097MAU D23 [PTI 03-6093]
P003	4.3 mmBtu/hr NG Direct Fired Cleaner Strip Dryer #2 [PTI 03-6093]
P004	4.3 mmBtu/hr NG Direct Fired Tension Leveler Strip Dryer #4 [PTI 03-6093]
P007	Zinc Induction Pot [PTI 03-5443]
P008	Galvanneal Induction Furnace [PTI 03-5443]
P009	Continuous Alkaline Cleaner with Packed Tower Scrubber [PTI 03-5443]
P012	CAL1 – Non-Contact Water Cooling Tower [PTI P0112268]
P014	CAL1 Emergency Generator 600 kW distillate oil diesel engine/emergency power generator [PBR07821]
P015	143 Horsepower Distillate Oil-Powered Water Pump FWP-CAL1, Fire Water Pump CAL [PBR09965]
P016	Emergency Electricity Generator CGL, Caterpillar 3412 800 kW with distillate oil diesel engine [PBR09965]
P017	Emergency Electricity Generator CGL2, Caterpillar 3412 800 kW with distillate oil diesel engine [PBR09965]
P018	Firewater Pump Distillate Oil Diesel Engine, Cummins 6BTA 208 HP [PBR09965]

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

5. The permittee is subject to the applicable emission limitations and/or control measures, operational restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart WWWWWW, in accordance with 40 CFR Parts 63.11504 through 63.11512 (including the Table(s) and Appendix(ices) referenced in Subpart WWWWWW). The permittee shall meet the requirements of 40 CFR Part 63, Subpart WWWWWW upon startup. The following emissions units in this permit are subject to the aforementioned requirements: P013. For more information on the area source rules, please refer to the following U.S. EPA website: http://www.epa.gov/ttn/atw/area/arearules.html.

   [Authority for term: 40 CFR, Part 63, Subpart WWWWWW]

6. The emergency, compression ignition (CI) reciprocating internal combustion engine(s) (RICE), **emissions units P016, P017 and P018**, installed before **6/12/06** and located at an area source for hazardous air pollutants (HAPs), are not subject to the General Provisions to Part 63, Subpart A, the National Emission Standards for Hazardous Air Pollutants (NESHAP) or its subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines, and no initial notification is required.

   [Authority for Term: OAC rule 3745-77-07(A)(13) and 40 CFR, Part 63, Subpart ZZZZ]

7. The new emergency or limited use compression ignition (CI) reciprocating internal combustion engine(s) (RICE), located at an area source for hazardous air pollutants (HAPs), is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, Part 63, Subpart ZZZZ. The new stationary CI RICE, **emissions unitsP014 and P015**, installed on or after 6/12/06, shall meet the requirements of Part 63, Subpart ZZZZ upon startup, through demonstration of compliance with the New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines, Part 60, Subpart IIII.

   [Authority for Term: OAC rule 3745-77-07(A)(13) and 40 CFR, Part 63, Subpart ZZZZ]

8. The permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 60, Subpart IIII, in accordance with 40 CFR Parts 60.4200 through 60.4219 (including the Table(s) and Appendix(ices) referenced in Subpart IIII).

   The following emissions units in this permit are subject to the aforementioned requirements: **P014 and P015**.

   The permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subpart IIII, including the following sections:

60.4202(a)	Certification Emission Standards
60.4206	Continuous Compliance
60.4207(b)	Fuel Requirements
60.4209(a) & 60.4211(a), (f), and (g)	Monitoring, installation, operation and maintenance requirements
60.4212 (a) and (c)	Testing Requirements
60.4214(b) and (c)	Notification, reporting, and recordkeeping
60.4217	Special fuel requirements
60.4218	Table 8 General Provisions

   [Authority for term: OAC rule 3745-77-07(A)(13), 40 CFR Part 60, Subpart IIII]

C. Emissions Unit Terms and Conditions

1. K001, RC-CGL

Operations, Property and/or Equipment Description:

Dry film lube horizontal roll coater with infrared oven

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) b)(1)f., d)(5), d)(6), d)(7), d)(8) and e)(5).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) [PTI 03-9977, issued 02/06/1997]	42 lbs volatile organic compounds (VOC)/hr; 24.44 tons VOC/yr See b)(2)c. 0.10 lb particulate emissions (PE)/hr; 0.44 ton PE/yr 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.
b.	OAC rule 3745-17-07(A)	See b)(2)a.
c.	OAC rule 3745-17-11(B)(2)	See b)(2)b.
d.	OAC rule 3745-21-09(E)	2.6 pounds of VOC per gallon of coating, excluding water and exempt solvents
e.	40 CFR, Part 60, Subpart TT	0.28 kilogram VOC per liter of coating solids applied (based on a monthly, volume-weighted average)
f.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(5) through d)(8) and e)(5)

(2) Additional Terms and Conditions

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.

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.

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.

c) Operational Restrictions

(1) The permittee shall not employ any cleanup material in this emissions unit that is a liquid organic material. This 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).

[OAC rule 3745-77-07(A)(1) and PTI 03-9977]

d) Monitoring and/or Recordkeeping 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:

a. Calculate the mass of VOCs consumed (Mo + Md) during the calendar month by the following equation:

Mo + Md= [Summation of (Lci x Dci x Woi) for i= 1, 2,…,n + summation of (Ldj x Ddj)* for j= 1, 2,…,m]

Where:

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

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

Lci= the total volume, in liters, of coating i consumed, as received

Ldj= the total volume, in liters, of solvent j added to coatings

Dci= density of coating i, as received (kilograms per liter)

Ddj= density of solvent j added to coatings (kilograms per liter)

Woi= 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

*The summation of (Ldj x Ddj) for j= 1, 2,…,m will be zero if no VOC-based solvent is added to the coatings, as received.

b. Calculate the total volume of coatings solids used (Ls) in the calendar month by the following equation:

Ls= summation of (Lci x Vsi) for i= 1, 2,…,n

Where:

Ls= the volume of all the coatings solids consumed (liters)

Lci= the volume of coating i consumed, as received (liters)

Vsi= the fraction, by volume, of the solids in coating i, as received

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

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= (Mo + Md)/(Ls)

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)

[OAC rule 3745-77-07(C)(1), 40 CFR Part 60.463(c) and PTI 03-9977]

(2) If each individual coating used by the emissions unit has a VOC content, as received, that is equal to or less than 0.28 kg/liter of coating solids, no monthly, volume-weighted average calculations are necessary to show compliance with the 0.28 kg/liter of coating solids.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 60.463(c) and PTI 03-9977]

(3) The permittee shall collect and record the following information each month for the line:

a. The name and identification number of each coating and cleanup material employed;

b. Documentation on whether or not each cleanup material employed is a liquid organic material;

c. The VOC content of each coating employed in lbs/gallon and in lbs/gallon excluding water and exempt solvents, as applied;

d. The number of gallons of each coating employed; and

e. The total VOC emissions for all the coatings employed [summation of d)(3)c. x d)(3)d. for all coatings], in pounds.

[OAC rule 3745-77-07(C)(1), OAC rule 3745-21-09(B)(3)(f) and PTI 03-9977]

(4) The permittee shall collect and record each year the total VOC emissions, in tons, for all the coatings employed [this is determined by adding all the monthly VOC emissions from d)(3)e. for the calendar year and dividing by 2000 lbs/ton.]

[OAC rule 3745-77-07(C)(1) and PTI 03-9977]

(5) The permit-to-install (PTI) application for this emissions unit,K001, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "**X**" hours per day and "**Y**" days per week, from that of 8 hours per day and 5 days per week. The resulting

calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Ethyl alcohol

TLV (mg/m3): 1,880

Maximum Hourly Emission Rate (lbs/hr): 34.50

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

MAGLC (ug/m3): 44,761.90

The permittee, has demonstrated that emissions of ethyl alcohol, from emissions unit K001, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[PTI 03-9977]

(6) Prior to making any physical changes to or changes in the method of operation of the emissions unit, that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" 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 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a

"modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[PTI 03-9977]

(7) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[PTI 03-9977]

(8) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[PTI 03-9977]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. All exceedances of the VOC content limitation 0.28 kg VOC/liter of coating solids (based on a monthly, volume-weighted average).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions section of this permit.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 60.465(c) and PTI 03-9977]

(2) 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.

[OAC rule 3745-77-07(C)(1), OAC rule 3745-21-09(B)(3)(g) and PTI 03-9977]

(3) 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.

[OAC rule 3745-77-07(C)(1), OAC rule 3745-21-09(B)(3)(g) and PTI 03-9977]

(4) 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.

[OAC rule 3745-77-07(C)(1) and PTI 03-9977]

(5) The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute," ORC 3704.03(F), through the predicted 1-hours maximum ground-level concentration. If no changes to the emissions unit or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be submitted no later than January 31 following the end of each calendar year.

[ORC 3704.03(F)(3)(c) and (F)(4), OAC rule 3745-114-01 and PTI 03-9977]

(6) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

2.6 lbs VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation through the monitoring and record keeping requirements required in d)(3) of this permit.

[OAC rule 3745-77-07(C)(1), OAC rule 3745-21-09(E) and PTI 03-9977]

b. Emission Limitation:

0.28 kg VOC/liter of coating solids applied (based on a monthly, volume-weighted average)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation through the monitoring and record keeping requirements required in d)(1) of this permit.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 60.462 and PTI 03-9977]

c. Emission Limitation:

42.0 lbs VOC/hr

Applicable Compliance Method:

The hourly emission limitation was determined 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.

[OAC rule 3745-77-07(C)(1) and PTI 03-9977]

d. Emission Limitation:

24.44 tons VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation through the monitoring and record keeping requirements required in d)(2) and d)(3) of this permit.

[OAC rule 3745-77-07(C)(1) and PTI 03-9977]

e. Emission Limitation:

0.10 lb PE/hr; 0.44 ton PE/yr

Applicable Compliance Method:

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

E= particulate emission rate (lbs/hr)

E= Maximum coating solids usage rate, in pounds per hour x (1-TE) x (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 Methods 1-5 of 40 CFR, Part 60, Appendix A.

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 hours/year and dividing by 2000 lbs/ton).

[OAC rule 3745-77-07(C)(1) and PTI 03-9977]

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

[OAC rule 3745-77-07(C)(1) and PTI 03-9977]

g) Miscellaneous Requirements

(1) None.

2. P001, AF-CGL

Operations, Property and/or Equipment Description:

80.0 mmBtu/hr continuous annealing furnace, with 12 mmBtu/hr auxiliary heat input (92 mmBtu/hr total)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) d)(13), d)(14), d)(15), d)(16) and e)(4).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) [PTI P0113381, issued 07/01/2013]	0.10 lb nitrogen oxides (NOx)/mmBtu [See b)(2)c. and b)(2)d.] 9.2 lbs NOx/hr [See b)(2)c. and b)(2)d.] 40.30 tons NOx/yr 11.9 lbs carbon monoxide (CO)/hr and 52.05 tons CO/yr 1.04 lbs organic compounds (OC)/hr and 4.56 tons OC/yr 0.72 lb particulate emissions (PE)/hr and 3.15 tons PE/yr [See b)(2)e.]
b.	OAC rule 3745-17-07(A)	See b)(2)a.
c.	OAC rule 3745-17-11(B)(2)	See b)(2)b.
d.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See c)(2), d)(2) through d)(12), e)(2) and e)(3)

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the visible emissions 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.

b. The uncontrolled mass rate of PE 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 because the facility is located in Putnam County, which is identified as a P-2 county.

c. The permittee shall employ North American regenerative-type burners with flue gas recirculation and a NOx OUT SCR system with Hauck direct-fired burners to maintain the recommended gas temperatures for NOx emissions reduction. The NOx emissions shall be limited to 0.10 lb NOx/mmBtu, based on a 3-hour rolling average, when this emissions unit is “in a production mode of operation”. "In a production mode of operation" shall mean that the main burners are firing and the product is moving through the continuous annealing furnace. "In a production mode of operation" shall not include low fuel flow/low temperature furnace conditions, such as idle and furnace temperature ramp-up and ramp-down.

d. During times that the furnace is not "in a production mode of operation" and the main burners are idling or only the pilot burners are operating, the 9.2* lbs/hr NOx limit shall be met at all times. The emission limitation of 0.10 pound NOx/mmBtu is not applicable during times that the furnace is not “in a production mode of operation”.

* The 9.2 pounds NOx per hour limitation shall be based on a 3-hour rolling average.

e. All PE is assumed to be PM10.

f. The facility agreed and consented to entry into a Consent Decree with the United States of America (Civil Action No. 3:98CV 7749, entered 2/11/98) requiring the permittee to install an SCR unit to continuously control NOx emissions to an emission rate not to exceed 0.10 lb NOx/mmBtu.

c) Operational Restrictions

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

[OAC rule 3745-77-07(A)(1) and PTI P0113381]

(2) The maximum heat input (including the lance pilot) shall not exceed 92.0 mmBtu/hr.

[OAC rule 3745-77-07(A)(1), 40 CFR Part 64 and PTI P0113381]

d) Monitoring and/or Recordkeeping 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.

[OAC rule 3745-77-07(C)(1) and PTI P0113381]

(2) The permittee shall properly install, operate and maintain equipment to continuously monitor and record the following NOx emission values at the discharge of the SCR units, when the emissions unit is operating in a production or a non-production mode of operation:

a. Production mode of operation:

i. lb NOx/mmBtu heat input, as a 3-hr rolling average

b. Non-production mode of operation:

i. lb NOx/hr, as a 3-hr rolling average

c. The NOx analyzers associated with this emissions unit are used as part of the process control system for the SCR unit. The data from the analyzers is used to adjust the SCR reagent injection flow rate to optimize the performance of the SCR unit.

The analyzer was not installed with the intent of satisfying the requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 2, and therefore cannot be certified as a true continuous NOx monitoring system. Even though the analyzer cannot be certified as true continuous NOx monitoring system, it has demonstrated that it provides accurate NOx emission concentration data as compared to emission concentration data simultaneously obtained through 40 CFR Part 60, Appendix A, Method 7E. As such, the data from the analyzer will be used as part of a data acquisition system to collect and record information to ensure ongoing compliance with the NOx emission limitations.

[OAC rule 3745-77-07(A)(1), 40 CFR Part 64 and PTI P0113381]

(3) Whenever the monitored values for NOx emissions at the discharge of the SCR unit deviate from the applicable limitations contained within this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the SCR reagent-gas ratio and SCR inlet temperature immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not

eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[OAC rule 3745-77-07(A)(1), 40 CFR Part 64 and PTI P0113381]

(4) The SCR reagent-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 SCR reagent flow rate to the SCR unit. Additionally, a secondary control circuit shall be utilized consisting of the required NOx analyzer above which shall increase or decrease the SCR reagent flow rate according to NOx concentrations observed at the discharge of the SCR unit. The purpose of the secondary control circuit is to optimize the efficiency of the SCR control system and minimize the SCR reagent slip to the atmosphere. The programmable logic controller (PLC) program utilized by the primary and secondary control circuits shall not be altered from the control logic instituted during the most recent compliance test. If alterations to the PLC program are necessary, permittee shall submit requested changes to the permitting authority for approval.

[OAC rule 3745-77-07(A)(1), 40 CFR Part 64 and PTI P0113381]

(5) The permittee shall properly install, operate and maintain equipment necessary to continuously monitor and record the following parameter for the SCR unit during all time periods when SCR reagent is utilized by the control system. 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 SCR inlet temperature, in degrees Fahrenheit, as a 3-hr rolling average.

[OAC rule 3745-77-07(A)(1), 40 CFR Part 64 and PTI P0113381]

(6) Whenever the monitored values for the SCR inlet temperature deviate from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the SCR inlet temperature immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not

eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

a. The SCR inlet temperature shall be continuously maintained, at all times while the emissions unit is "in a production mode of operation", at a value of not less than the average temperature of 520 degrees or greater than the average of 730 degrees Fahrenheit based upon a 3-hour average.

These ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the ranges based upon information obtained during future NOx emission tests that demonstrate compliance with the allowable NOx emission rate for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

[OAC rule 3745-77-07(A)(1), 40 CFR Part 64 and PTI P0113381]

(7) The permittee shall collect and record the following information each month for this emissions unit:

a. 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 a production mode of operation", was less than the average temperature of 520 degrees Fahrenheit and/or greater than 730 degrees Fahrenheit;

b. all 3-hour periods during which the average NOx emission rate was greater than 9.2 pounds NOx per hour;

c. all 3-hour periods during which the average NOx emission rate was greater than 0.10 pound NOx per mmBtu; and

d. identification of all time periods when natural gas was fired in the annealing furnace and the monitoring requirements specified in d)(1) and/or d)(4) were not maintained.

[OAC rule 3745-77-07(A)(1), 40 CFR Part 64 and PTI P0113381]

(8) 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 a production mode of operation";

b. the Btu content of fuel (Btu per standard cubic feet) as specified by the natural gas supplier;

c. the total natural gas fuel usage while the emissions unit was "in a production mode of operation", in mmft3; and

d. the firing rate, in mmBtu/hr, using the following equation:

firing rate (mmBtu/hr) = [d)(8)b. times d)(8)c.] divided by d)(8)a.

[OAC rule 3745-77-07(A)(1), 40 CFR Part 64 and PTI P0113381]

(9) The permittee shall operate and maintain the existing equipment to continuously monitor and record NOx emissions from this emissions unit in units of the applicable standard. The NOx analyzers, monitoring, and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations and the procedures specified in the permittee's ISO 14001 environmental management system.

The permittee shall maintain records of all data obtained by the continuous NOx analyzers and 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.

[OAC rule 3745-77-07(A)(1), 40 CFR Part 64 and PTI P0113381]

(10) At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(A)(1), 40 CFR Part 64 and PTI P0113381]

(11) After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(A)(1), 40 CFR Part 64 and PTI P0113381]

(12) The CAM plan for this emissions unit has been developed for NOx emissions. The CAM performance indicators for the selective catalytic reduction (SCR) controlling this emissions unit are SCR reagent injection flow rate, inlet gas temperature at the SCR, NOx ppm measurement and O2% measurement post SCR which is based upon the result of site-specific NOx emission testing and manufacturer recommendations. When the performance indicators are operating outside the indicator ranges, the permittee shall take corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in e)(3) below. The emissions unit and control

equipment shall be run in accordance with the approved CAM Plan or any approved revision of the Plan.

SCR operating parameters will be re-verified through periodic emission testing, or if the SCR or emissions units operating conditions change. In addition to periodic monitoring of the SCR operating parameters, the permittee also has an inspection/preventative maintenance program for the SCR. Based on the results of the inspection/preventative maintenance program, repairs to the SCR shall be made as needed. If the current CAM indicators and/or the SCR inspection/preventative maintenance program are considered inadequate, the permittee will develop a Quality Improvement Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(13) The permit-to-install (PTI) application for this emissions unit(s) [P001] was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The Toxic Air Contaminant Statute, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled Review of New Sources of Air Toxic Emissions, Option A, as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. Threshold Limit Value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; or

   ii. Short Term Exposure Limit (STEL) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., ''X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting

calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

(TLV/10) x (8/X) x (5/Y) = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Ammonia

TLV (mg/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

The permittee has demonstrated that emissions of ammonia, from emissions unit(s) P001, are calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).

[OAC rule 3745-114-01, ORC 3704.03(F) and PTI P0113381]

(14) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physicalchanges to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the Toxic Air Contaminant Statute 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 solely due to a non-restrictive change to a parameter or process operation, where compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a

"modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[OAC rule 3745-114-01, ORC 3704.03(F) and PTI P0113381]

(15) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[OAC rule 3745-114-01, ORC 3704.03(F) and PTI P0113381]

(16) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[OAC rule 3745-114-01, ORC 3704.03(F) and PTI P0113381]

e) 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.

[OAC rule 3745-77-07(C)(1) and PTI P0113381]

(2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following:

a. the 3-hour average NOx emission limitation of 9.2 lbs/hr;

b. the 3-hour average NOx emission limitation of 0.1 lb/mmBtu;

c. the 3-hour average SCR inlet temperature range required by section d)(5)a.;* and

d. the maximum heat input rate of 92.0 mmBtu per hour.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

* Any 3-hour average SCR inlet temperature value that was outside the permitted SCR inlet temperature range may be considered to be an exceedance only if it occurred concurrently with an exceedance of the 0.10 pound NOx per mmBtu or the 9.2 pounds NOx/hr limitations (based upon a 3-hour average of the emission rates).

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI P0113381]

(3) If the results of the monitoring or record keeping data indicate that the NOx emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

[OAC rule 3745-114-01, ORC 3704.03(F) and PTI P0113381]

(5) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. The emission testing shall be conducted within 12 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limitations for NOx and CO.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

i. NOx - Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A; and

ii. CO - Methods 1 through 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.

* During the emission testing, the permittee shall also record the SCR reagent flow rate and the average temperature of the exhaust gases immediately before the catalyst bed for each run.

[OAC rule 3745-77-07(C)(1) and PTI P0113381]

(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.

[OAC rule 3745-77-07(C)(1) and PTI P0113381]

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

a. Emission Limitation:

0.10 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, Methods 1 through 4 and 7.

Also, the permittee may demonstrate compliance with the emission limitation above based on the record keeping requirements specified in d)(3) of this permit.

[OAC rule 3745-77-07(C)(1) and PTI P0113381]

b. Emission Limitations:

9.2 lbs NOx/hr and 40.30 tons/yr NOx

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 7.

Also, the permittee may demonstrate compliance with the hourly emission limitation above based on the record keeping requirements specified in d)(3) 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 be demonstrated with the annual limitation.

[OAC rule 3745-77-07(C)(1) and PTI P0113381]

c. Emission Limitations:

11.9 lbs CO/hr and 52.05 tons/yr 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 Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A.

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 be demonstrated with the annual limitation.

[OAC rule 3745-77-07(C)(1) and PTI P0113381]

d. Emission Limitations:

1.04 lbs OC/hr and 4.56 tons/yr OC

Applicable Compliance Method:

The permittee shall demonstrate compliance with the lbs/hr emission limitation based upon calculations using the maximum rated capacity of the annealing furnace and auxiliary natural gas burners (92 mmBtu/hr), an AP-42 Chapter 1/4 (7/98) emission factor of 11.0 lb OC/mmft3 of natural gas and 1020 Btu/ft3 of natural gas.

If required, compliance with the hourly limitation shall be determined using the test methods and procedures described in Methods 1 through 4, and Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

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 be demonstrated with the annual limitation.

[OAC rule 3745-77-07(C)(1) and PTI P0113381]

e. Emission Limitations:

0.72 lb PE/hr and 3.15 tons/yr PE

Applicable Compliance Method:

The permittee shall demonstrate compliance with the lb/hr emission limitation based upon calculations using the maximum rated capacity of the annealing furnace and the auxiliary natural gas burners (92 mmBtu/hr), an AP-42 Chapter 1.4 (7/98) emission factor of 1.9 lb PE (filterable)/mmft3 of natural gas and 1020 Btu/ft3 of natural gas.

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

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 be demonstrated with the annual limitation.

[OAC rule 3745-77-07(C)(1) and PTI P0113381]

g) Miscellaneous Requirements

(1) None.

3. P010, AF-CGL2

Operations, Property and/or Equipment Description:

71.8 mm Btu/hr continuous annealing furnace with 5.0 mm Btu/hr heat input (76.8 mm Btu/hr).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) d)(12), d)(13), d)(14), d)(15) and e)(4).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) [PTI P0113380, issued 07/01/2013	0.06 lb nitrogen oxides (NOx)/mmBtu [See b)(2)c. and b)(2)d.] 4.61 lbs NOx/hr [See b)(2)c. and b)(2)d.] 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 [See b)(2)e.] 3.99 tons ammonia/yr
b.	OAC rule 3745-17-07(A)	See b)(2)a.
c.	OAC rule 3745-17-11(B)(2)	See b)(2)b.
d.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See c)(2), d)(2) through d)(11), e)(2) and e)(3)

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the visible emissions 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.

b. The uncontrolled mass rate of PE 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 because the facility is located in Putnam County, which is identified as a P-2 county.

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 a production mode of operation” (including lance pilot). "In a production mode of operation" shall mean that the main burners are firing and the product is moving through the continuous annealing furnace. "In a production mode of operation" shall not include low fuel flow/low temperature furnace conditions, such as idle and furnace temperature ramp-up and ramp-down.

d. During times that the furnace is not "in a production mode of 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 emission limitation of 0.06 pound NOx/mmBtu is not applicable during times that the furnace is not “in a production mode of operation”.

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

e. All PE is assumed to be PM10.

c) Operational Restrictions

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

[OAC rule 3745-77-07(A)(1) and PTI P0113380]

(2) The maximum heat input (including the lance pilot) shall not exceed 76.8 mmBtu per hour.

[OAC rule 3745-77-07(A)(1), 40 CFR Part 64 and PTI P0113380]

d) Monitoring and/or Recordkeeping 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.

[OAC rule 3745-77-07(C)(1) and PTI P0113380]

(2) The permittee shall properly install, operate and maintain equipment to continuously monitor and record the following NOx emission values at the discharge of the SCR units, when the emissions unit is operating in a production or a non-production mode of operation:

a. Production mode of operation:

i. lb NOx/mmBtu heat input, as a 3-hr rolling average

b. Non-production mode of operation:

i. lb NOx/hr, as a 3-hr rolling average

c. The NOx analyzers associated with this emissions unit are used as part of the process control system for the SCR unit. The data from the analyzers is used to adjust the SCR reagent injection flow rate to optimize the performance of the SCR unit. These analyzers were not installed with the intent of satisfying the requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 2, and therefore cannot be certified as true continuous NOx monitoring systems. Even though the analyzers cannot be certified as true continuous NOx monitoring systems, they have demonstrated that they provide accurate NOx emission concentration data as compared to emission concentration data simultaneously obtained through 40 CFR Part 60, Appendix A, Method 7E. As such, the data from the analyzers will be used as part of a data acquisition system to collect and record information to ensure ongoing compliance with the NOx emission limitations.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI P0113380]

(3) Whenever the monitored values for NOx emissions at the discharge of SCR unit deviate from the applicable limitations contained within this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the SCR reagent-gas ratio and SCR inlet temperature immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI P0113380]

(4) The SCR reagent-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 SCR reagent flow rate to the SCR unit. Additionally, a secondary control

circuit shall be utilized consisting of the required NOx analyzer above which shall increase or decrease the SCR reagent flow rate according to NOx concentrations observed at the discharge of the SCR unit. The purpose of the secondary control circuit is to optimize the efficiency of the SCR control system and minimize the SCR reagent slip to the atmosphere. The programmable logic controller (PLC) program utilized by the primary and secondary control circuits shall not be altered from the control logic instituted during the most recent compliance test. If alterations to the PLC program are necessary, permittee shall submit requested changes to the permitting authority for approval.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI P0113380]

(5) The permittee shall properly install, operate and maintain equipment necessary to continuously monitor and record the following parameter for each SCR unit during all time periods when SCR reagent is utilized by the control system. 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 SCR inlet temperature, in degrees Fahrenheit, as a 3-hr rolling average.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI P0113380]

(6) Whenever the monitored values for the SCR inlet temperature deviate from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the SCR inlet temperature immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

a. The SCR inlet temperature shall be continuously maintained, at all times while the emissions unit is “in a production mode of operation, at a value of not less than the average temperature of 520 degrees Fahrenheit or greater than the average temperature of 730 degrees Fahrenheit based upon a 3-hour average.

These ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the ranges based upon information obtained during future NOx emission tests that demonstrate compliance with the allowable NOx emission rate for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI P0113380]

(7) The permittee shall collect and record the following information each month for this emissions unit:

a. all 3-hour blocks of time during which the average temperature of the flue gases at the inlet to each SCR unit, when the emissions unit was in “a production mode of operation”, was less than the average temperature of 520 degrees Fahrenheit and/or greater than 730 degrees Fahrenheit;

b. all 3-hour periods during which the average NOx emission rate was greater than 4.61 pounds NOx per hour;

c. all 3-hour periods during which the average NOx emission rate was greater than 0.06 pound NOx per mmBtu; and

d. identification of all time periods when natural gas was fired in the annealing furnace and the monitoring requirements specified in d)(1) and/or d)(4) were not maintained.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI P0113380]

(8) The permittee shall operate and maintain the existing equipment to continuously monitor and record NOx emissions from this emissions unit in units of the applicable standard. The NOx analyzers, monitoring, and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations and the procedures specified in the permittee's ISO 14001 environmental management system.

The permittee shall maintain records of all data obtained by the continuous NOx analyzers and 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.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI P0113380]

(9) At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI P0113380]

(10) After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI P0113380]

(11) The CAM plan for this emissions unit has been developed for NOx emissions. The CAM performance indicators for the selective catalytic reduction (SCR) controlling this emissions unit are SCR reagent injection flow rate, inlet gas temperature at the SCR, NOx ppm measurement and O2% measurement post SCR which is based upon the result of site-specific NOx emission testing and manufacturer recommendations. When the performance indicators are operating outside the indicator ranges, the permittee shall take corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in e)(3) below. The emissions unit and control equipment shall be run in accordance with the approved CAM Plan, or any approved revision of the Plan.

SCR operating parameters will be re-verified through periodic emission testing, or if the SCR or emissions units operating conditions change. In addition to periodic monitoring of the SCR operating parameters, the permittee also has an inspection/preventative maintenance program for the SCR. Based on the results of the inspection/preventative maintenance program, repairs to the SCR shall be made as needed. If the current CAM indicators and/or the SCR inspection/preventative maintenance program are considered inadequate, the permittee will develop a Quality Improvement Plan.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI P0113380]

(12) The permit-to-install (PTI) application for this emissions unit(s) [P010] was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The Toxic Air Contaminant Statute, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled Review of New Sources of Air Toxic Emissions, Option A, as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. Threshold Limit Value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; or

   ii. Short Term Exposure Limit (STEL) or the Ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or Ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., “X” hours per day and “Y” days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

   $$(TLV/10) \times (8/X) \times (5/Y) = 4\ TLV/XY = MAGLC$$

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or worst case toxic contaminant(s):

   Toxic Contaminant: 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): 404,800

The permittee has demonstrated that emissions of ethyl alcohol, from emissions unit(s) P010, are calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).

[OAC rule 3745-114-01, ORC 3704.03(F) and PTI P0113380]

(13) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physicalchanges to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the Toxic Air Contaminant Statute 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 solely due to a non-restrictive change to a parameter or process operation, where compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification”, the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[OAC rule 3745-114-01, ORC 3704.03(F) and PTI P0113380]

(14) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F),

initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[OAC rule 3745-114-01, ORC 3704.03(F) and PTI P0113380]

(15) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[OAC rule 3745-114-01, ORC 3704.03(F) and PTI P0113380]

e) 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.

[OAC rule 3745-77-07(C)(1) and PTI P0113380]

(2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following:

a. the 3-hour average NOx emission limitation of 4.61 lbs/hr;

b. the 3-hour average NOx emission limitation of 0.06 lb/mmBtu; and

c. the 3-hour average SCR inlet temperature range required by d)(5)a.*.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

* Any 3-hour average SCR inlet temperature value that was outside the permitted SCR inlet temperature range may be considered to be an exceedance only if it occurred concurrently with an exceedance of the 0.06 pound NOx per mmBtu or the 4.61 pounds NOx/hr limitations (based upon a 3-hour average of the emission rates).

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI P0113380]

(3) If the results of the monitoring or record keeping data indicate that the NOx emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing

emissions. The reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1), 40 CFR Part 64 and PTI P0113380]

(4) The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

[OAC rule 3745-114-01, ORC 3704.03(F) and PTI P0113380]

(5) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. The emission testing shall be conducted within 12 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limitations for NOx and CO.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

i. NOx - Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A; and

ii. CO - Methods 1 through 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.

*During the emission testing, the permittee shall also record the SCR reagent flow rate and the average temperature of the exhaust gases immediately before the catalyst bed for each run.

[OAC rule 3745-77-07(C)(1) and PTI P0113380]

(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.

[OAC rule 3745-77-07(C)(1) and PTI P0113380]

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

a. <u>Emission Limitation</u>:

0.06 lb NOx/mmBtu

<u>Applicable Compliance Method</u>:

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, Methods 1 through 4 and 7.

Also, the permittee may demonstrate compliance with the emission limitation above based on the record keeping requirements specified in d)(3) of this permit.

[OAC rule 3745-77-07(C)(1) and PTI P0113380]

b. <u>Emission Limitations</u>:

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, Methods 1 through 4 and 7.

Also, the permittee may demonstrate compliance with the hourly limitation above based on the record keeping requirements specified in Section d)(3) 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 demonstrated with the annual limitation.

[OAC rule 3745-77-07(C)(1) and PTI P0113380]

c. Emission Limitations:

1.03 lbs PE/hr and 4.5 tons/yr

Applicable Compliance Method:

The permittee may 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)/mmft3 of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmft3/hr).

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

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 demonstrated with the annual limitation.

[OAC rule 3745-77-07(C)(1) and PTI P0113380]

d. Emission Limitations:

0.21 lb VOC/hr and 0.9 ton/yr

Applicable Compliance Method:

The permittee may 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/mmft3 of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmft3/hr).

If required, compliance with the hourly limitation shall be determined using the test methods and procedures described in Methods 1 through 4, and Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

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 demonstrated with the annual limitation.

[OAC rule 3745-77-07(C)(1) and PTI P0113380]

e. Emission Limitations:

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 Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A.

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 demonstrated with the annual limitation.

[OAC rule 3745-77-07(C)(1) and PTI P0113380]

f. Emission Limitation:

3.99 tons ammonia/yr

Applicable Compliance Method:

The limitation above was established at the emissions unit's potential to emit, calculated 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).

[OAC rule 3745-77-07(C)(1) and PTI P0113380]

g) Miscellaneous Requirements

(1) None.

4. P013, AF-CAL1

Operations, Property and/or Equipment Description:

Continuous annealing line 1 which includes alkaline cleaning, an annealing furnace, rapid water quenching, final water quenching, acid washing, nickel plating and tempering.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) b)(1)h., d)(11) through d)(15) and e)(4).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) [PTI P0112814, issued 02/13/2013]	Carbon monoxide (CO) emissions shall not exceed 0.12 pound per million British thermal units (lb/mmBtu) from the 93.12 mmBtu/hr regenerative annealing furnace (AF-CAL1) See b)(2)b.
b.	OAC rule 3745-31-05(D) [PTI P0112814, issued 02/13/2013]	Nitrogen oxides (NOx) emissions shall not exceed 1.40 pounds per hour (lb/hr) and 6.13 tons per year (tpy) from the 93.12 mmBtu/hr regenerative annealing furnace (AF-CAL1) [See b)(2)c. and c)(1)] Particulate matter equal to or less than ten microns in diameter (PM10) shall not exceed 0.22 lb/hr and 0.96 tpy from alkaline cleaning operations (ACS-CAL1) [See b)(2)c. and c)(2)] Visible particulate emissions (PE) from the stack of the mesh pad mist eliminator serving this emissions unit shall not exceed 5% opacity, as a six-minute average (ACS-CAL1) [See b)(2)c.]
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 [PTI P0112814, issued 02/13/2013]	Volatile organic compounds (VOC) emissions shall not exceed 0.50 lb/hr and 2.20 tpy from AF-CAL1 and 0.58 lb/hr and 2.52 tpy from TM-CAL1

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Sulfur dioxide (SO2) emissions shall not exceed 0.06 lb/hr and 0.26 tpy (AF-CAL1) See b)(2)c.
d.	OAC rule 3745-31-05(A)(3), as effective 12/01/06 [PTI P0112814, issued 02/13/2013]	See b)(2)d.
e.	OAC rule 3745-17-11(B)(2)	See b)(2)e.
f.	OAC rule 3745-17-07(A)	See b)(2)f.
g.	OAC rule 3745-18-06	Exempt [See b)(2)g.]
h.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(11) through d)(15) and e)(4)
i.	40 CFR, Part 63, Subpart WWWWWW (40 CFR 63.11504 through 63.11513) [In accordance with 40 CFR 63.11504(a) and 63.11504(b), this emissions unit is a new source, as defined in 40 CFR Part 63.11511, subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Area Source Standards for Plating and Polishing Operations]	See b)(2)i., c)(3) and e)(4)
j.	40 CFR, Part 63, Subpart A	Per §63.11510, Table 1 to 40 CFR, Part 63, Subpart WWWWWW shows which parts of the General Provisions in 40 CFR 63.1-15 applicable to Subpart WWWWWW.

(2) Additional Terms and Conditions

a. Emissions unit P013 (AF-CAL1) is a continuous steel annealing operation consisting of the following processes/equipment which emit air contaminant(s):

i. Alkaline cleaning (ACS-CAL1);

ii. Alkaline cleaning dryer (SD1-CAL1);

iii. Regenerative annealing furnace (AF-CAL1);

iv. Rapid water quenching (RQS-CAL1);

v. Rapid water quench dryer (SD2-CAL1);

vi. Final water quenching (FQS-CAL1);

vii. Final water quench dryer (SD3-CAL1);

viii. Acid washing (AWS-CAL1);

ix. Nickel flash plating (NFP-CAL1);

x. Nickel flash plating dryer (SD4-CAL1);

xi. Temper mill/skin pass mill (TM-CAL1); and

xii. Temper mill dryer (SD5-CAL1).

It should be noted that the dryers are fired with natural gas and only have emissions associated with the products of combustion (CO, NOx, SO2, VOC and PM10). The potential emissions of CO, NOx, SO2, VOC and PM10 are based on a cumulative maximum heat input of 7.15 mmBtu (natural gas) and result in negligible emission quantities and therefore have not been addressed through limitations within this permit. It should be noted that the negligible emission quantities were included in the evaluation of the total emission increases that resulted from the proposed project.

b. The Best Available Technology (BAT) requirements under ORC 3704.03(T) have been determined to be a CO emission limitation not to exceed 0.12 lb/mmBtu from the 93.12 mmBtu/hr regenerative annealing furnace (AF-CAL1).

The CO lb/mmBtu emission rate above represents the potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design.) Therefore, no monitoring, record keeping or reporting requirements are necessary to ensure compliance with this emission limitation.

c. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) for NOx and PM10. The PTE is being restricted such that the emission increase for NOx and PM10 allowed for in this permit action will be below the Prevention of Significant Deterioration (PSD) “significant threshold” applicability level of 40 tpy for NOx and 15 tpy for PM10. The federally enforceable emission limitations are based on the operational restrictions contained in c)(1) and c)(2) which require emissions control:

i. NOx emissions:

(a) 1.40 lbs/hr and 6.13 tpy from the 93.12 mmBtu/hr natural gas fired regenerative annealing furnace (AF-CAL1).

ii. PM10 emissions:

(a) 0.22 lb/hr and 0.96 tpy from alkaline cleaning operations (ACS-CAL1).

(b) Visible PE from the stack of the mesh pad mist eliminator serving this emissions unit shall not exceed 5% opacity, as a six-minute average (ACS-CAL1).

The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective November 30, 2001 will no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(D) will remain applicable after the above SIP revisions are approved by U.S. EPA.

d. This rule applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the NOx and PM10 emissions from this air contaminant source since the controlled potential to emit (PTE) for NOx and PM10 is each less than 10 tons per year taking into consideration federally enforceable requirements established under OAC rule 3745-31-05(D).

The BAT requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006 do not apply to the SO2 and VOC emissions from this air contaminant source since the uncontrolled potential to emit (PTE) for each is less than ten tons per year.

i. Potential emissions of VOC from this unit are associated with fuel combustion associated with AF-CAL1 and lubricant usage in the temper mill/skin pass section (TM-CAL1). Lubricant usage emissions were determined by multiplying a VOC content of 0.02 pound of VOC per gallon, an annual usage of 252,288 gallons and applying the conversion factor of 2000 pounds per ton. Fuel combustion emissions were determined by multiplying the maximum heat input capacity of 93.12 mmBtu/hr, the emission factor below, a maximum operating schedule of 8760 hours per year and applying the conversion factor of 2000 pounds per ton:

VOC – 0.0054 lb/mmBtu*, AP-42, Table 1.4-2(7/98)

*Emission factor was converted from lb/mmscf to lb/mmBtu by using a value of 1020 Btu/cf of natural gas.

ii. Potential emissions of SO2 from AF-CAL1 is associated with fuel combustion and was determined by multiplying the maximum heat input capacity of 93.12 mmBtu/hr, the emission factor below, a maximum operating schedule of 8760 hours per year and applying the conversion factor of 2000 pounds per ton:

SO2 – 0.0006 lb/mmBtu*, AP-42, Table 1.4-2(7/98)

*Emission factor was converted from lb/mmscf to lb/mmBtu by using a value of 1020 Btu/cf of natural gas.

e. The uncontrolled mass rate of PE from CAL1 is less than ten tons per 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 1 of OAC rule 3745-17-11 does not apply because the facility is located in Putnam County, which is identified as a P-2 county.

f. CAL1 is exempt from the visible emissions limitation 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.

g. CAL1 is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A). [Sulfur dioxide emissions are generated only from the combustion of natural gas.]

h. Prevention of Significant Deterioration (PSD) requirements for particulate matter equal to or less than 2.5 microns in size (PM2.5) are being implemented through the PM_{10} Surrogate Policy issued by EPA in 1997. For purposes of demonstrating that PM10 is a reasonable surrogate for PM2.5, all emissions of PM_{10} will be considered PM2.5.

i. The permittee shall comply with the applicable restrictions required under 40 CFR part 63, Subpart WWWWWW, including the following sections:

63.11507(a) and (g)	Standards and Management Practices
63.11508(b)	Management Practices and Equipment Standards

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for purposes of establishing federally enforceable requirements which limit the PTE [see b)(2)a.]:

a. Exhaust gas from the 93.12 mmBtu/hr natural gas fired regenerative annealing furnace (AF-CAL1) shall meet the following requirements:

i. When "in a production mode of operation" exhaust gas from AF-CAL1 shall be controlled by a selective catalytic reduction (SCR) control system to reduce NOx emissions. The exhaust gas from the SCR control system shall not exceed an emission rate of 0.015 lb NOx/mmBtu heat input, based on a 3-hour rolling average. For this operational restriction, "in a production mode operation" shall mean that the main burners are firing and product is moving through the continuous annealing furnace. "In a production mode of operation" shall not include low fuel flow/low temperature furnace conditions, such as idle and furnace temperature ramp-up and ramp-down.

ii. During times that the furnace is not "in a production mode of operation" and the main burners are idling or only the pilot burners are operating, NOx emissions shall not exceed 1.40* lbs/hr. the emission limitation of 0.015 lb NOx/mmBtu is not applicable during times that the furnace is not "in a production mode of operation."

*The 1.40 pounds NOx per hour limitation shall be based on a 3-hour rolling average.

b. The exhaust from the alkaline cleaning operation (ACS-AF1) shall be controlled by a mesh pad mist eliminator to reduce PM10 emissions. PM10 emissions from the mesh pad mist eliminator shall not exceed a maximum outlet concentration of 0.08 gr/dscf for PM10.

[OAC rule 3745-77-07(A)(1) and PTI P0112814]

(2) The permittee shall burn only natural gas in the driers and furnace associated with this emissions unit.

[OAC rule 3745-77-07(A)(1) and PTI P0112814]

(3) The permittee shall comply with the applicable restrictions required under 40 CFR part 63, Subpart WWWWWW, including the following sections:

63.11508(c)	Work Practice Requirements

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart WWWWWW]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the following NOx emission values at the discharge of the SCR unit, when the emissions unit (AF-CAL1) is operating in production or a non-production mode of operation:

a. production mode of operation:

i. lb NOx/mmBtu heat input, as a 3-hr rolling average

b. non-production mode of operation:

i. lb NOx/hr, as a 3-hr rolling average.

A NOx analyzer is employed on the annealing furnace operation of this emissions unit (AF-CAL1) and is used as part of the process control system for the SCR unit. The data from the analyzers is used to adjust the SCR reagent injection flow rate to optimize the performance of the SCR unit. The analyzer was not installed with the intent of satisfying the requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 2, and therefore cannot be certified as a true continuous NOx monitoring system. Even though the analyzer cannot be certified as true continuous NOx monitoring system, it has been demonstrated that the analyzer does provide accurate NOx emission concentration data as compared to emission concentration data simultaneously obtained through 40 CFR Part 60, Appendix A, Method 7E. As such, the data from the analyzer will be used as part of a data acquisition system to collect and record information to ensure ongoing compliance with the NOx emission limitations.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

(2) Whenever the monitored values for NOx emissions at the discharge of SCR unit deviate from the applicable limitations contained within this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the SCR reagent-gas ratio and SCR inlet temperature immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

(3) The SCR reagent-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 SCR reagent flow rate to the SCR unit. Additionally, a secondary control circuit shall be utilized consisting of the required NOx analyzer above which shall increase or decrease the SCR reagent flow rate according to NOx concentrations observed at the discharge of the SCR unit. The purpose of the secondary control circuit is to optimize the efficiency of the SCR control system and minimize the SCR reagent slip to the atmosphere. The programmable logic controller (PLC) program associated

with the SCR control unit utilized by the primary and secondary control circuits shall not be altered from the control logic instituted during the most recent compliance test. If alterations to the PLC program are necessary, permittee shall submit requested changes to the permitting authority for approval.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

(4) The permittee shall properly install, operate and maintain equipment necessary to continuously monitor and record the following parameters for the SCR unit during all time periods when SCR reagent is utilized by the control system. 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 SCR inlet temperature, in degrees Fahrenheit, as a 3-hr rolling average.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

(5) Whenever the monitored values for the SCR inlet temperature deviate from the range(s) specified below, the permittee shall promptly investigate the cause of the deviation(s). The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the urea flow rate and SCR inlet temperature immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

a. The SCR inlet temperature in degrees Fahrenheit shall be continuously maintained, at all times while the emissions unit is in operation, at a value of not less than the average temperature of 520 degrees Fahrenheit or greater than the average temperature of 730 degrees Fahrenheit based upon a 3 hour average.

These range(s) are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the ranges based upon information obtained during future NOx emission tests that demonstrate compliance with the allowable NOx emission rate for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation

of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

(6) The permittee shall collect and record the following information each month for the SCR unit and the annealing furnace associated with this emissions unit:

a. all 3-hour blocks of time during which the average temperature of the flue gases at the inlet to the SCR unit was less than the average temperature of 520 degrees Fahrenheit and/or greater than 730 degrees Fahrenheit;

b. all 3-hour periods during which the average NOx emission rate was greater than 1.40 pounds NOx per hour; and

c. all 3-hour periods during which the average NOx emission rate was greater than 0.015 pound NOx per mmBtu;

d. identification of all time periods when natural gas was fired in the annealing furnace and the monitoring requirements specified in d)(1) and/or d)(4) were not maintained.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

(7) The permittee shall operate and maintain equipment to continuously monitor and record NOx emissions from this emissions unit in units of the applicable standard. The NOx analyzers, monitoring, and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations and the procedures specified in the permittee's ISO 14001 Environmental Management System procedures.

The permittee shall maintain records of all data obtained by the continuous NOx analyzers and 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.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

(8) At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

(9) After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed administrative modification to address the necessary monitoring changes. Such a modification may include, but is not

limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

(10) For each day during which the permittee burns a fuel other than natural gas in the driers and/or annealing furnace associated with this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

(11) The permit-to-install (PTI) application for these emissions units B045, B046 and P013 (PTI #P0106197 issued 9/9/2010), was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The Toxic Air Contaminant Statute, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled Review of New Sources of Air Toxic Emissions, Option A, as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; or

   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., **X** hours per day and **Y** days per week, from that of 8 hours per day and 5 days per week. The resulting

calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year):

i. Toxic Contaminant: hydrogen chloride

TLV (mg/m3): 2.98
Maximum Hourly Emission Rate (lb/hr): 0.40
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 32.51
MAGLC (ug/m3): 71

ii. Toxic Contaminant: hexane

TLV (mg/m3): 176
Maximum Hourly Emission Rate (lb/hr): 0.16
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.29
MAGLC (ug/m3): 4196

The permittee has demonstrated that emissions of hydrogen chloride, from emissions units B045, B046 and P013, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).

[PTI P0112814]

(12) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the Toxic Air Contaminant Statute 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 solely due to a non-restrictive change to a parameter or process operation, where compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTIprior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[PTI P0112814]

(13) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[PTI P0112814]

(14) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[PTI P0112814]

(15) Modeling to demonstrate compliance with, the Toxic Air Contaminant Statute, ORC 3704.03(F)(4)(b), was not necessary for emissions of nickel and hydrogen chloride from

this emissions unit due to acid wash and nickel flash plating operations being subject to the "Generally Available Control Technology" (GACT) requirements under 40 CFR Part 63 Subpart WWWWWW - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations [See Term B.2 of Facility-Wide Terms and Conditions.

[40 CFR, Part 63, Subpart WWWWWW and PTI P0112814]

(16) The acceptable range for the pressure drop across the mist eliminator shall be based upon the manufacturer's specifications, until such time as any required performance testing is conducted and an alternative pressure drop range and/or limit is established.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

(17) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the mist eliminator when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the mist eliminator on a continuous basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable pressure drop shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the pressure drop readings immediately after the corrective action was implemented; and

k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

(18) This range or limit on the pressure drop across the mist eliminator is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following:

a. the 3-hour average NOx emission limitation of 1.40 lbs/hr;

b. the 3-hour average NOx emission limitation of 0.015 lb/mmBtu;

c. the 3-hour average SCR inlet temperature range required by section d)(4);*

d. each period of time (start time and date, and end time and date) when the pressure drop across the mist eliminator was outside of the range specified by the manufacturer and outside of the acceptable range following any required compliance demonstration;

e. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the mist eliminator;

f. each incident of deviation described in “a“ (above) where a prompt investigation was not conducted;

g. each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

h. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

* Any 3-hour average SCR inlet temperature value that was outside the permitted SCR inlet temperature range may be considered to be an exceedance only if it occurred concurrently with an exceedance of the 0.015 pound NOx per mmBtu or the 1.40 pounds NOx/hr limitations (based upon a 3-hour average of the emission rates).

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

(2) 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.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

(3) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration, in the quarterly deviation (excursion) reports. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

[ORC 3704.03(F), OAC rule 3745-114-01 and PTI P0112814]

(4) The permittee shall comply with the applicable restrictions required under 40 CFR part 63, Subpart WWWWWW, including the following sections:

63.11508(a) and (c)	Notification and Reporting
63.11509(b) and (c)	Notification and Reporting

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart WWWWWW]

(5) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A)]

f) 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 180 days after initial startup of the emissions unit. Testing time frame(s) specified may be amended or waived for cause upon prior request of, and written approval of, the Ohio EPA Northwest District Office.

b. The emission testing shall be conducted to demonstrate compliance with the following:

   i. The NOx emission rates of 0.015 lb/mmBtu and 1.40 lb/hr.

c. The following test method(s) shall be employed to meet the testing requirements above:

   NOx – Methods 1-4 and 7 of 40 CFR, Part 60, Appendix A.

   Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

   *During the emission testing, the permittee shall also record the SCR reagent flow rate and the average temperature of the exhaust gases immediately before the catalyst bed for each run.

d. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an “Intent to Test” notification to the appropriate Ohio EPA District Office 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).

f. 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.

g. 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.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

(2) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

CO emissions shall not exceed 0.12 lb/mmBtu from the 93.12 mmBtu/hr regenerative annealing furnace (AF-CAL1)

Applicable Compliance Method:

The emission limitation was established in accordance with an equipment vendor guaranteed emission rate. If required, compliance with the allowable emission limitation shall be determined in accordance with test methods and procedures described in Methods 1-4 and 10 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

b. Emission Limitations:

NOx emissions from the 93.12 mmBtu/hr regenerative annealing furnace (AF-CAL1) shall not exceed:

i. 0.015 lb/mmBtu;

ii. 1.40 lb/hr; and

iii. 6.13 tpy

Applicable Compliance Method:

Compliance with the lb/mmBtu and hourlyand lb/mmBtu emission limitations shall be determined based on the results of emission testing conducted in accordance with the test methods and procedures of 40 CFR, Part 60, Appendix A, Methods 1-4 and 7 [See Testing Requirements in f)(1)].

The annual emission limitation was developed by multiplying the hourly emission rate by 8760 hours per year and dividing by 2000 lbs. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

c. Emission Limitations:

PM10 emissions from the mesh pad mist eliminator controlling alkaline cleaning operations (ACS-CAL1) shall not exceed:

i. A maximum outlet concentration of 0.08 gr/dscf;

ii. 0.22 lb/hr; and

iii. 0.96 tpy

Applicable Compliance Method:

The maximum outlet concentration and hourly emission limitations were established in accordance with a stack test of a similar cleaning operation installed by the equipment supplier.

The hourly limitation was established by multiplying the maximum outlet grain loading concentration of 0.08 gr PM10/dscf and the maximum volumetric air flow rate (11,630 acfm) from this emissions unit to the fabric filter, and using the following conversion factors in order to convert to pounds per hour: 1 pounds/7000 grains and 60 minutes/hour.

If required, the permittee shall demonstrate compliance with the maximum outlet concentration and hourly emission limitations by testing in accordance with Methods 1-4 of 40 CFR, Part 60, Appendix A and Methods 201/201A of 40 CFR, Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

The annual emission limitation was developed by multiplying the hourly emission rate by 8760 hours per year and dividing by 2000 lbs. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

d. Emission Limitations:

VOC emissions shall not exceed 1.08 lbs/hr and 4.72 tpy

Applicable Compliance Method:

The hourly emission limitation represents the potential to emit for this emissions unit. Potential emissions of VOC from this unit are associated with fuel combustion from AF-CAL1 and lubricant usage in the temper mill/skin pass section (TM-CAL1). Lubricant usage emissions were determined by multiplying a VOC content of 0.02 pound of VOC per gallon, an annual usage of 252,288 gallons and applying the conversion factor of 2000 pounds per ton. Fuel combustion emissions were determined by multiplying the maximum heat input capacity of 93.12 mmBtu/hr by the emission factor below and by a maximum

operating schedule of 8760 hours per year and applying the conversion factor of 2000 pounds per ton:

VOC – 0.0054 lb/mmBtu*, AP-42, Table 1.4-2 (7/98)

*Emission factor was converted from lb/mmscf to lb/mmBtu by using a value of 1020 Btu/cf of natural gas.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 and 18, 25 or 25A, as applicable, of 40 CFR, Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly emission rate by 8760 hours per year and dividing by 2000 lbs. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

e. Emission Limitations:

SO2 emissions shall not exceed 0.06 lb/hr and 0.26 tpy

Applicable Compliance Method:

The hourly emission limitation represents the potential to emit for AF-CAL1 Potential emissions of SO2 from this unit is associated with fuel combustion and was determined by multiplying the maximum heat input capacity of 93.12 mmBtu/hr, the emission factor below, a maximum operating schedule of 8760 hours per year and applying the conversion factor of 2000 pounds per ton:

SO2 – 0.0006 lb/mmBtu*, AP-42, Table 1.4-2 (7/98)

*Emission factor was converted from lb/mmscf to lb/mmBtu by using a value of 1020 Btu/cf of natural gas.

If required, the permittee shall demonstrate compliance with the hourly SO2 emission limitation by testing in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly emission rate by 8760 hours per year and dividing by 2000 lbs. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI P0112814]

g) Miscellaneous Requirements

(1) None.

5. Emissions Unit Group -Boiler Group 1 CGL1: B001,B002

EU ID	Operations, Property and/or Equipment Description
B001	Hot Water Boiler 1 (14.7 MmBtu/hr Boiler)
B002	Hot Water Boiler 2 (14.7 MmBtu/hr Boiler)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) [PTI 03-14070, issued 01/24/2008]	0.49 lb nitrogen oxides (NOx)/hr; 2.15 tons NOx/yr 0.54 lb carbon monoxide (CO)/hr; 2.4 tons CO/yr 0.11 lb particulate emissions (PE)/hr; 0.5 ton PE/yr Control Requirements [See b)(2)a.] See b)(2)b.
b.	40 CFR, Part 60, Subpart Dc	Recordkeeping Requirements [See d)(2)]
c.	OAC rule 3745-17-07(A)(1)	Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule
d.	OAC rule 3745-18-06	Exempt [See b)(2)c.]
e.	OAC rule 3745-17-10(B)(1)	See b)(2)d.
f.	40 CFR, Part 63, Subpart JJJJJJ	Exempt [See b)(2)e.]

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) control requirements for this emissions unit has been determined to be use of low NOx burners. BAT also includes compliance with the terms and conditions of this permit.

PRO-TEC Coating Company agreed and consented to entry into a Consent Decree with the United States of America (Civil Action No. 3:98CV 7749, entered 2/11/98) requiring the permittee to install natural gas-fired low NOx burners on this emissions unit. The consent decree also required this emissions unit to achieve an emission rate not to exceed 0.033 lb NOx/mmBtu, which is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

b. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1) and 40 CFR, Part 60, Subpart Dc.

c. This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A).

d. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

e. This emissions unit only burns natural gas and; therefore, is exempt from the requirements of 40 CFR, Part 63, Subpart JJJJJJ pursuant to 40 CFR 63.11195(e).

c) Operational Restrictions

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

[OAC rule 3745-77-07(A)(1) and PTI 03-14070]

d) Monitoring and/or Recordkeeping 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.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(2) The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(3) While performing each burner tuning, the permittee shall record the results of the burner tuning using the Burner Tuning Reporting Forms for Boilers. An alternative form may be used upon approval of the appropriate Ohio EPA District Office or local air agency.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

e) 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.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(2) The permittee shall submit a copy of the Burner Tuning Reporting Form for Boilers form to the appropriate Ohio EPA District Office or local air agency to summarize the results of each burner tuning procedure. These reports shall be submitted to the Ohio EPA district office or local air agency by January 31 of each year and shall cover the previous calendar year.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(3) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

0.49 lb NOx/hr; 2.15 tons NOx/yr

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit (PTE)* of the emissions unit. Therefore, no monitoring and record keeping, reporting or compliance method calculations are required to demonstrate compliance with these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

*The PTE for this emissions unit is based on the maximum capacity of the boiler of 14.7 mmBtu/hr and the vendor supplied emission factor of 0.0241 lb NOx/mmBtu. The annual PTE is based on the hourly PTE and a maximum operating schedule of 8760 hrs/yr.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

b. Emission Limitations:

0.54 lb CO/hr; 2.4 tons CO/yr

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit (PTE)* of the emissions unit. Therefore, no monitoring and record keeping, reporting or compliance method calculations are required to demonstrate compliance with

these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A.

*The PTE for this emissions unit is based on the maximum capacity of the boiler of 14.7 mmBtu/hr and the vendor supplied emission factor of 0.0367 lb CO/mmBtu. The annual PTE is based on the hourly PTE and a maximum operating schedule of 8760 hrs/yr.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

c. Emission Limitations:

0.11 lb PE/hr; 0.5 ton PE/yr

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit (PTE)* of the emissions unit. Therefore, no monitoring and record keeping, reporting or compliance method calculations are required to demonstrate compliance with these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

*The PTE for this emissions unit is based on the maximum capacity of the boiler of 14.7 mmBtu/hr, the heat content of natural gas (1020 Btu/mmft3), and an emission factor of 1.9 lbs PE (filterable)/ mmft3 of natural gas burned (AP-42 Table 1.4-2, dated 9/98). The annual PTE is based on the hourly PTE and a maximum operating schedule of 8760 hrs/yr.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

d. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule

Applicable Compliance Method:

If required, the method to be employed to demonstrate compliance with the visible PE limitation shall be OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(2) The permittee may conduct periodic tuning of the boiler burner. The purpose of this tuning is to ensure that the burner is adjusted properly so that air pollution emissions remain in compliance with allowable emission rates and are minimized.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(3) Technicians who conduct the burner tuning must be qualified to perform the expected tasks. The permittee is required to provide training to the technicians who perform the burner tuning procedure. Technicians who are qualified shall, at a minimum, have passed manufacturer's training concerning burner tuning, or have been trained by someone who has completed the manufacturer's training concerning burner tuning.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(4) The permittee shall properly operate and maintain portable device(s) to monitor the concentration of NOx in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(5) The first steps concerning burner tuning involve setting the pollutant baseline levels (concentrations) utilizing the portable monitor. These baselines shall be set during the initial U.S. EPA approved emissions testing that demonstrated the emissions unit was in compliance with all applicable emissions limitations. The baselines shall be determined for NOx. Sampling should measure the exhaust gas values exiting the baghouse. The duration of each sample shall follow the portable monitor manufacturer's recommendations. Record these values on the Burner Tuning Reporting Form for Boilers in the "Recent Stack Test Basis Values" column.

Once the pollutant baseline levels are set, the burner shall be next tuned based on the frequency described in f)(6). The general procedure for tuning the burner involves the following steps:

a. Review the plant operations to ensure the boiler is operating normally.

b. Confirm that the portable monitor is calibrated per the manufacturer's specifications.

c. Using the calibrated monitor and monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for NOx. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre Tuning" results column on the Burner Tuning Reporting Form for Boilers form.

d. Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values, then it is not necessary to tune the burner. Go on to (5)e. below. The permittee shall have the burners tuned within two calendar weeks of any measured stack exhaust values greater than 115 percent of the baseline values. Make any necessary adjustments and repairs. Repeat (5)c. and (5)d. until the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values.

e. Once all of the measured stack exhaust gas values are within the 115 percent of the pollutant baseline values, record the measured stack exhaust gas values in the "Post Tuning" results column on the Burner Tuning Reporting Form for Boilers form.

f. By January 31st of each year, submit a copy of all Burner Tuning Reporting Form for Boilers forms produced during the past calendar year to the Ohio EPA District Office or local air agency responsible for the permitting of the facility.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(6) The permittee shall conduct the burner tuning procedure at a frequency to be determined and approved by the Ohio EPA Northwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(7) The firing rate of the boiler shall be at least 11.0 mmBtu/hr and such to maintain a steady-state water temperature of 179 degrees F at the cleaner section of the continuous galvanizing line when stack testing or burner tuning is being conducted.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03-14070]

g) Miscellaneous Requirements

(1) None.

6. Emissions Unit Group -Boiler Group 2 CGL2: B043,B044

EU ID	Operations, Property and/or Equipment Description
B043	Hot Water Boiler 3 (14.7 MmBtu/hr Boiler)
B044	Hot Water Boiler 4 (14.7 MmBtu/hr Boiler)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) [PTI 03-14070, issued 01/24/2008]	0.49 lb nitrogen oxide (NOx)/hr; 2.15 tons NOx/yr 0.54 lb carbon monoxide (CO)/hr; 2.4 tons CO/yr 0.11 lb particulate emissions (PE)/hr; 0.5 ton PE/yr control requirements [See b)(2)a.] See b)(2)b.
b.	40 CFR, Part 60, Subpart Dc	recordkeeping requirements [See d)(2)]
c.	OAC rule 3745-17-07(A)(1)	Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
d.	OAC rule 3745-18-06	Exempt [See b)(2)c.]
e.	OAC rule 3745-17-10(B)(1)	See b)(2)d.
f.	40 CFR, Part 63, Subpart JJJJJJ	Exempt [See b)(2)e.]

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) control requirements for this emissions unit has been determined to be use of low NOx burners. BAT also includes compliance with the terms and conditions of this permit.

PRO-TEC Coating Company agreed and consented to entry into a Consent Decree with the United States of America (Civil Action No. 3:98CV 7749, entered 2/11/98) requiring the permittee to install natural gas fired low NOx burners on this emissions unit. The consent decree also required this emissions unit to achieve an emission rate not to exceed 0.033 lbs NOx/mmBtu, which is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

b. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1) and 40 CFR, Part 60, Subpart Dc.

c. This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A).

d. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

e. This emissions unit only burns natural gas and; therefore, is exempt from the requirements of 40 CFR, Part 63, Subpart JJJJJJ pursuant to 40 CFR 63.11195(e).

c) Operational Restrictions

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

[OAC rule 3745-77-07(A)(1) and PTI 03-14070]

d) Monitoring and/or Recordkeeping 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.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(2) The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(3) While performing each burner tuning, the permittee shall record the results of the burner tuning using the Burner Tuning Reporting Forms for Boilers. An alternative form may be used upon approval of the appropriate Ohio EPA District Office or local air agency.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

e) 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.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(2) The permittee shall submit a copy of the Burner Tuning Reporting Form for Boilers form to the appropriate Ohio EPA District Office or local air agency to summarize the results of each burner tuning procedure. These reports shall be submitted to the Ohio EPA district office or local air agency by January 31 of each year and shall cover the previous calendar year.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(3) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

0.49 lb NOx/hr; 2.15 tons NOx/yr

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit (PTE)* of the emissions unit. Therefore, no monitoring and record keeping, reporting or compliance method calculations are required to demonstrate compliance with these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

*The PTE for this emissions unit is based on the maximum capacity of the boiler of 14.7 mmBtu/hr and the vendor supplied emission factor of 0.0241 lb NOx/mmBtu. The annual PTE is based on the hourly PTE and a maximum operating schedule of 8760 hrs/yr.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

b. Emission Limitations:

0.54 lb CO/hr; 2.4 tons CO/yr

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit (PTE)* of the emissions unit. Therefore, no monitoring and record keeping, reporting or compliance method calculations are required to demonstrate compliance with

these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in 1 through 4 and 10 of 40 CFR, Part 60, Appendix A.

*The PTE for this emissions unit is based on the maximum capacity of the boiler of 14.7 mmBtu/hr and the vendor supplied emission factor of 0.0367 lb CO/mmBtu. The annual PTE is based on the hourly PTE and a maximum operating schedule of 8760 hrs/yr.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

c. Emission Limitations:

0.11 lb PE/hr; 0.5 ton PE/yr

Applicable Compliance Method:

The hourly and annual emission limitations represent the potential to emit (PTE)* of the emissions unit. Therefore, no monitoring and record keeping, reporting or compliance method calculations are required to demonstrate compliance with these limitations. If required, the permittee shall demonstrate compliance with the hourly limitation in accordance with the test methods and procedures in Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

*The PTE for this emissions unit is based on the maximum capacity of the boiler of 14.7 mmBtu/hr, the heat content of natural gas (1020 Btu/mmft3), and an emission factor of 1.9 lbs PE (filterable)/mmft3 of natural gas burned (AP-42 Table 1.4-2, dated 9/98). The annual PTE is based on the hourly PTE and a maximum operating schedule of 8760 hrs/yr.

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

d. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule

Applicable Compliance Method:

If required, the method to be employed to demonstrate compliance with the visible PE limitation shall be OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(2) The permittee may conduct periodic tuning of the boiler burner. The purpose of this tuning is to ensure that the burner is adjusted properly so that air pollution emissions remain in compliance with allowable emission rates and are minimized.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(3) Technicians who conduct the burner tuning must be qualified to perform the expected tasks. The permittee is required to provide training to the technicians who perform the burner tuning procedure. Technicians who are qualified shall, at a minimum, have passed manufacturer's training concerning burner tuning, or have been trained by someone who has completed the manufacturer's training concerning burner tuning.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(4) The permittee shall properly operate and maintain portable device(s) to monitor the concentration of NOx in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(5) The first steps concerning burner tuning involve setting the pollutant baseline levels (concentrations) utilizing the portable monitor. These baselines shall be set during the initial U.S. EPA approved emissions testing that demonstrated the emissions unit was in compliance with all applicable emissions limitations. The baselines shall be determined for NOx. Sampling should measure the exhaust gas values exiting the baghouse. The duration of each sample shall follow the portable monitor manufacturer's recommendations. Record these values on the Burner Tuning Reporting Form for Boilers in the "Recent Stack Test Basis Values" column.

Once the pollutant baseline levels are set, the burner shall be next tuned based on the frequency described in f)(6). The general procedure for tuning the burner involves the following steps:

a. Review the plant operations to ensure the boiler is operating normally.

b. Confirm that the portable monitor is calibrated per the manufacturer's specifications.

c. Using the calibrated monitor and monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for NOx. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre Tuning" results column on the Burner Tuning Reporting Form for Boilers form.

d. Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values, then it is not necessary to tune the burner. Go on to (5)e. below. The permittee shall have the burners tuned within two calendar weeks of any measured stack exhaust values greater than 115 percent of the baseline values. Make any necessary adjustments and repairs. Repeat (5)c. and (5)d. until the measured stack exhaust gas values are equal to or less than 115 percent of the pollutant baseline values.

e. Once all of the measured stack exhaust gas values are within the 115 percent of the pollutant baseline values, record the measured stack exhaust gas values in the "Post Tuning" results column on the Burner Tuning Reporting Form for Boilers form.

f. By January 31st of each year, submit a copy of all Burner Tuning Reporting Form for Boilers forms produced during the past calendar year to the Ohio EPA District Office or local air agency responsible for the permitting of the facility.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(6) The permittee shall conduct the burner tuning procedure at a frequency to be determined and approved by the Ohio EPA Northwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03-14070]

(7) The firing rate of the boiler shall be at least 7.0 mmBtu/hr and such to maintain a steady-state water temperature of 179 degrees F at the cleaner section of the continuous galvanizing line when stack testing or burner tuning is being conducted.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 03-14070]

g) Miscellaneous Requirements

(1) None.

7. Emissions Unit Group -Boiler Group 3 CAL1: B045,B046

EU ID	Operations, Property and/or Equipment Description
B045	41.0 mmBtu/hr natural gas fired hot water boiler (Boiler #5)
B046	41.0 mmBtu/hr natural gas fired hot water boiler (Boiler 6-Backup Only)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) b)(2)i., d)(4), d)(5), d)(6), d)(7) and e)(4).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC rule 3704.03(T) [PTI P0106197, issued 09/09/2010]	Carbon monoxide (CO) emissions shall not exceed 0.082 pound per million British thermal units (lb/mmBtu) of actual heat input from emissions unit B045 or B046 See b)(2)a.
b.	OAC rule 3745-31-05(D) [PTI P0106197, issued 09/09/2010]	14.79 tons CO per rolling, 12-month period See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 [PTI P0106197, issued 09/09/2010]	<u>For emissions unit B045 and B046 (individually):</u> Nitrogen oxides (NOx) emissions shall not exceed 0.036 lb/mmBtu and 6.48 tpy. See b)(2)d.
d.	OAC rule 3745-31-05(A)(3), as effective 12/01/06 [PTI P0106197, issued 09/09/2010]	See b)(2)e.
e.	40 CFR, Part 60, Subpart Dc	Record keeping Requirements [See d)(2)]
f.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average, except as provided by rule from emissions unit B045 or B046.
g.	OAC rule 3745-18-06	Exempt [See b)(2)c.]

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
h.	OAC rule 3745-17-10(B)(1)	PE shall not exceed 0.020 lb/mmBtu of actual heat input, from emissions unit B045 or B046 See b)(2)f.
i.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(4) through d)(7) and e)(4)
j.	40 CFR, Part 63, Subpart JJJJJJ	Exempt [See b)(2)h.]

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements under ORC 3704.03(T) have been determined to an emission limitation not to exceed 0.082 lb CO/mmBtu from B045 and B046 (individually).

The lb/mmBtu emission rate above represents the potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design). Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations.

b. This permit establishes federally enforceable emission limitations for purposes of limiting potential to emit (PTE). The federally enforceable emission limitations are identified in b)(1)b. and are based on the operational restrictions contained in c)(1) and c)(2). The PTE is being restricted such that the emission increase for CO allowed for in this permit action (P0106197) will be below the Prevention of Significant Deterioration (PSD) "significant threshold" applicability level of 100 tpy.

c. These emissions units are exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A).

d. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective November 30, 2001 will no longer apply.

It should be noted that the boilers are fired with natural gas and only have emissions associated with the products of combustion [(CO, NOx, sulfur dioxide

(SO2), volatile organic compounds (VOC), and particulate matter equal to or less than ten microns in diameter (PM10)]. The potential emissions are based on a cumulative maximum heat input of 41.0 mmBtu (natural gas) and result in negligible emission quantities of SO2, VOC, and PM10 therefore have not been addressed through limitations within this permit. It should be noted that the negligible emission quantities were included in the evaluation of the total emission increases that resulted from the proposed project.

e. This rule applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of Ohio's SIP.

The BAT requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006 do not apply to the NOx, PM10, VOC and SO2 emissions from this air contaminant source since the uncontrolled potential to emit (PTE) for each is less than ten tons per year.

Potential emissions from these units are associated with fuel combustion and were determined by multiplying the maximum heat input capacity of 41.0 mmBtu/hr, the emission factors below, a maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton:

NOx – 0.036 lb/mmBtu (equipment vendor guarantee)

PM10 – 0.0075 lb/mmBtu*, AP-42, Table 1.4-2(7/98)

VOC – 0.0054 lb/mmBtu*, AP-42, Table 1.4-2(7/98)

SO2 – 0.0006 lb/mmBtu*, AP-42, Table 1.4-2(7/98)

*Emission factor was converted from lb/mmscf to lb/mmBtu by using a value of 1020 Btu/cf of natural gas.

f. The potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design) for PE from the each boiler is less than the allowable emission limitation established by OAC rule 3745-17-11(B). See f)(1)c.for details regarding the potential to emit.

g. Prevention of Significant Deterioration (PSD) requirements for particulate matter equal to or less than 2.5 microns in size (PM2.5) are being implemented through the PM10 Surrogate Policy issued by EPA in 1997. For purposes of demonstrating that PM10 is a reasonable surrogate for PM2.5, all emissions of PM10 will be considered PM2.5.

h. This emissions unit only burns natural gas and; therefore, is exempt from the requirements of 40 CFR, Part 63, Subpart JJJJJJ pursuant to 40 CFR 63.11195(e).

c) Operational Restrictions

(1) The permittee shall burn only natural gas as fuel in emissions units B045 and B046.

[OAC rule 3745-77-07(A)(1) and PTI P0106197]

(2) The maximum rolling, 12-month quantity of natural gas burned in emissions units B045 and B046, combined, shall not exceed 352.2 million standard cubic feet (mmscf). To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the natural gas usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Natural Gas Usage (mmscf)
1	88
1-2	176
1-3	264
1-12	352.2

After the first 12 calendar months of operation, compliance with the annual natural gas usage rate limitation shall be based upon a rolling, 12-month summation of the usage rates.

[OAC rule 3745-77-07(A)(1) and PTI P0106197]

d) Monitoring and/or Recordkeeping 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 these emissions units.

[OAC rule 3745-77-07(C)(1) and PTI P0106197]

(2) The permittee shall record and maintain records of the amounts of each fuel combusted during each calendar month for B045 and B046 individually.

[OAC rule 3745-77-07(C)(1) and PTI P0106197]

(3) In conjunction with the monitoring and record keeping in d)(1), the permittee shall maintain monthly records of the following information for emissions units B045 and B046, combined:

a. the total natural gas usage, in mmscf, for each month;

b. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the natural gas usage, in mmscf;

Also, during the first 12 calendar months of operation, the permittee shall record the cumulative natural gas usage rate for each calendar month.

[OAC rule 3745-77-07(C)(1) and PTI P0106197]

(4) The permit-to-install (PTI) application for these emissions units B045, B046 and P013 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The Toxic Air Contaminant Statute, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled Review of New Sources of Air Toxic Emissions, Option A, as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., **X** hours per day and **Y** days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year):

i. Toxic Contaminant: hydrogen chloride

TLV (mg/m3): 2.98

Maximum Hourly Emission Rate (lbs/hr): 0.40
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 32.51
MAGLC (ug/m3): 71

ii. Toxic Contaminant: hexane

TLV (mg/m3): 176
Maximum Hourly Emission Rate (lbs/hr): 0.16
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.29
MAGLC (ug/m3): 4196

The permittee has demonstrated that emissions of hydrogen chloride, from emissions units B045, B046 and P013, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).

[PTI P0106197]

(5) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the Toxic Air Contaminant Statute 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 solely due to a non-restrictive change to a parameter or process operation, where compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification”, the permittee shall apply for and obtain a final PTIprior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[PTI P0106197]

(6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[PTI P0106197]

(7) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[PTI P0106197]

e) Reporting Requirements

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

[OAC rule 3745-77-07(C)(1) and PTI P0106197]

(2) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. all exceedances of the rolling, 12-month natural gas usage rate limitation for emissions units B045 and B046, combined; and for the first 12 calendar months of operation, all exceedances of the maximum allowable natural gas usage level.

[OAC rule 3745-77-07(C)(1) and PTI P0106197]

(3) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground−level concentration, in the quarterly deviation (excursion) reports. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

[PTI P0106197]

(4) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

CO emissions shall not exceed 0.082 lb/mmBtu.

<u>Applicable Compliance Method:</u>

The emission limitation was established by converting the emission factor from AP-42, Table 1.4-1 (revised 7/98) of 84 lbs CO/mmscf by dividing by a heat content of 1,020 Btu/scf for natural gas. If required, compliance with the lb CO/mmBtu emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

[OAC rule 3745-77-07(C)(1) and PTI P0106197]

b. <u>Emission Limitations:</u>

14.79 tons CO per rolling 12-month period

<u>Applicable Compliance Method:</u>

The permittee shall demonstrate compliance with this limitation by multiplying the emission factor from AP-42, Table 1.4-1 (revised 7/98) of 84 lbs CO/mmscf by the actual rolling, 12-month summation of the natural gas usage, in mmscf per

rolling, 12-month period [as derived from the records required by term and condition d)(3)], and dividing by 2000 pounds per ton.

[OAC rule 3745-77-07(C)(1) and PTI P0106197]

c. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the stack visible PE limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9 of 40 CFR Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI P0106197]

d. Emission Limitation:

PE shall not exceed 0.020 lb/mmBtu.

Applicable Compliance Method:

The potential to emit (defined as the maximum capacity to emit an air pollutant under the physical and operational design) for PE from each boiler is less than the allowable limitation established by OAC rule 3745-17-11(B) and, therefore; compliance is assured. The potential to emit was determined multiplying the maximum hourly natural gas consumption rate, in mmscf/hr, by the appropriate emission factor from AP-42, Table 1.4-1 (revised 7/98) [1.9 lbs PE (filterable)/mmscf] and dividing by the maximum heat input capacity of the boiler (41 mmBtu/hr). If required, compliance with the PE limitation above shall be determined in accordance with the test methods and procedures of 40 CFR Part 60, Appendix A, Methods 1-5.

[OAC rule 3745-77-07(C)(1) and PTI P0106197]

e. Emission Limitations:

NOx emissions shall not exceed 0.036 lb/mmBtu and 6.48 tpy.

Applicable Compliance Method:

The lb/mmBtu emission limitation was established in accordance with an equipment vendor's guarantee. If required, compliance with the lb NOx/mmBtu emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 7.

The annual limitation was determined by multiplying the lb/mmBtu limitation by the maximum heat input capacity of the boiler (41 mmBtu/hr). The resulting NOx emissions in lb/hr were multiplied by a maximum operating schedule of 8760

hours per year, and then divided by 2000 pounds per ton. Therefore, provided compliance is shown with the lb/mmBtu limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI P0106197]

g) Miscellaneous Requirements

(1) None.