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

12/24/2012

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Rick Rupert
Pro-Tec Coating Company
5000 County Rd. #5
Leipsic, OH 45856-9234

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0369000025
Permit Number: P0112268
Permit Type: Administrative Modification
County: Putnam

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA)Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to “Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General’s Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF 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 you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA
Ohio EPA-NWDO; Michigan; Indiana; Canada

FINAL

Division of Air Pollution Control
Permit-to-Install
for
Pro-Tec Coating Company

Facility ID:	0369000025
Permit Number:	P0112268
Permit Type:	Administrative Modification
Issued:	12/24/2012
Effective:	12/24/2012

Division of Air Pollution Control
Permit-to-Install
for
Pro-Tec Coating Company

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. Federally Enforceable Standard Terms and Conditions 4
2. Severability Clause 4
3. General Requirements 4
4. Monitoring and Related Record Keeping and Reporting Requirements 5
5. Scheduled Maintenance/Malfunction Reporting 6
6. Compliance Requirements 6
7. Best Available Technology 7
8. Air Pollution Nuisance 7
9. Reporting Requirements 7
10. Applicability 8
11. Construction of New Sources(s) and Authorization to Install 8
12. Permit-To-Operate Application 9
13. Construction Compliance Certification 9
14. Public Disclosure 9
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 9
16. Fees 10
17. Permit Transfers 10
18. Risk Management Plans 10
19. Title IV Provisions 10
B. Facility-Wide Terms and Conditions 11
C. Emissions Unit Terms and Conditions 13
1. P012, NCWCT-CAL1 14
2. P013, CAL1 18

Authorization

Facility ID:	0369000025
Facility Description:	Steel Finishing Mill
Application Number(s):	M0002012
Permit Number:	P0112268
Permit Description:	Facility-initiated administrative modification to accurately reflect air emissions units, control equipments and egress points that are in the process of being installed as part of the Continuous Annealing Line (CAL1) project. To accurately reflect changes to additional terms and conditions, operational restrictions, monitoring and/or recordkeeping requirements and reporting requirements associated with P013, CAL1 that were collaborated with the Division of Air Pollution Control at Ohio EPA's Northwest District Office. To request changes for applicable emissions limitations for particulate emission associated with P012, NCWCT-CAL1.
Permit Type:	Administrative Modification
Permit Fee:	$625.00
Issue Date:	12/24/2012
Effective Date:	12/24/2012

This document constitutes issuance to:

Pro-Tec Coating Company
5000 County Rd. #5
Leipsic, OH 45856-9234

of a Permit-to-Install for the emissions unit(s) identified on the following page.

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 Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0112268
Permit Description: Facility-initiated administrative modification to accurately reflect air emissions units, control equipments and egress points that are in the process of being installed as part of the Continuous Annealing Line (CAL1) project. To accurately reflect changes to additional terms and conditions, operational restrictions, monitoring and/or recordkeeping requirements and reporting requirements associated with P013, CAL1 that were collaborated with the Division of Air Pollution Control at Ohio EPA's Northwest District Office. To request changes for applicable emissions limitations for particulate emission associated with P012, NCWCT-CAL1.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**P012**
Company Equipment ID:	NCWCT-CAL1
Superseded Permit Number:	P0106197
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P013**
Company Equipment ID:	AF-CAL1
Superseded Permit Number:	P0106197
General Permit Category and Type:	Not Applicable

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.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e)General Requirements

(3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A.9., Reporting Requirements

(5) Standard Term and Condition A.10., Applicability

(6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A.14., Public Disclosure

(8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A.16., Fees

(10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

a) 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.

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they 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 and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. 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 re-issuance, or modification.

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, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

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

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying 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.

4. 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, 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.

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

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emissionlimitations, operationalrestrictions,

andcontroldeviceoperatingparameterlimitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northwest District Office. The written 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. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, andreportingrequirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Northwest District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Northwest District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

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

6. Compliance Requirements

a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

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

c) 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 ORC section 3704.08.

(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.

d) The permittee shall submit progress reports to the Ohio EPA DAPC, Northwest District Office 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.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northwest District Office. If no deviations occurred during a calendar quarter, the permitteeshall

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.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

11. Construction of New Sources(s) and Authorization to Install

a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit 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) by submitting a certification from the authorized 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 authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as “permanently shut down” in Ohio EPA’s “Air Services” along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit 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). All

records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

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

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

a) Completion of initial installation date shall be enteredupon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

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

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

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the “Owner/Contact Change” functionality in Air Services once the transfer is legally completed.The change must be submitted through Air Services within thirty days of the ownership transfer date.

18. Risk Management Plans

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

19. 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.

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. The permittee is advised that this facility is 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). The U.S. EPA is responsible for the administration of the requirements of this rule at this time. It should be noted that the enforcement authority of the GACT requirements have not been delegated to Ohio EPA at the time of this permit processing. The complete requirements of this rule (including the Part 63 General Provisions) may be accessed via the Internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.govor by contacting the appropriate Ohio EPA District Office of local air agency.

C. Emissions Unit Terms and Conditions

1. P012, NCWCT-CAL1

Operations, Property and/or Equipment Description:

CAL1 - Non-Contact Water Cooling Tower.

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)c.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	Particulate matter equal to or less than ten microns in diameter (PM_{10}) shall not exceed 0.74 pound per hour (lb/hr) and 3.24 ton per year (tpy). Visible particulate emissions (PE) shall not exceed 10% opacity, as a six-minute average. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)c.
d.	OAC rule 3745-17-07(A)(1)	See b)(2)d.
e.	OAC rule 3745-17-11(B)	See b)(2)e.

(2) Additional Terms and Conditions

a. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) for PM_{10}. The PTE is being restricted such that the emission increase for PM_{10} allowed for in this permit action will be below the Prevention of Significant Deterioration (PSD) "significant threshold" applicability level of 15 tpy (for PM_{10}). The federally enforceable emission limitations are based on the operational restrictions contained in c)(1) and c)(2). which require control equipment and process control:

i. 0.74 lb/hr and 3.24 tpy PM_{10}; and

ii. visible PE shall not exceed 10% opacity, as a six-minute average.

All emissions of particulate matter from the cooling tower are PM_{10}.

b. The requirements of this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D); therefore, the permitteehas satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 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 Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 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.

c. This rule paragraph 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 PM_{10} emissions from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration federally enforceable requirements established under OAC rule 3745-31-05(D).

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

e. The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(D).

f. 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.

c) Operational Restrictions

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

a. this emissions unit shall employ a drift eliminator achieving "drift loss" equal to or less than 0.005 percent; and

b. maintain the total dissolved solids (TDS) content of the circulating cooling water at 1,750 mg/L or less.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall determine the TDS content, in mg/L, of the cooling tower water in accordance with the following:

a. Conductivity shall be used to determine the TDS content of the cooling tower water based on an established correlation (or index) between TDS and conductivity of the cooling water.

b. The permittee shall properly install, operate, and maintain equipment to continuously monitor and electronically record the conductivity of the cooling tower water. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

c. The permittee shall employ a computerized data management system to determine the conductivity based on a monthly average of the electronically recorded information.

d. If the continuous conductivity monitor malfunctions or is otherwise not operational for greater than a 24-hour period:

i. The permittee shall notify the Ohio EPA district office or local air agency of such malfunction as soon as practicable, but not later than twenty-four hours after the discovery of the event. Notification shall take the form of a telephone call, fax, or other electronic notification.

ii. The duration of the equipment malfunction shall be recorded.

iii. The permittee shall perform and record daily conductivity tests of samples from the cooling tower water until the malfunction is resolved. The results of the samples shall be applied to the monthly conductivity calculation.

iv. The Ohio EPA district office or local air agency shall be notified when the condition causing the malfunction was corrected and the equipment is again in operation. Notification shall take the form of a telephone call, fax, or other electronic notification and shall occur as expeditiously as practicable, but no later than two weeks after the correction has occurred.

e) Reporting Requirements

(1) 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.

(2) The permittee shall submit deviation (excursion) reports that identify any exceedances of the TDS content requirement. Each report shall be submitted within 30 days after the deviation occurs.

f) Testing Requirements

(1) 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 Limitations:

PM_{10} emissions shall not exceed 0.74 lb/hr and 3.24 tpy.

Applicable Compliance Method:

Compliance with the lb/hr limitation shall be demonstrated by multiplying the drift loss factor (0.005 percent) by the maximum circulating water flow rate (1,020,000 gallons/hr), the maximum TDS content (1750 mg/L), and then applying the conversion factors of 3.785 L/gal and 454,000 mg/lb.

If required, the permittee shall submit a testing proposal to demonstrate that the maximum drift loss does not exceed 0.005 percent.

The annual limitation was determined by multiplying the hourly limitation by a maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

b. Emission Limitation:

Visible PE shall not exceed 10% opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be demonstrated in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

g) Miscellaneous Requirements

(1) None.

2. P013, CAL1

Operations, Property and/or Equipment Description:

Continuous annealing line 1 that 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)d., b)(1)(h), d)(11) through d)(15), and e)(4).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC rule 3704.03(T)	Carbon monoxide 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)	Nitrogen oxides (NOx) emissions shall not exceed 1.40 pound 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	Volatile organic compound (VOC) emissions shall not exceed 0.50lbs/hr and 2.20tpy 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)(a)(ii), as effective 12/01/06	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	See d)(11) through d)(15) and e)(4).

(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 PM_{10}). The potential emissions of CO, NOx, SO2, VOC, and PM_{10} 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 PM_{10}. The PTE is being restricted such that the emission increase for NOx and PM_{10} allowed for in this permit action (P0106197) will be below the Prevention of Significant Deterioration (PSD) "significant threshold" applicability level of 40 tpy for NOx and 15 tpy for PM_{10}. 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 particulate emissions from the stack serving the mesh pad mist eliminator 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 PM_{10} 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 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.

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 lbNOx/mmBtu heat input, based on a 3-hour rolling average. For this operational restriction, "in a production mode of 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 lbNOx/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 PM_{10}.

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

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. lbNOx/mmBtu heat input, as a 3-hr rolling average

b. non-production mode of operation:

i. lbNOx/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.

(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.

(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 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.

(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;

(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.

(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, when , 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.

(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.

(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.

(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.

(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.

(11) The permit-to-install (PTI) application for these emissions units B045, B046 andP013 (PTI #P0106197 issued 9/9/2012),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 andP013, 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).

(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.

(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.

(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.

(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.

(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.

(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 acontinuous 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.

l. 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 anadministrative modification.

e) Reporting Requirements

(1) 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.

(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 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).

(3) 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.

(4) 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.

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 CFRPart 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.

(2) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following method(s):

a. Emission Limitation:

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.

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;

iii. 6.13 tpy

Applicable Compliance Method:

Compliance with the lb/mmBtu and hourly 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 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.

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;

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 PM_{10}/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 covert to pounds per hour: 1 pound/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 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.

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 emissionsunit. 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, 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.

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 limitation was determined by multiplying the hourly limitation by a maximum operating schedule of 8760 hours per year and dividing by 2000

pounds per ton. Therefore, provided compliance is shown with the hourly limitation,compliance with the annual limitation shall also be demonstrated.

d. Emission Limitation:

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-CAL1Potential 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 limitation was determined by multiplying the hourly limitation by a maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation,compliance with the annual limitation shall also be demonstrated.

g) Miscellaneous Requirements

(1) None.