



State of Ohio Environmental Protection Agency

Street Address:

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122 S. Front Street  
Columbus, OH 43215

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

02/06/02

**RE: Proposed Title V Chapter 3745-77 Permit  
03-70-02-0133  
LTV Copperweld Tubular Products**

Attn: Genevieve Damico AR-18J  
United States Environmental Protection Agency  
Region V  
77 West Jackson Blvd.  
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for LTV Copperweld Tubular Products, has been created in Ohio EPA's State Air Resources System (STARS) on 02/06/02, for review by USEPA. This proposed action is identified in STARS as  3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and  Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact Mike Ahern, DAPC Permit Management Unit supervisor at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,



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

cc: Northwest District Office  
File, DAPC PMU



State of Ohio Environmental Protection Agency

PROPOSED TITLE V PERMIT

Issue Date: 02/06/02

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 03-70-02-0133 to:
LTV Copperweld Tubular Products
132 W. Main Street
Shelby, OH 44875-1471

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

Table with 3 columns: Emissions Unit ID, Activity Description, and Emissions Unit Activity Description. Rows include P003, P013, P019, P022, P023, and P031.

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below.

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

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

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. *State and Federally Enforceable Section*

#### 1. **Monitoring and Related Record Keeping and Reporting Requirements**

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.6 below if no deviations occurred during the quarter.  
*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))*

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.  
*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))*
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

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

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

Except as provided in OAC rule 3745-15-06, 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).

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

## **3. Risk Management Plans**

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

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

## **4. Title IV Provisions**

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

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

## 5. Severability Clause

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

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

## 6. General Requirements

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

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

## 7. Fees

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

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

## 8. Marketable Permit Programs

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

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

**9. Reasonably Anticipated Operating Scenarios**

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

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

**10. Reopening for Cause**

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

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

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

**11. Federal and State Enforceability**

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

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

**12. Compliance Requirements**

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

- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
- i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - ii. Compliance certifications shall include the following:
    - (a) An identification of each term or condition of this permit that is the basis of the certification.
    - (b) The permittee's current compliance status.
    - (c) Whether compliance was continuous or intermittent.
    - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
    - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
  - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

**13. Permit Shield**

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

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

**14. Operational Flexibility**

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

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

**15. Emergencies**

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

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

**16. Off-Permit Changes**

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

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions

or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;

- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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

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

**17. Compliance Method Requirements**

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

*(This term is provided for informational purposes only.)*

**18. Insignificant Activities**

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

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

**19. Permit to Install Requirement**

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

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

**20. Air Pollution Nuisance**

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

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

**B. State Only Enforceable Section**

**1. Reporting Requirements Related to Monitoring and Record Keeping Requirements**

The permittee shall submit required reports in the following manner:

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

**2. Records Retention Requirements**

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

**3. Inspections and Information Requests**

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

**4. Scheduled Maintenance/Malfunction Reporting**

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

control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**5. Permit Transfers**

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

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

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

## Part II - Specific Facility Terms and Conditions

### A. State and Federally Enforcable Section

None

### B. State Only Enforceable Section

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

B013 Plant 2-Rupp 23689-53 Heater;  
B014 Plant 2-Building 74 Hastings-Make up Air UnitCF-400-G81;  
K003 Line 1-Stencil Unit;  
P027 Quench & Temper: Temper Furnace;  
P028 Quench & Temper: Holding Furnace;  
Z018 Line 9-Stencil Unit;  
B001 Plant 1-Boiler 16664;  
B002 Pant 1-Boiler 16665;  
B004 Plant 1-Boiler 16667;  
B005 Plant 2-Boiler #1;  
B006 Plant 1:4 Mill MAU;  
B007 Plant 2-Water Heater;  
B008 Plant 1-Boiler #5;  
B009 Plant 2-Cogen Boiler #1;  
B010 Plant 2-Rupp 23689-50 Heater;  
B011 Plant 2-Rupp 23689-51 Heater;  
B012 Plant 2-Rupp 23689-52 Heater;  
B015 Plant 2-Building 97 Hastings-Make Air unitCF-400-G81;  
P001 Hot Mill-Reheat Furnace;  
P007 Plant 1-#8 SRA Furnace;  
P009 Plant 1-#2 SRA Furnace;  
P016 Plant 2-#16 SRA Furnace;  
P018 Plant 1-#6 SRA Furnace;  
P021 Plant 2-#18 SRA Furnace;  
P032 Plant 2-#22 SRA Furnace;  
T006 Plant 1-New Oil Storage Tank;  
T007 Plant 1-Used Oil Storage Tank;  
T009 Plant 2-South:New Oil Storage Tank;  
T010 Plant 2-South:Used Oil Storage Tank;  
T011 Plant 1-Waste Oil Collection Tank;  
Z001 Plant 2-Boiler #2;  
Z002 Plant 2-Boiler #3;  
Z003 Plant 2-Boiler #4;  
Z004 Plant 2 MAU-#4;  
Z005 Plant 2 MAU-#5;  
Z006 Plant 2-CoGen Boiler #2;  
Z007 Plant 2-Boiler #5;  
Z008 Plant 2-Boiler #6;  
Z009 Plant 2-Building 97A MAU20 Absolutaire;  
Z010 Plant 2-Building 98C North MAU21Absolutaire R366UO;

**B. State Only Enforceable Section (continued)**

Z011 Plant 2-Building 98E MAU22 Absolutaire R366UO;  
Z012 Plant 2-Building 98C South MAU23 Absolutaire R366UO;  
Z013 Plant 2-Building 98D Northwest MAU24 Absolutaire R349UO;  
Z014 Plant 2-Building 98D Northeast MAU25 Absolutaire R349UO;  
Z015 Plant 2-Building 98D Southwest MAU25 Absolutaire R349UO;  
Z016 Plant 2-Building 98D Southeast MAU25 Absolutaire R349UO;  
Z017 Plant 2-#24 SRA Furnace;  
Z019 Plant 2-North: New Oil Storage Tank;  
Z020 Plant 2-Building 77C Absolutaire Make-Up Air Unit R366U;  
Z021 Plant 2-Building 77B Absolutaire Make-Up Air Unit R366U;  
Z022 Plant 2-Building 78A Absolutaire Make-Up Air Unit R366U;  
Z023 Plant 2-Building 78B Absolutaire Make-Up Air Unit R366U;  
Z024 Plant 2-North: Used Oil Storage Tank;  
Z025 Plant 1-#1 CoGen Boiler;  
Z026 Plant 1-#2 CoGen Boiler;  
K001 Line 7-Stencil Unit;  
K002 Line 8-Stencil Unit;  
K004 Line 2-Stencil Unit;  
K005 Line 3-Stencil Unit;  
K006 Line 4-Stencil Unit;  
P014 Plant 1-Pickle Tubs 1-7;  
P020 Plant 1-North Pickle Tub;  
P024 Plant 2-#8 Mill Pangborne;  
P025 Plant 2-#12 Mill Pangborne;  
P026 Plant 1-#4 Mill Wheelabrator;  
P034 Plant 2-N. Pickle Tub;  
T001 500,000-gallon Storage Tank;  
T002 100,000-gallon Storage Tank; and  
T003 1,000,000-gallon Storage Tank.

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

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

**Emissions Unit ID:** Plant 1-#3 Normalize Furnace (P003)

**Activity Description:** 13.125 million BTU/hr Natural Gas Fired Anneal Furnace. This furnace utilizes Dx gas primarily from source Z026.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#3 normalize furnace (Plant 1); 13.125 mmBtu/hr, natural gas-fired	OAC rule 3745-17-07(A)	none (See A.I.2.a.)
	OAC rule 3745-17-11(B)	none (See A.I.2.b.)
	OAC rule 3745-18-06(E)(2)	Sulfur dioxide emissions shall not exceed 120.8 pounds per hour.

##### 2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from the visible particulate emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.
- 2.b The uncontrolled mass rate of particulate emissions (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 process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01(B)(14).

\* The burning of natural gas and Dx gas\*\* is the only source of PE from this emissions unit.

\*\* Dx gas is derived from natural gas in a Dx generator. It is made up of mostly carbon monoxide. It is used for the purpose of preventing the oxidation of carbon when steel is in the furnace.

##### II. Operational Restrictions

None

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

None

##### IV. Reporting Requirements

None

## **V. Testing Requirements**

1. Emission Limitation:  
Sulfur dioxide emissions shall not exceed 120.8 pounds per hour.

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas and Dx gas. The process materials (steel tubing) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the natural gas and Dx gas.

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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Hot Mill Rotary Furnace (P013)

**Activity Description:** 97 Million BTU/hr Normal Maximum Fire:Natural Gas Fired Rotary Hearth Furnace. Modification July 1998, Maximum Average Firing Rate: 122.5 Million BTU/hr.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
122.5 mmBtu/hr, natural gas-fired hot mill rotary hearth furnace	OAC rule 3745-31-05 (PTI #03-13000)	0.37 lb organic compounds(OC)/hr 1.62 tons OC/yr 0.003 lb OC/mmBtu of actual heat input
		0.07 lb sulfur dioxide (SO <sub>2</sub> )/hr 0.32 ton SO <sub>2</sub> /yr 0.0006 lb SO <sub>2</sub> /mmBtu of actual heat input
		0.86 lb particulate emissions (PE)/hr 3.76 tons PE/yr 0.007 lb PE/mmBtu of actual heat input
		16.66 lbs nitrogen oxides (NO <sub>x</sub> )/hr 72.97 tons NO <sub>x</sub> /yr 0.136 lb NO <sub>x</sub> /mmBtu of actual heat input
		See A.I.2.a.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-08(B) and 3745-23-06(B).
	OAC rule 3745-17-07(A)	none (See A.I.2.b.)
	OAC rule 3745-17-11(B)	none (See A.I.2.c.)
	OAC rule 3745-18-06(E)(2)	none (See A.I.2.d.)
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.e.

##### 2. Additional Terms and Conditions

- 2.a** The permittee shall employ low NO<sub>x</sub> burners in this emissions unit. (As a result of the modification of PTI 03-13000 issued on 6/14/00, the permittee installed 25 new low NO<sub>x</sub> burners in this emissions unit.)

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

- 2.b** This emissions unit is exempt from the visible particulate 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.
- 2.c** The uncontrolled mass rate of particulate emissions (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 process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01(B)(14).
- \* The burning of natural gas is the only source of PE from this emissions unit.
- 2.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).
- 2.e** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-13000.

## **II. Operational Restrictions**

1. The permittee shall only process "clean" raw materials (i.e., free of oils, greases, solvents, etc.) in this emissions unit.
2. The firing rate for this emissions unit shall not exceed 122.5 mmBtu/hr.
3. The permittee shall burn only natural gas in this emissions unit.

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

1. The permittee shall maintain daily records of the following information for this emissions unit:
  - a. the total number of hours the emissions unit was in operation;
  - b. the total natural gas fuel usage, in mm cu. ft; and
  - c. the firing rate, in mmBtu/hr, calculated using the following equation:  
$$\text{firing rate (mmBtu/hr)} = [\text{total daily natural gas usage rate (from section b above)} \times 1,030 \text{ mmBtu/mm cu. ft} \times 1 / \text{the total number of hours the emissions unit was in operation (from section a above)}]$$
2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

## **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the firing rate of 122.5 mmBtu/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
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.

## V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 3 months after issuance of the permit, unless emissions testing was conducted within the previous year, and within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for NO<sub>x</sub>.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): NO<sub>x</sub> - Methods 1 through 4 and 7E, 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.

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 emission 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 section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

- 2.a Emission Limitations:  
0.37 lb OC/hr, 0.003 lb OC/mmBtu and 1.62 tons OC/yr

### Applicable Compliance Method:

The permittee may determine compliance with the lb/mmBtu limitation by multiplying the emission factor from the source classification code document for Fabricated Metal Products (SCC # 3-09-900-03) of 2.8 lbs OC/mm cu.ft of natural gas combusted by the maximum hourly usage rate for natural gas (.1189 mm cu.ft/hr), and then dividing by the restricted maximum heat input capacity of the emissions unit (122.5 mmBtu/hr).

The permittee may determine compliance with the hourly limitation by multiplying the emission factor from the source classification code document for Fabricated Metal Products (SCC # 3-09-900-03) of 2.8 lbs OC/mm cu.ft of natural gas combusted by the maximum hourly usage rate for natural gas (.1189 mm cu.ft/hr).

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

If required, the permittee shall demonstrate compliance with the hourly and lb/mmBtu OC emission limitations above in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

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

**2.b** Emission Limitations:  
0.07 lb SO<sub>2</sub>/hr, 0.0006 lb SO<sub>2</sub>/mmBtu and 0.32 ton SO<sub>2</sub>/yr

**Applicable Compliance Method:**

The permittee may determine compliance with the lb/mmBtu limitation by multiplying the emission factor from the source classification code document for Fabricated Metal Products (SCC # 3-09-900-03) of 0.6 lb SO<sub>2</sub>/mm cu.ft of natural gas combusted by the maximum hourly usage rate for natural gas (.1189 mm cu.ft/hr), and then dividing by the restricted maximum heat input capacity of the emissions unit (122.5 mmBtu/hr).

The permittee may determine compliance with the hourly limitation by multiplying the emission factor from the source classification code document for Fabricated Metal Products (SCC # 3-09-900-03) of 0.6 lb SO<sub>2</sub>/mm cu.ft of natural gas combusted by the maximum hourly usage rate for natural gas (.1189 mm cu.ft/hr).

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

If required, the permittee shall demonstrate compliance with the hourly and lb/mmBtu SO<sub>2</sub> emission limitations above in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 6.

**2.c** Emission Limitations:  
0.86 lb PE/hr, 0.007 lb PE/mmBtu and 3.76 tons PE/yr

**Applicable Compliance Method:**

The permittee may determine compliance with the lb/mmBtu limitation by multiplying the emission factor from USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (revised 7/98) of 1.9 lbs PE/mm cu.ft natural gas combusted by the maximum hourly usage rate for natural gas (.1189 mm cu.ft/hr), and then dividing by the restricted maximum heat input capacity of the emissions unit (122.5 mmBtu/hr).

The permittee may determine compliance with the hourly limitation by multiplying the emission factor from USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (revised 7/98) of 1.9 lbs PE/mm cu.ft natural gas combusted by the maximum hourly usage rate for natural gas (.1189 mm cu.ft/hr).

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

If required, the permittee shall demonstrate compliance with the hourly and lb/mmBtu PE limitations above in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5.

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

**2.d** Emission Limitations:  
16.66 lbs NOx/hr, 0.136 lb NOx/mmBtu of actual heat input and 72.97 tons NOx/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly and lb/mmBtu emission limitations above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 7E.

The permittee may determine compliance with the lb/mmBtu limitation by multiplying the emission factor from USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-1 (revised 7/98) of 140 lbs NOx/mm cu.ft natural gas combusted by the maximum hourly usage rate for natural gas (.1189 mm cu.ft/hr), and then dividing by the restricted maximum heat input capacity of the unit (122.5 mmBtu/hr).

The permittee may determine compliance with the hourly limitation by multiplying the emission factor from USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-1 (revised 7/98) of 140 lbs NOx/mm cu.ft natural gas combusted by the maximum hourly usage rate for natural gas (.1189 mm cu.ft/hr).

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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Plant 1-#15 Normalize Furnace (P019)

**Activity Description:** 12.6 million BTU/hr Natural Gas Fired Anneal Furnace. with a 4.5 Million BTU/hr Natural Gas Fired Dx gas generating unit. This source may also obtain Dx gas from source Z025.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#15 normalize furnace (Plant 1) 12.6 mm Btu/hr, natural gas-fired anneal furnace	OAC rule 3745-17-07(A)	none (See A.I.2.b.)
	OAC rule 3745-17-11(B)	none (See A.I.2.c.)
	OAC rule 3745-31-05(A) (PTI #03-919)	See A.I.2.a.
	OAC rule 3745-18-06(E)(2)	Sulfur dioxide emissions shall not exceed 140.3 pounds per hour.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.d.

##### 2. Additional Terms and Conditions

- 2.a The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-18-06(E), 3745-21-08(B) and 3745-23-06(B).
- 2.b This emissions unit is exempt from the visible particulate 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.
- 2.c The uncontrolled mass rate of particulate emissions (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 process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01(B)(14).

\* The burning of natural gas and Dx gas\*\* is the only source of PE from this emissions unit.

\*\* Dx gas is derived from natural gas in a Dx generator. It is made up of mostly carbon monoxide. It is used for the purpose of preventing the oxidation of carbon when steel is in the furnace.

- 2.d The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-919.

**II. Operational Restrictions**

**None**

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

**None**

**IV. Reporting Requirements**

**None**

**V. Testing Requirements**

1. Emission Limitation:  
Sulfur dioxide emissions shall not exceed 140.3 pounds per hour.

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas and Dx gas. The process materials (steel tubing) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the natural gas and Dx gas.

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

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Plant 2-#17 Normalize Furnace (P022)

**Activity Description:** 15.75 Million BTU/hr Natural Gas Fired Anneal Furnace with a 4.5 Million BTU/hr Natural Gas Fired Dx Gas generating unit.

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#17 normalize furnace (Plant 2) 15.75 mm Btu/hr, natural gas-fired anneal furnace	OAC rule 3745-17-07(A)	none (See A.I.2.b.)
	OAC rule 3745-17-11(B)	none (See A.I.2.c.)
	OAC rule 3745-31-05(A) (PTI #03-530)	See A.I.2.a.
	OAC rule 3745-18-06(E)(2)	Sulfur dioxide emissions shall not exceed 167.3 pounds per hour.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.d.

##### 2. Additional Terms and Conditions

- 2.a The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-18-06(E), 3745-21-08(B) and 3745-23-06(B).
- 2.b This emissions unit is exempt from the visible particulate 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.
- 2.c The uncontrolled mass rate of particulate emissions (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 process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01(B)(14).

\* The burning of natural gas and Dx gas\*\* is the only source of PE from this emissions unit.

\*\* Dx gas is derived from natural gas in a Dx generator. It is made up of mostly carbon monoxide. It is used for the purpose of preventing the oxidation of carbon when steel is in the furnace.

- 2.d The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-530.

##### II. Operational Restrictions

None

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

**None**

**IV. Reporting Requirements**

**None**

**V. Testing Requirements**

1. Emission Limitation:  
Sulfur dioxide emissions shall not exceed 167.3 pounds per hour.

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas and Dx gas. The process materials (steel tubing) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the natural gas and Dx gas.

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

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Plant 2-#19 Normalize Furnace (P023)  
**Activity Description:** 14.4 million BTU/hr Natural Gas Fired Anneal Furnace

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#19 normalize furnace (Plant 2) 15.75 mmBtu/hr, natural gas-fired anneal furnace	OAC rule 3745-17-07(A)	none (See A.I.2.a.)
	OAC rule 3745-17-11(B)	none (See A.I.2.b.)
	OAC rule 3745-31-05 (PTI #03-4897)	0.33 lb particulate emissions (PE)/hr 2.64 lbs nitrogen oxides (NOx)/hr See A.I.2.d.
	OAC rule 3745-18-06(E)(2)	Sulfur dioxide emissions shall not exceed 140.3 pounds per hour.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.c.

##### 2. Additional Terms and Conditions

- 2.a This emissions unit is exempt from the visible particulate 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.
- 2.b The uncontrolled mass rate of particulate emissions 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 because the process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01(B)(14).
  - \* The burning of natural gas is the only source of PE from this emissions unit.
- 2.c The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-4897.
- 2.d The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-18-06(E), 3745-21-08(B) and 3745-23-06(B).

## II. Operational Restrictions

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

## III. Monitoring and/or Record Keeping Requirements

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

## IV. Reporting Requirements

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

## V. Testing Requirements

1. Compliance with the emission limitations in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitation:  
0.33 lb PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly limitation by multiplying the emission factor from USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (revised 7/98) of 1.9 lbs PE/mm cu.ft natural gas combusted by the maximum hourly usage rate for natural gas (.0153 mm cu.ft/hr).

If required, the permittee shall demonstrate compliance with the PE limitation above in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

- 1.b Emission Limitation:  
2.64 lbs NOx/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly limitation by multiplying the emission factor from the source classification code document for Fabricated Metal Products (SCC # 3-09-900-03) of 140 lbs NOx/mm cu.ft of natural gas combusted by the maximum hourly usage rate for natural gas (.0153 mm cu.ft/hr).

If required, the permittee shall demonstrate compliance with the NOx emission limitation above in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7E.

- 1.c Emission Limitation:  
Sulfur dioxide emissions shall not exceed 140.3 pounds per hour.

Applicable Compliance Method:

The sulfur dioxide emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials (steel tubing) employed in this emissions unit do not generate sulfur dioxide emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the natural gas.

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

## **VI. Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon NO<sub>x</sub> emission factors for industrial processes, USEPA source classification code 3-09-900-03. The permittee has since aquired burner data from the manufacturer specific to this furnace. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors from the burner manufacturer. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee submitted a permit to install modification application November 8, 2001.

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Plant 1-West Chrome Plate Tank (P031)

**Activity Description:** Hard Chrome electroplating system with a Duall-Hexmaster Chrome Scrubber System.(NESHAPS Source-Must meet MACT Std.)

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
west hard chrome electroplating tank (Plant 1), with packed bed scrubber and composite mesh-pad system	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)	0.551 lb (PE)/hr
	40 CFR, Part 63, Subpart N	0.03 milligram total chromium/dry standard cubic meter of exhaust gas discharged to atmosphere (See A.2.a.)

##### 2. Additional Terms and Conditions

- The permittee shall not allow the concentration of total chromium in the exhaust gases discharged to the atmosphere to exceed 0.03 mg/dscm (1.3E-5 gr/dscf).

##### II. Operational Restrictions

- At all times, including periods of start-up, shutdown, and malfunction, the permittee shall operate and maintain any chromium electroplating or anodizing tank, including associated air pollution control devices and monitoring equipment, in a manner consistent with the operation and maintenance plan required by these terms and conditions.
- Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan.

## II. Operational Restrictions (continued)

3. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the appropriate Ohio EPA District Office or local air agency, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the emissions unit. Based on this information, the appropriate Ohio EPA District Office or local air agency may require that the permittee make changes to the operation and maintenance plan if that plan:
  - a. does not address a malfunction that has occurred;
  - b. fails to provide for the operation of the emissions units, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution practices; or
  - c. does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.
4. The permittee's operation and maintenance plan shall include the following elements:
  - 4.a The plan shall specify the operation and maintenance criteria for the affected emissions unit, the add-on air pollution control device (if such a device is used to comply with the emission limitations), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of the equipment.
  - 4.b The operation and maintenance plan shall incorporate the following work practice standards:
    - i. Visually inspect the device at least once per quarter to ensure there is proper drainage, no chronic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device.
    - ii. Visually inspect at least once per quarter the back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist.
    - iii. Visually inspect at least once per quarter the ductwork from tank to the control device to ensure there are no leaks.
    - iv. Perform washdown of the composite mesh-pads in accordance with manufacturer's recommendations.
  - 4.c If a pitot tube is used for monitoring, the operation and maintenance plan shall incorporate the following work practice standards to be performed at least once per quarter:
    - i. Backflush with water, or remove from the duct and rinse with fresh water.
    - ii. Replace in the duct and rotate 180 degrees to ensure that the same zero reading is obtained.
    - iii. Check pitot tube ends for damage. Replace pitot tube if cracked or fatigued.
  - 4.d The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur.
  - 4.e The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment, and for implementing corrective actions to address such malfunctions.
  - 4.f If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the permittee shall revise the operation and maintenance plan within 45 days after such an event occurs.
  - 4.g If actions taken by the permittee during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan, the permittee shall record the actions taken for that event and shall report such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event, unless the permittee makes alternative reporting arrangements, in advance, with the appropriate Ohio EPA District Office or local air agency.

## II. Operational Restrictions (continued)

- 4.h The permittee shall keep the written operation and maintenance plan on site for the life of the emissions unit and make it available for inspection, upon request, by the appropriate Ohio EPA District Office or local air agency. If the operation and maintenance plan is revised, the permittee shall keep previous versions of the plan on record to be made available for inspection, upon request, by the appropriate Ohio EPA District Office or local air agency for a period of 5 years after each revision to the plan.
- 4.i The permittee may use applicable standard operating procedure manuals, Occupational Safety and Health Administration plans, or other existing plans to meet the operation and maintenance plan requirements as long as the alternative plans meet the requirements.

## III. Monitoring and/or Record Keeping Requirements

- 1. During the initial performance test, the permittee shall determine the outlet chromium concentration using the methods as described in the "Testing Requirements" section of this permit to comply with the emission limitation through the use of a packed-bed scrubber and composite mesh-pad system. The permittee shall establish as a site-specific operating parameter the pressure drop across the system, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in the "Testing Requirements" section of this permit.
- 2. The permittee may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliance value the average pressure drop measured over the three test runs of one performance test and accept plus or minus 1 inch of water column from this value as the compliant range.
- 3. On and after the date on which the initial performance test is required to be completed under Section 63.7 of 40 CFR Part 63, Subpart A, the permittee shall monitor and record the pressure drop across the composite mesh-pad system once each day that the emissions unit is operating. To be in compliance, the composite mesh-pad system shall be operated within plus or minus 1 inch of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests.
- 4. The permittee shall fulfill all record keeping requirements in the General Provisions to 40 CFR Part 63, according to the applicability of Subpart A.
- 5. The permittee also shall maintain the following records:
  - 5.a Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of this permit have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.
  - 5.b Records of all maintenance performed on the emissions unit, add-on air pollution control device, and monitoring equipment.
  - 5.c Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control device, and monitoring equipment.
  - 5.d Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan.
  - 5.e Other records, which may take the form of checklists, necessary to demonstrate consistence with the provisions of the operation and maintenance plan.
  - 5.f Test reports documenting results of all performance tests.
  - 5.g All measurements as may be necessary to determine the conditions of performance tests.
  - 5.h Records of monitoring data that are used to demonstrate compliance with the standard including the date and time the data are collected.
  - 5.i The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control device, or monitoring equipment.

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

- 5.j The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control device, or monitoring equipment.
- 5.k The total process operating time of the emissions unit during the reporting period.
- 5.l All documentation supporting the notifications and reports as outlined in the Reporting Requirements of this permit and Sections 63.9 and 63.10 of 40 CFR Part 63, Subpart A.
- 5.m Records of the actual cumulative rectifier capacity of hard chromium electroplating tanks expended during each month of the reporting period, and the total capacity expended to date for a reporting period.
- 6. All records shall be maintained for a period of 5 years.

### IV. Reporting Requirements

- 1. The permittee shall fulfill all reporting requirements as outlined in 40 CFR Part 63, Subpart A. These reports shall be submitted to U.S. EPA with a copy also being sent to the appropriate Ohio EPA District Office or local air agency and shall be sent by U.S. mail, fax or by another courier.
  - a. Submittals sent by U.S. mail shall be postmarked on or before the specified date.
  - b. Submittals sent by other methods shall be received by U.S. EPA with a copy also being sent to the appropriate Ohio EPA District Office or local air agency on or before the specified date.
- 2. The permittee shall submit a Notification of Compliance Status to the appropriate Ohio EPA District Office or local air agency 90 days after the performance test is completed, signed by the responsible official who shall certify its accuracy, attesting to whether the affected emissions unit is in compliance. The notification shall list for each affected emissions unit:
  - a. The applicable emission limitations and the methods that were used to determine compliance with this limitation.
  - b. If a performance test is required, the test report documenting the results of the performance test, which includes the elements required in the Test Requirements section of this permit, including measurements and calculations to support special compliance provisions for multiple emissions units controlled by a common add-on air pollution control device.
  - c. The type and quantity of hazardous air pollutants emitted by the emissions unit reported in mg/dscm or mg/hr if the emissions unit is using the special provisions for multiple emissions units controlled by a common add-on air pollution control device. (For emissions units not required to conduct a performance test, the surface tension measurement may fulfill this requirement.)
  - d. For each monitored parameter for which a compliant value was established, the specific operating parameter value, or range of values, that corresponds to compliance with the applicable emission limitation.
  - e. The methods that will be used to determine continuous compliance.
  - f. A description of the air pollution control technique used for each emission point.
  - g. A statement that the permittee has completed and has on file the operation and maintenance plan as required by the work practice standards.
  - h. A statement by the owner or operator as to whether the emissions unit is in compliance.
  - i. Records to support that the facility is small.
- 3. The permittee shall report to U.S. EPA and to the appropriate Ohio EPA District Office or local air agency the results of any performance test conducted. The report shall be submitted no later than 90 days following the completion of the performance test, and shall be submitted as part of the notification of compliance status report required by this section.

#### IV. Reporting Requirements (continued)

4. The permittee shall prepare an ongoing compliance status report semiannually (unless a request to reduce frequency of ongoing compliance status reports has been approved) to U.S. EPA and the appropriate Ohio EPA District Office or local air agency to document the ongoing compliance status of the emissions unit. This report shall include the following:
  - a. The company name and address of the emissions unit.
  - b. An identification of the operating parameter that is monitored for compliance determination.
  - c. The relevant emission limitation for the emissions unit, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation as specified in the Notification of Compliance Status required by this section.
  - d. The beginning and ending dates of the reporting period.
  - e. The total operating time of the emissions unit during the reporting period.
  - f. A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total emissions unit operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes.
  - g. A certification by a responsible official that the work practice standards in this permit were followed in accordance with the operation and maintenance plan for the emissions unit.
  - h. If the operation and maintenance plan required by this permit was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the reports required by the work practices in this permit.
  - i. A description of any changes in monitoring, processes, or controls since the last reporting period.
  - j. The name, title, and signature of the responsible official who is certifying the accuracy of the report.
  - k. The date of the report.
  - l. The actual cumulative rectifier capacity expended during the reporting period, on a month-by-month basis.
  - m. The reports shall be submitted semiannually except when:
    - i. the U.S. EPA and appropriate Ohio EPA District Office or local air agency determine that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit; or
    - ii. the monitoring data collected by the permittee show that the emission limitation has been exceeded, in which case quarterly reports shall be submitted. Once an exceedance is reported, ongoing compliance status reports shall be submitted quarterly until a request to reduce reporting frequency is approved.
5. The permittee who is required to submit ongoing compliance status reports on a quarterly (or more frequent basis) may reduce the frequency of reporting to semiannual if all of the following conditions are met:
  - a. For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods), the ongoing compliance status reports demonstrate that the affected emissions unit is in compliance with the relevant emission limitation.
  - b. The permittee continues to comply with all applicable record keeping and monitoring requirements of 40 CFR Part 63, Subpart A and others listed in this permit.

#### **IV. Reporting Requirements (continued)**

- c. The U.S. EPA and appropriate Ohio EPA District Office or local air agency do not object to a reduced reporting for the affected emissions unit and if the following requirements are met:
  - i. The permittee notifies the U.S. EPA and appropriate Ohio EPA District Office or local air agency in writing of its intention to make such a change, and the U.S. EPA and appropriate Ohio EPA District Office or local air agency do not object to the intended change. In deciding whether to approve a reduced reporting frequency, the U.S. EPA and appropriate Ohio EPA District Office or local air agency may review information concerning the facility's entire previous performance history during the 5-year record keeping period prior to the intended change, or the record keeping period since the facility's compliance date, whichever is shorter. Records subject to review may include performance test results, monitoring data, and evaluations of a permittee's conformance with emission limitations and work practice standards. If the request is disapproved, the permittee will be notified in writing within 45 days after receiving notice of the permittee's intention. The notification will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
  - ii. As soon as the monitoring data show that the facility is not in compliance with the relevant emission limitation, the frequency of reporting shall revert to quarterly, and the permittee shall state this exceedance in the ongoing compliance status report for the next reporting period. After demonstrating ongoing compliance with the relevant emission limitation for another full year, the permittee may again request approval to reduce the reporting frequency.

#### **V. Testing Requirements**

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for chromium.
  - c. The following test method shall be employed to demonstrate compliance with the allowable mass emission rate:  
  
chromium: Method 306 of 40 CFR Part 60, Appendix A
  - 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. In addition, all compliance testing shall be done while the emissions unit is operating under a worst case scenario.

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

**V. Testing Requirements (continued)**

- 2.** Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
- 2.a** Emission Limitation:  
0.551 lb PE/hr
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with the hourly PE limitation above based upon the results of emission testing for chromium conducted in accordance with 40 CFR Part 60, Appendix A, Method 306. (All PE is assumed to be in the form of chromium.)
- 2.b** Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
- Applicable Compliance Method:  
If required, the permittee shall demonstrate compliance with the above visible particulate emissions limitations pursuant to OAC rule 3745-17-03(B)(1).
- 2.c** Emission Limitation:  
0.03 mg total chromium/dscm of exhaust gas discharged to atmosphere
- Applicable Compliance Method:  
The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing for chromium conducted in accordance with 40 CFR Part 60, Appendix A, Method 306.
- 3.** All monitoring equipment shall be installed such that representative measurements of emissions or process parameters from the affected emissions unit are obtained. For monitoring equipment purchased from a vendor, verification of the operational status of the monitoring equipment shall include execution of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system. Specifications for differential pressure measurement devices used to measure velocity pressure shall be in accordance with Section 2.2 of Method 2 (40 CFR Part 60, Appendix A).
- 4.** The permittee shall measure the pressure drop across the add-on air pollution control device in accordance with the following guidelines:
- 4.a** Pressure taps shall be installed at any of the following locations:
- i. At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower.
  - ii. On each side of the packed bed within the control system or on each side of each mesh pad within the control system.
  - iii. On the front side of the first mesh pad and back side of the last mesh pad within the control system.
- 4.b** Pressure taps shall be sited at locations that are:
- i. As free from pluggage as possible and away from any flow disturbances such as cyclonic demisters.
  - ii. Situated such that no air infiltration at the measurement site will occur that could bias the measurement.
- 4.c** Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.
- 4.d** Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.
- 4.e** Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a "U" tube manometer.

**V. Testing Requirements (continued)**

- 4.f** Prior to connecting any pressure lines to the pressure gauge(s), each gauge shall be zeroed. No calibration of the pressure gauges is required.
- 5.** The permittee shall measure the velocity pressure at the inlet to an add-on air pollution control device to establish the site-specific velocity pressure as follows:
- 5.a** Locate a velocity traverse port in a section of straight duct that connects the hooding on the plating tank or tanks with the control device. The port shall be located as close to the control system as possible, and shall be placed a minimum of 2 duct diameters downstream and 0.5 diameter upstream of any flow disturbance such as a bend, expansion, or contraction. If 2.5 diameters of straight duct work does not exist, locate the port 0.8 of the duct diameter downstream and 0.2 of the duct diameter upstream from any flow disturbance.
- 5.b** A 12-point velocity traverse of the duct to the control device shall be conducted along a single axis according to Method 2 (40 CFR Part 60, Appendix A) using an S-type pitot tube measurement of the barometric pressure and duct temperature at each traverse point is not required, but is suggested. Mark the S-type pitot tube as specified in Method 1 (40 CFR Part 60, Appendix A) with 12 points. Measure the velocity pressure ( $\Delta p$ ) values for the velocity points and record. Determine the square root of the individual velocity point  $\Delta p$  values and average. The point with the square root value that comes closest to the average square root value is the point of average velocity. The  $\Delta p$  value measured for this point during the performance test will be used as the reference for future monitoring.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** Plant 2-#21 Normalize Furnace (P033)  
**Activity Description:** 15.82 million BTU/hour Natural Gas Fired Normalize Anneal Furnace

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
#21 normalize furnace (Plant 2) 15.82 mmBtu/hr, natural gas-fired anneal furnace	OAC rule 3745-17-07(A)	none (See A.I.2.a.)
	OAC rule 3745-17-11(B)	none (See A.I.2.b.)
	OAC rule 3745-31-05 (PTI #03-1177)	0.4 lb particulate emissions(PE)/hr 1.8 tons PE/yr
		5.53 lbs nitrogen oxides (NOx)/hr 24.21 tons NOx/yr
		0.01 lb sulfur dioxide (SO2)/hr 0.05 ton SO2/yr
		0.7 lb carbon monoxide (CO)/hr 3.0 tons CO/yr
		0.06 lb volatile organic compounds (VOC)/hr 0.3 ton VOC/yr
	OAC rule 3745-18-06(E)(2)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-08(B) and 3745-23-06(B). The emission limitation from this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.c.

##### 2. Additional Terms and Conditions

- This emissions unit is exempt from the visible particulate 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.

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

**2.b** The uncontrolled mass rate of particulate emissions (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 process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01(B)(14).

\* The burning of natural gas is the only source of PE from this emissions unit.

**2.c** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-1177.

## **II. Operational Restrictions**

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

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

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

## **IV. Reporting Requirements**

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

## **V. Testing Requirements**

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after issuance of the permit, unless emissions testing was conducted within the previous year.

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

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: NOx - Methods 1 through 4 and 7E, 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.

## V. Testing Requirements (continued)

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

- 2.a** Emission Limitations:  
0.4 lb PE/hr and 1.8 tons PE/yr

Applicable Compliance Method:

The permittee may determine compliance with the hourly limitation by multiplying the emission factor from USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (revised 7/98) of 1.9 lbs PE/mm cu.ft natural gas combusted by the maximum hourly usage rate for natural gas (.0154 mm cu.ft/hr).

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

If required, the permittee shall demonstrate compliance with the PE limitation above in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

- 2.b** Emission Limitations:  
5.53 lbs NOx/hr and 24.21 tons NOx/yr

Applicable Compliance Method:

The permittee may 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 7E.

The permittee may determine compliance with the hourly limitation by multiplying the emission factor from the burner manufacturer, Eclipse-Dungs Controls Inc., Model 75 TFB Burner with recuperators of 360 lbs NOx/mm cu.ft of natural gas combusted by the maximum hourly usage rate for natural gas (.0154 mm cu.ft/hr).

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

## V. Testing Requirements (continued)

**2.c** Emission Limitations:  
0.01 lb SO<sub>2</sub>/hr and 0.05 ton SO<sub>2</sub>/yr

**Applicable Compliance Method:**

The permittee may determine compliance with the hourly limitation by multiplying the emission factor from the source classification code document for Fabricated Metal Products (SCC # 3-09-900-03) of 0.6 lb SO<sub>2</sub>/mm cu.ft of natural gas combusted by the maximum hourly usage rate for natural gas (.0154 mm cu.ft/hr).

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

If required, the permittee shall demonstrate compliance with the SO<sub>2</sub> emission limitation above in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

**2.d** Emission Limitations:  
0.7 lb CO/hr and 3.0 tons CO/yr

**Applicable Compliance Method:**

The permittee may determine compliance with the hourly limitation by multiplying the emission factor from USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (revised 7/98) of 24 lbs CO/mm cu.ft natural gas combusted by the maximum hourly usage rate for natural gas (.0154 mm cu.ft/hr).

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

If required, the permittee shall demonstrate compliance with the CO emission limitation above in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

**2.e** Emission Limitations:  
0.06 lb VOC/hr and 0.3 ton VOC/yr

**Applicable Compliance Method:**

The permittee may determine compliance with the hourly limitation by multiplying the emission factor from the source classification code document for Fabricated Metal Products (SCC # 3-09-900-03) of 2.8 lbs VOC/mm cu.ft of natural gas combusted by the maximum hourly usage rate for natural gas (.0154 mm cu.ft/hr).

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

If required, the permittee shall demonstrate compliance with the VOC emission limitation above in accordance with the procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 18, 25 or 25A, as appropriate.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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