



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Lazarus Gov. Center

**RE: DRAFT PERMIT TO INSTALL CERTIFIED MAIL  
WARREN COUNTY**  
**Application No: 14-05470**

**DATE:** 11/20/2003

Quantum Metals, Inc.  
Mark Kolb  
3675 Taft Drive  
Lebanon, OH 45036-0000

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$1500** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

*Michael W. Ahern*

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

CC: USEPA HCDES OH-KY-IN Regional Council of Gov. KY IN

**WARREN COUNTY**

**PUBLIC NOTICE**  
**ISSUANCE OF DRAFT PERMIT TO INSTALL 14-05470 FOR AN AIR CONTAMINANT SOURCE FOR**  
**QUANTUM METALS, INC.**

On 11/20/2003 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Quantum Metals, Inc.**, located at **3675 Taft Drive, Lebanon, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 14-05470:

**Installation of new scrap metal burn off oven with afterburner.**

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Brad Miller, Hamilton County Department of Environmental Services, 250 William Howart Taft Pkwy,  
Cincinnati, OH 45219-2660 [(513)946-7777]



**Permit To Install  
Terms and Conditions**

**Issue Date: To be entered upon final issuance  
Effective Date: To be entered upon final issuance**

**DRAFT PERMIT TO INSTALL 14-05470**

Application Number: 14-05470  
APS Premise Number: 1483060439  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: Quantum Metals, Inc.  
Person to Contact: Mark Kolb  
Address: 3675 Taft Drive  
Lebanon, OH 45036-0000

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**3675 Taft Drive  
Lebanon, Ohio**

Description of proposed emissions unit(s):  
**Installation of new scrap metal burn off oven with afterburner.**

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

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Director

Quantum Metals, Inc.

Facility ID: 1483060439

PTI Application: 14-05470

Issued: To be entered upon final issuance

## Part I - GENERAL TERMS AND CONDITIONS

### A. Permit to Install General Terms and Conditions

#### 1. Compliance Requirements

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

#### 2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

#### 3. Records Retention Requirements

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

#### 4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any

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information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**9. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may

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lead to such sanctions

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and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

**10. Public Disclosure**

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

**11. Applicability**

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

**12. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**13. Source Operation and Operating Permit Requirements After Completion of Construction**

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete

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

- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

#### **14. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

#### **15. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

### **B. Permit to Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)

#### **TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<b><u>Pollutant</u></b>	<b><u>Tons Per Year</u></b>
PM	1.5
SO <sub>2</sub>	0.22

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NOx	1.62
OC	0.66
CO	0.22
HCl	1.4
HF	0.1
dioxin/furan	1.5E-09

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PTI /

Emissions Unit ID: N002

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**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
	OAC rule 3745-17-09(B)
	OAC rule 3745-17-09(C)
N002 - Scrap metal decoating kiln with afterburner (Big Blue burn-off oven)	OAC rule 3745-31-05(A)(3)  40 CFR Part 63 Subpart RRR Alternative Limits*
	*For decoating kiln equipped with an afterburner having a design residence time of at least 1 second and the afterburner is operated at a temperature of at least 1400 degrees Fahrenheit at all times.

OAC rule 3745-17-07(A)(1)

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Emissions Unit ID: **N002**

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Applicable Emissions  
Limitations/Control Measures

0.34 lb/hr PM/PM10; 1.5 TPY PM/PM10  
0.05 lb/hr SO2; 0.22 TPY SO2  
0.15 lb/hr OC; 0.66 TPY OC  
0.37 lb/hr NOx; 1.62 TPY NOx  
0.05 lb/hr CO; 0.22 TPY CO  
0.31 lb/hr HCl(Hydrogen Chloride)  
1.4 TPY HCl  
0.02 lb/hr HF (Hydrogen Fluoride)  
0.1 TPY HF

1.5E-09 TPY dioxin/furan

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-09, OAC rule 3745-17-07(A)(1) and 40 CFR Part 63 Subpart RRR.

Visible particulate emissions from any stack associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

See T&C A.2.a.

See T&C A.2.b.

5.0 µg of dioxin/furan TEQ per Mg (7.0 x 10<sup>-5</sup> gr of dioxin/furan TEQ per ton) of feed/charge from a decoating kiln at a secondary

aluminum production facility that is an area source.

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## **2. Additional Terms and Conditions**

- 2.a** Particulate emissions in the exhaust gases shall not exceed 0.10 pound per one hundred pounds of liquid, semi-solid or solid refuse and salvageable material charged.
- 2.b** The incinerator, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
- 2.c** The hourly emission limitations outlined in term A.1. except for dioxin/furan are based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with these limits.
- 2.d** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of an afterburner, compliance with all requirements pursuant to 40 CFR 63 Subpart RRR relative to dioxin/furan emissions, compliance with the visible emissions limitation, compliance with OAC rule 3745-17-09, compliance with the BAT emissions limitations and compliance with the air toxics policy.

## **B. Operational Restrictions**

- 1. Pursuant to 40 CFR 63.1506(b), the permittee must provide and maintain easily visible labels, posted at the decoating kiln, that identifies the type of affected emissions unit, the applicable emissions limits and means of compliance including the afterburner operating temperature and design residence time.
- 2. Pursuant to 40 CFR 63.1506(d)(1), the permittee must install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test. The permittee must operate each weight measurement system or other weight determination procedure in accordance with the operation, maintenance, and monitoring (OM&M) plan.

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3. Pursuant to 40 CFR 63.1512(c)(1), the permittee must maintain the 3-hour block average operating temperature of the afterburner at or above 1400 degrees Fahrenheit. The permittee must operate the afterburner in accordance with the OM&M plan.
4. The permittee shall maintain the capture/collection system in accordance with 40 CFR 63.1506(c).

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall comply with the general record keeping requirements in 40 CFR 63.1517.
2. On and after the date the initial performance test is completed or required to be complete, whichever date is earlier, the permittee must monitor all control equipment and processes according to the requirements pursuant to 40 CFR 62.1510.
3. Pursuant to 40 CFR 63.1510(b), the permittee must prepare and implement a written operation, maintenance, and monitoring (OM&M) plan. The permittee must submit the plan to the applicable permitting authority for review and approval as part of the application for a part 70 or part 71 permit. The plan must be accompanied by a written certification by the permittee that the OM&M plan satisfies all requirements of this section and is otherwise consistent with the requirements of this subpart. The permittee must comply with all of the provisions of the OM&M plan as submitted to the permitting authority, unless and until the plan is revised in accordance with the following procedures. If the permitting authority determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of this section or this subpart, the permittee must promptly make all necessary revisions and submit the revised plan. If the permittee determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the permittee submits a description of the changes and a revised plan incorporating them to the permitting authority,
4. The permittee must inspect the labels for the decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard are intact and legible (see term B.1.) and record the results of each inspection.
5. The permittee shall inspect the capture/collection system at least once each calendar year to ensure the system is operating in accordance with the requirements of 40 CFR 63.1506(c) and record the results of each inspection.
6. The permittee must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emissions unit over the same operating cycle or time period used in the performance test. As an alternative to a measurement device, the permittee may use a procedure acceptable to the Hamilton County

Department of Environmental Services to determine the total weight of feed/charge or aluminum production to the affected source or emissions unit:

- a. the accuracy of the weight measurement device or procedure must be +/- 1 percent of the weight being measured. The permittee may apply to the Hamilton County Department of Environmental Services for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emissions standard; and
  - b. the permittee must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
7. The permittee shall maintain the afterburner and records pursuant to the following requirements:
- a. the permittee must install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner consistent with the requirements for continuous monitoring systems in subpart A of 40 CFR 63;
  - b. the temperature monitoring device must be installed at the exit of the combustion zone of the afterburner;
  - c. the monitoring system must record the temperature in 15-minute block averages and determine and record the average temperature for each 3-hour block period, including any period when the average temperature in any 3-hour block period falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken;
  - d. the recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1512(m);
  - e. the reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator; and
  - f. the permittee must conduct an inspection of the afterburner at least once a year and record the results. At a minimum, an inspection must include:
    - i. an inspection of all burners, pilot assemblies, and pilot sensing devices for proper

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- operation and clean pilot sensor;
- ii. an inspection for proper adjustment of combustion air;
- iii. an inspection of internal structures (e.g., baffles) to ensure structural integrity;
- iv. an inspection of dampers, fans, and blowers for proper operation;
- v. an inspection for proper sealing;
- vi. an inspection of motors for proper operation;
- vii. an inspection of combustion chamber refractory lining and clean and replace lining as necessary;
- viii. an inspection of afterburner shell for corrosion and/or hot spots;
- ix. documentation, for the burn cycle that follows the inspection, that the afterburner is operating properly and any necessary adjustments have been made; and
- x. verification that the equipment is maintained in good operating condition.

Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan.

8. The permit to install for this emissions unit (N001) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: HCl

TLV (ug/m3): 2198

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Maximum Hourly Emission Rate (lbs/hr): 0.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 49.82

MAGLC (ug/m3): 52.33

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

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- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied with the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is(are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the Air Toxic Policy:

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

**D. Reporting Requirements**

1. Within 120 days after initial start-up, the permittee shall submit an Initial Notification Report which certifies whether or not the permittee is subject to the promulgated standard. If the permittee is subject to the final standard, the following information shall also be included in the Initial Notification Report:
  - a. The name and mailing address of the permittee;

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- b. The physical location of the source if it is different from the mailing address;
- c. Identification of the relevant MACT standard and the permittee's compliance date;

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- d. A brief description of the nature, design, size, and method of operation of the source, including the operating design capacity and an identification of each emission point of each hazardous air pollutant;
  - e. A statement of whether or not the permittee is a major source or an area source according to the promulgated MACT; and
  - f. The start date of construction.
2. Within 60 days following completion of the required compliance determination activity specified in the 40 CFR 63 Subpart RRR, the permittee shall submit a Notification of Compliance Status report that contains the following information:
- a. The methods used to determine compliance;
  - b. The results of any performance tests, opacity or visible emission observations, continuous monitoring systems (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
  - c. The methods that will be used for determining compliance, including a description of the monitoring and reporting requirements and test methods;
  - d. The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times in accordance with the test methods specified in 40 CFR 63 Subpart RRR;
  - e. An analysis demonstrating whether the affected source is a major source or an area source;
  - f. A description of the air pollution control equipment or method of each emission point, including each control device or method for each hazardous air pollutant and the control efficiency (percent) for each control device or method; and
  - g. A statement as to whether or not the permittee has complied with the requirements of 40 CFR 63 Subpart RRR.
3. The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard.

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The owner or operator shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:

- a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
  - b. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
4. As required by 40 CFR 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10(c). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period. A report must be submitted if any of these conditions occur during a 6-month reporting period:
- a. An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter);
  - b. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3); or
  - c. An affected source (including an emissions unit in a secondary aluminum processing unit) was not operated according to the requirements of 40 CFR 63 Subpart RRR.

The owner or operator must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.

5. For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:
- a. Any period of excess emissions that occurred during the year were reported; and
  - b. All monitoring, recordkeeping, and reporting requirements were met during the year.

## **E. Testing Requirements**

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Emissions Unit ID: **N002**

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1. Emissions Limitation

5.0 µg of dioxin/furan TEQ per Mg ( $7.0 \times 10^{-5}$  gr of dioxin/furan TEQ per ton) of feed/charge

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0.10 pound per one hundred pounds of liquid, semi-solid or solid refuse and salvageable material charged

**Applicable Compliance Method**

Prior to conducting the performance test, the permittee must prepare a site-specific test plan which satisfies all of the requirements, and must obtain approval of the plan pursuant to the procedures set forth in 40 CFR 63.7(c).

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

- a. The Initial Performance Test shall be conducted within 180 days after start-up of the emissions unit
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emissions rate for dioxins/furans and particulate;
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for the concentration of dioxins/furans at the outlet of the afterburner, Method 23 of 40 CFR Part 60, Appendix A and for particulate matter, Method 5 of 40 CFR Part 60, Appendix A;
- d. The permittee must conduct each test while the emissions unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit; and
- e. The testing shall follow the procedures outlined in 40 CFR 63.1511(b) and 40 CFR 63.1512(c).

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. 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 Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to

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witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services 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 Hamilton County Department of Environmental Services.

The permittee shall use equation 7 of 40 CFR 63.1513(b) to determine compliance with the dioxin/furan emissions limit:

$$E = (C \times Q \times K) / P$$

Where,

E = Emission rate of dioxin/furan in kg/Mg (lb/ton) of feed/charge;

C = Concentration of dioxin/furan g/dscm (gr/dscf);

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);

K = Conversion Factor, 1 kg/1000 g (1 lb/7000 gr); and

P = Production rate, Mg/hr (ton/hr)

## 2. Emissions Limitations

0.34 lb/hr PM/PM10; 1.5 TPY PM/PM10

0.05 lb/hr SO<sub>2</sub>; 0.22 TPY SO<sub>2</sub>

0.15 lb/hr OC; 0.66 TPY OC

0.37 lb/hr NO<sub>x</sub>; 1.62 TPY NO<sub>x</sub>

0.05 lb/hr CO; 0.22 TPY CO

0.31 lb/hr HCl; 1.4 TPY HCl

0.02 lb/hr HF, 0.1 TPY HF

### Applicable Compliance Methods

Compliance with the lb/hr emissions limitations shall be demonstrated by the emissions test data as submitted in the PTI application 14-05381, November 2002.

Compliance with the TPY emissions limitations shall be demonstrated by multiplying the lb/hr emissions from the emissions test data as submitted in the PTI application 14-05381, November

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2002 by the actual annual hours of operation and dividing by 2000 lbs:

XXX lb pollutant/hr x YYYY hrs operation/year x Ton/2000 lbs = TPY pollutant

3. Emissions Limitation

Visible particulate emissions shall not exceed 20 percent opacity as a six-minute average

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Applicable Compliance Method

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

**F. Miscellaneous Requirements**

1. The permittee shall comply with all other applicable provisions in 40 CFR Part 60, Appendix A not noted above.
2. Per 40 CFR 63.1500(e), this facility is an area source and is deferred from the Title V permitting requirements until December 9, 2004. The permittee shall submit a Title V application by December 9, 2005.