



State of Ohio Environmental Protection Agency

RE: DRAFT PERMIT TO INSTALL CERTIFIED MAIL  
CARROLL COUNTY

Street Address:

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

Mailing Address:

Lazarus Gov. Center

Application No: 02-13875

DATE: 7/11/00

Minerva Aluminum Company Inc  
John L Stiefel  
217 Roosevelt Ave  
Minerva, OH 44657

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 or 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 \$600 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,

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

CC: USEPA  
PA

NEDO

WV



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install

Issue Date: To be entered upon final issuance

**DRAFT PERMIT TO INSTALL 02-13875**

Application Number: 02-13875  
APS Premise Number: 0210000107  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: Minerva Aluminum Company Inc  
Person to Contact: John L Stiefel  
Address: 217 Roosevelt Ave  
Minerva, OH 44657

Location of proposed air contaminant source(s) [emissions unit(s)]:

**217 Roosevelt Ave  
Minerva, Ohio**

Description of proposed emissions unit(s):

**Rotary Aluminum Smelting Furnace No. 2 with Oxyfuel Gas Burner rated at 7.00 MMBTU.**

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

Director

Minerva Aluminum Company Inc

Facility ID: 0210000107

PTI Application: 02-13875

Issued: To be entered upon final issuance

**Part I - GENERAL TERMS AND CONDITIONS**

**A. State and Federally Enforceable Permit To Install General Terms and Conditions**

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

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. 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. See B.11 below if no deviations occurred during the quarter.

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- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

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

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

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

## **3. Risk Management Plans**

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

## **4. Title IV Provisions**

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

## **5. Severability Clause**

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

## 6. General Requirements

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

## 7. Fees

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

## 8. 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

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shall not be federally enforceable and shall be enforceable under State law only.

## **9. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- 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 ORC section 3704.08.
  - 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.

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#### 10. Permit To Operate Application

- 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 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 thirty (30) days after commencing operation of the source(s) covered by this permit.

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**B. State Only Enforceable 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 Related to Monitoring and Recordkeeping Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable 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 state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the 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. 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.

**4. 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.

**5. 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.

#### **6. 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 lead to such sanctions 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 are inadequate 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 prove to be inadequate or cannot meet applicable standards.

#### **7. 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.

#### **8. Applicability**

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

#### **9. Best Available Technology**

**Minerva Aluminum Company Inc**

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**Facility ID: 0210000107**

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.

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**10. 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.

**11. 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.

**C. 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**

<u>Pollutant</u>	<u>Tons Per Year</u>
Particulate/PM <sub>10</sub>	13.14
HCl	0.44
Dioxin and Furans	4.14 x 10 <sup>-07</sup>

**Minerva Aluminum Company Inc**

**PTI Application: 02-13875**

**Issued: To be entered upon final issuance**

**Facility ID: 0210000107**

**Minerva Aluminum Company Inc**

**PTI Application: 02 12075**

**Issued**

**Facility ID: 0210000107**

Emissions Unit ID: P004

**Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

**A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions**

None

**B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions**

None

**Miner  
PTI A**

Emissions Unit ID: P004

**Issued: To be entered upon final issuance**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

**I. 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>	<u>Applicable Emissions Limitations/Control Measures</u>
P004 - Rotary Aluminum Smelting Furnace #2, with a max. process weight rate of 6,300 lbs per hour, controlled by a lime injected fabric filter dust collector. See Section A.I.2.b below.	OAC rule 3745-31-05	Visible particulate emissions shall not exceed 10% opacity as a 6-minute average.
	40 CFR Part 63, Subpart RRR	Particulate emissions shall not exceed 3.0 lbs per hour and 13.14 tons per year. See Section A.I.2.a below.
	OAC rule 3745-17-07(A)	HCl emissions shall not exceed 0.1 lb per hour.
	OAC rule 3745-17-11	Dioxins and furans (D/F) emissions shall not exceed 2.1 E -04 gr of D/F TEQ per ton of feed or charge to the furnace, and 4.13 x 10 <sup>-07</sup> ton per year. See Section A.I.2.c below.
		The requirements of this rule are less stringent than visible particulate emission limit established pursuant to OAC rule 3745-31-05.
		The requirements of this rule are less stringent than the particulate emission limit established pursuant to OAC rule 3745-31-05.

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Emissions Unit ID: P004

**2. Additional Terms and Conditions**

**2.a** The particulate emissions from this emissions unit will be controlled by a fabric filter dust collector which also serves to control emissions from an existing emissions unit, no. F003 - Rotary Aluminum Smelting Furnace No.1. The baghouse has a maximum stack exhaust flow

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Emissions Unit ID: P004

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no  
greater  
than  
0.02  
gr/dscf.

**2.b** In accordance with the definitions listed in Subpart RRR, Minerva Aluminum Co.,

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Emissions Unit ID: P004

Inc. is a secondary aluminum production facility that is an area source of HAPs. This emissions unit is a group 1 furnace within a new secondary aluminum processing unit, per said definitions, therefore, only the dioxins and furans emissions limitation, operatin

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Emissions Unit ID: P004

g,  
monitoring,  
reporting and  
record  
keeping  
requirements  
apply.

**2.c** Section 65.1503 of Subpart RRR defines TEQ as the international method of expressing toxicity equivalents for dioxins and furans as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixture

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Emissions Unit ID: P004

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**II. Operational Restrictions**

1. The permittee shall burn only natural gas fuel in this emissions unit.
2. The permittee shall maintain the 3-hour block average inlet temperature for the fabric filter at or below the average temperature established during the performance test, plus 14 degrees C (plus 25 degrees F).
3. The permittee shall operate and maintain a continuous lime injection system for the fabric filter. The permittee shall maintain free-flowing lime in the hopper to the feed device at all times and shall maintain the lime feeder setting at the same level established during the performance test.
4. The pressure drop across the baghouse shall be maintained within the range of 2 - 10 inches of water while the emissions unit is in operation.

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

1. The permittee shall properly install, operate, and maintain equipment to monitor and

Emissions Unit ID: P004

record the 3-hour block average inlet temperature for the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual (s). Further monitoring device specifications are listed in Section 63.1510 of Subpart RRR.

2. The permittee shall inspect the lime injection system at least once each 8-hour period and record the results of each inspection. If lime is found not to be free flowing during any of the 8-hour periods, the permittee must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The permittee may return to inspections at least once every 8 hour period if corrective action results in no further blockages of lime during the 3-day period.
3. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual (s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
4. The permittee shall maintain daily records of the number of hours of operation for this emissions unit.

#### **IV. Reporting Requirements**

1. The permittee shall submit baghouse inlet temperature deviation (excursion) reports that identify all periods of time during which the 3-hour block average baghouse inlet temperature did not comply with the allowable range specified above.
2. The permittee shall submit lime feeder deviation (excursion) reports that identify all periods of time during which the lime feeder

**Miner****PTI A****Issued: To be entered upon final issuance**

Emissions Unit ID: P004

setting did not comply with the allowable range specified at the same level established during the performance test.

The permittee shall submit deviation reports that identify all 8-periods for which inspection of the lime injection system revealed that lime was not free flowing and list the corrective action taken to remedy same.

3. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

## V. Testing Requirements

1. Emission Limitation -

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, at any time.

Applicable Compliance Method -

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. Emission Limitation -

3.0 lbs/hour and 13.14 tons per year mass emission rate of particulates.

Applicable Compliance Method -

The permittee shall conduct, or have conducted, particulate emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 5.

Compliance with the annual emission limit shall be determined by multiplying the number of hours of annual operation by the hourly emission rate determined by the particulate emission test and dividing by 2,000 lbs/ton.

3. Emission Limitation -

0.1 lbs/hour and 0.44 ton per year mass emission rate of HCl.

The permittee shall conduct, or have

Emissions Unit ID: P004  
conducted, HCl emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate in accordance with 40 CFR Part 60, Appendix A, Method 26A

Compliance with the annual emission limit shall be determined by multiplying the number of hours of annual operation by the hourly emission rate determined by the HCl emission test and dividing by 2,000 lbs/ton.

4. Emission Limitation -

2.1 E -04 gr of D/F TEQ per ton of feed or charge to the furnace and 4.14 E -06 ton per year.

The permittee shall conduct, or have conducted, D/F emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate in accordance with 40 CFR Part 60, Appendix A, Method 23.

Compliance with the annual emission limit shall be determined by multiplying the number of hours of annual operation by the hourly emission rate determined by the D/F emission test and dividing by 2,000 lbs/ton.

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Emissions Unit ID: P004

**Issued: To be entered upon final issuance**

5. All of the tests shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

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

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

## **VI. Miscellaneous Requirements**

None.

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Emissions Unit ID: P004

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**B. State Only Enforceable Section**

**I. 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>	<u>Applicable Emissions Limitations/Control Measures</u>
P004 - Rotary Aluminum Smelting Furnace #2	None.	None.

**2. Additional Terms and Conditions**

2.a None.

**II. Operational Restrictions**

None.

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

None.

**IV. Reporting Requirements**

None.

**V. Testing Requirements**

None.

**VI. Miscellaneous Requirements**

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**Miner**

**PTI A**

**Issued: To be entered upon final issuance**

None.

Emissions Unit ID: P004

**NEW SOURCE REVIEW FORM B**

PTI Number: 02-13875 Facility ID: 0210000107

FACILITY NAME Minerva Aluminum Company Inc

FACILITY DESCRIPTION Rotary Aluminum Smelting Furnace No. 2 CITY/TWP Minerva  
with Oxyfuel Gas Burner rated at 7.00  
MMBTU.

SIC CODE 3341 SCC CODE 3-04-001-02 EMISSIONS UNIT ID P004

EMISSIONS UNIT DESCRIPTION Rotary Aluminum Smelting Furnace #2

DATE INSTALLED Upon PTI issuance.

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter				3.0 lbs/Hr	13.14
PM <sub>10</sub>					
Sulfur Dioxide					
organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics	HCl			0.1 lb/Hr	0.44
	Dioxins/Furans			2.1 E -04 gr D/F TEQ per ton of furnace feed/charge	4.14 x 10 <sup>-07</sup>

APPLICABLE FEDERAL RULES: MACT rule Subpart RRR

NSPS? **Subpart RRR**

NESHAP?

PSD?

OFFSET POLICY?

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

**Enter Determination** BAT is the use of a lime injected fabric filter dust collector and compliance with the listed emission limits and all applicable MACT rule Subpart RRR requirements for a Group 1 furnace in an SAPU at a secondary aluminum production facility that is an area source of HAPs. The BAT determination was based upon a review of the permit application, MACT rule and other recent Ohio EPA BAT determinations.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No.

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$130,000

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? \_\_\_\_\_ YES \_\_\_\_\_ NO

IDENTIFY THE AIR CONTAMINANTS: \_\_\_\_\_

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MMBTU.

**Ohio EPA Permit to Install Information Form** Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit **hard copy items to Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to **airpti@epa.state.oh.us**

Please fill out the following. If the checkbox does not work, replace it with an 'X'

	<u>Electronic</u>	<u>Additional information File Name Convention (your PTI # plus this letter)</u>	<u>Hard Copy</u>	<u>None</u>
<u>Calculations (required)</u>	<input type="checkbox"/>	<b>0213875c.wpd</b>	<input type="checkbox"/>	
<u>Modeling form/results</u>	<input type="checkbox"/>	0000000s.wpd	<input type="checkbox"/>	<input type="checkbox"/>
<u>PTI Application (complete or partial)*</u>	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input type="checkbox"/>
<u>BAT Study</u>	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input type="checkbox"/>
<u>Other/misc.</u>	<input type="checkbox"/>	0000000t.wpd	<input type="checkbox"/>	<input type="checkbox"/>

\* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

**NSR Discussion**

This rotary furnace is for aluminum scrap recycling. This emissions unit is an area source subject to MACT rule Subpart RRR. The facility is an 'area source' for HAPs and as such only the dioxin and furan (D/F) emission limit and requirements apply.

This emissions unit is, per Subpart RRR, a secondary aluminum production facility/group 1 furnace.

After reviewing Subpart RRR, I spoke with Juan Santiago of USEPA-OAQPS (919-541-1084) the Subpart RRR expert. Juan told me that for area source group 1 furnaces only the D/F emission limit and testing and use of a baghouse inlet temperature monitoring was required, see Section 63.1500(c) and (c)(4).

The furnace will fire natural gas at 7.0 mmbtu/hr with an oxyfueled burner. I have not listed combustion gases emission limits since they are negligible amounts (10.0 mmbtu/hr boilers are permit exempt).

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

**Synthetic Minor Determination and/or**  **Netting Determination**  
Permit To Install **ENTER PTI NUMBER HERE**

A. Source Description

B. Facility Emissions and Attainment Status

C. Source Emissions

D. Conclusion

**NEW SOURCE REVIEW FORM B**

PTI Number: 02-13875 Facility ID: 0210000107

FACILITY NAME Minerva Aluminum Company Inc

FACILITY DESCRIPTION	Rotary Aluminum Smelting Furnace No. 2 with Oxyfuel Gas Burner rated at 7.00 MMBTU.	CITY/TWP	Minerva
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PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

NONE

Please complete:

SUMMARY (for informational purposes only)

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
Particulate/PM <sub>10</sub>	13.14
HCl	0.44
Dioxin and Furans	4.14 x 10 <sup>-07</sup>