



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
CLARK COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 08-04779

Fac ID: 0812100596

DATE: 12/14/2006

Staker Alloys
Marc Progozen
PO Box 957 1723 Woodlawn Ave.
Middletown, OH 45044

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

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.

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

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

RAPCA



**Permit To Install
Terms and Conditions**

**Issue Date: 12/14/2006
Effective Date: 12/14/2006**

FINAL PERMIT TO INSTALL 08-04779

Application Number: 08-04779
Facility ID: 0812100596
Permit Fee: **\$1000**
Name of Facility: Staker Alloys
Person to Contact: Marc Progozen
Address: PO Box 957 1723 Woodlawn Ave.
Middletown, OH 45044

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1075 James St.
Springfield, Ohio**

Description of proposed emissions unit(s):
Aluminum recycling furnace.

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

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 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 (i.e., postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

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

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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.

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)

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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 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.

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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This 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 emissions unit(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

| <u>Pollutant</u> | <u>Tons Per Year</u> |
|------------------|----------------------|
| PE | 0.10 |
| Nitrogen Oxides | 1.80 |

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.

Operations, Property, and/or Equipment - (P001) - secondary aluminum sweat furnace with afterburner; Pre-Aug. 3, 2006 BAT

| | |
|---|---|
| OAC rule 3745-31-05(A)(3) | <p>The particulate emissions (PE) shall not exceed 0.023 lbs/hour and 0.10 TPY.</p> <p>The nitrogen oxides (NO_x) emissions shall not exceed 1.80 TPY.</p> <p>The visible particulate emissions shall not exceed 10 percent opacity, as a 6-minute average, except as provided by rule.</p> <p>The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subparts A and RRR.</p> |
| OAC rule 3745-17-07(A)(1)(a) OAC rule 3745-17-11(B)(1) | The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). |
| 40 CFR Part 63, Subparts A and RRR | <p>The dioxins/furans emissions shall not exceed 0.80 nanogram (ng) TEQ per dscm (3.5×10^{-10} grains per dscf) at 11 percent oxygen (O₂).</p> <p>See Section A.2.b.</p> |

2. Additional Terms and Conditions

- 2.a The 0.023 lbs/hr and 0.10 TPY PE emissions were developed for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.b The permittee is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production 40 CFR Part 63, Subpart RRR promulgated March 23, 2000 and must comply with the provisions

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Emissions Unit ID: **P001**

of the new rule as an area source.

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B. Operational Restrictions

1. An afterburner for controlling emissions must be installed and used at all times during operation of the furnace. The after burner shall have a design residence time of 0.8 second or greater, and the average combustion temperature, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1650 degrees Fahrenheit.
2. The furnace and afterburner shall be operated and maintained in accordance with the emissions unit's operation, maintenance and monitoring (OM&M) plan following the manufacturer's recommendations, instructions, and operating manuals.
3. The emissions unit can only operate with metallic charge, any nonmetallic charge shall not be loaded into the furnace. All metallic charge shall be free of ice, water, lead and magnesium.
4. This emissions unit is permitted to burn propane or natural gas.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature at the exit of the of the combustion zone for the afterburner, in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The monitoring system shall collect and record the average temperature for 15 minute block averages and determine the average temperature for each 3-hour block of time.

2. 40 CFR Part 63, Subpart RRR requires a calibration and certification of the afterburner temperature monitor be performed every six months. An alternative to performing the calibration and certification for every six months was approved by USEPA for this emissions unit. The alternative requires the procedures as outlined in the USEPA approval letter of September 21, 2006 be implemented in the operation, maintenance and monitoring plan for this emissions unit. These procedures include the following specifications for the continuous temperature monitor and recorder for measuring and recording the temperature at the exit of the of the combustion zone for the afterburner.

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- a. The permittee will utilize three pieces of equipment: a data logger, a dual thermocouple and a digital readout. The data logger will utilize a software program to allow the operator to arrange data in a spreadsheet file. A spool of very low impedance wire is also utilized as part of the package since the currents generated by the thermocouples may be very low.
 - b. Dual thermocouples are to be used so that the data logger and the digital read-out each has its own thermocouple. As a result, there will be sufficient current for the digital read-out and the data logger to read properly. Both thermocouples will read the same temperature and report to their own piece of equipment. As part of the standard operating procedure, a second set of thermocouples will be kept on site to replace a malfunctioning unit immediately.
3. The permittee shall collect and record the following information each day when the emissions unit was in operation:
 - a. A log or record of the downtime for the afterburner or monitoring equipment when the associated emissions unit was in operation, and;
 - b. All 3-hour blocks of time during which the average combustion temperature of the afterburner was less than 1650 degrees Fahrenheit.
 4. The permittee shall implement the procedures outlined in the USEPA approval letter of September 21, 2006 in the operation, maintenance and monitoring plan for this emissions unit as an alternative to performing a calibration and certification of the afterburner temperature monitor every six months as specified by Subpart RRR.

D. Reporting Requirements

1. The permittee shall submit quarterly deviations (excursion) reports that identify all periods of time during which the temperature of the smelting furnace afterburner was not maintained above the required temperature.
2. The permittee shall submit quarterly summaries that include a log or record of the downtime for the afterburner and/or monitoring equipment when the associated emissions unit was in operation.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

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- a. Emission Limitation -
The particulate emissions (PE) shall not exceed 0.023 lbs/hour.

Applicable Compliance Method -
The hourly particulate emissions rate was determined from manufacturers' supplied test data (0.023 lbs/hour).
- b. Emission Limitation -
The particulate emissions (PE) shall not exceed 0.10 TPY.

Applicable Compliance Method -
Compliance shall be shown by multiplying the hourly limitation by 8,760 hrs/yr and then dividing by 2,000 lbs/ton.
- c. Emission Limitation -
The nitrogen oxides (NO_x) emissions shall not exceed 1.80 TPY.

Applicable Compliance Method -
Compliance shall be shown by multiplying the source manufacturers' supplied test data (0.41 lb-NO_x/hour) by 8,760 hrs/yr and then dividing by 2,000 lbs/ton.
- d. Emission Limitation-
The visible particulate emissions shall not exceed 10% opacity, as a 6-minute average.

Applicable Compliance Method -
Compliance shall be determined by visible emissions evaluations performed in accordance with OAC rule 3475-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.
- e. Emission Limitation-
The dioxins/furans emissions shall not exceed 0.80 nanogram (ng) TEQ per dscm (3.5×10^{-10} grains per dscf) at 11 percent oxygen (O₂).

Applicable Compliance Method -
Compliance shall be demonstrated through compliance with operational restrictions listed in B.1.

F. Miscellaneous Requirements

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None