



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

50 West Town Street, Suite 700

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 08-04897

Fac ID: 0812080451

DATE: 2/12/2008

Yamada North America Inc
Doug Hardy
PO Box Y
South Charleston, OH 45368-0000

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: 2/12/2008
Effective Date: 2/12/2008**

FINAL PERMIT TO INSTALL 08-04897

Application Number: 08-04897
Facility ID: 0812080451
Permit Fee: **\$500**
Name of Facility: Yamada North America Inc
Person to Contact: Doug Hardy
Address: PO Box Y
South Charleston, OH 45368-0000

Location of proposed air contaminant source(s) [emissions unit(s)]:
**9000 Columbus-Cincinnati Rd
South Charleston, Ohio**

Description of proposed emissions unit(s):
Modern AL2500 Jet Melter System.

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

Chris Korleski
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 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 (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

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)

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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 Issued: 2/12/2008

Facility ID: 0812080451

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	4.47

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 - (P027) - AL2500 Jet Melter system with Wet Scrubber

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C) (voluntary restriction to avoid BAT, State only)	The particulate emissions (PE) from this emissions unit shall not exceed 4.47 tons per year.
OAC rule 3745-31-05(A)(3)(b)	See A.2.a below.
OAC rule 3745-17-07(A)(1)	Visible particulate stack emissions shall not exceed 20% opacity, as a six minute average.
OAC rule 3745-17-11(B)(1)	The particulate emissions (PE) from this emissions unit shall not exceed 4.76 pounds per hour (lbs/hr) (based on Table I).

2. Additional Terms and Conditions

- 2.a** The Permit to Install 08-04897 for this air contaminant source takes into account the voluntary use of a venturi wet scrubber, as proposed by the permittee, for the purpose of avoiding Best Available Technology (BAT) per OAC rule 3745-31-05(A)(3).
- 2.b** The uncontrolled potential to emit as defined in OAC rule 3745-31-01, for this emissions unit is 20.95 tons PE per year, including emissions from the burning of natural gas in the furnace.

B. Operational Restrictions

1. The permittee shall operate the venturi wet scrubber in compliance with manufacturers specifications at all times during which this emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

Issued: 2/12/2008

1. The static pressure drop across the wet scrubber shall be continuously maintained at a value of 8 inches to 10 inches of water at all times while the emissions unit is in operation.
2. The scrubber water flow rate shall be continuously maintained at a value of not less than 500 gallons per minute at all times while the emissions unit is in operation.
3. The fan speed for the exhaust hood located over the charge inlet to the furnace shall be continuously maintained at a value of not less than 2000 cubic feet per minute (cfm) at all times while the emissions unit is in operation.
4. For each day which the permittee melted a metal other than aluminum, the permittee shall maintain a record of the type and quantity of metal melted in this emissions unit.
5. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
6. The permittee shall collect and record the following information:
 - a. The pressure drop across the scrubber, in inches of water, on an hourly basis.
 - b. The scrubber water flow rate, in gallons per minute, on an hourly basis.
 - c. The operating times for the capture (collection) system, control device, monitoring equipment and the associated emissions unit on a daily basis.
7. The permittee shall collect and record the fan speed of the exhaust hood, in cubic feet per minute, when the emission unit is in operation on a daily basis.
8. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operation log. If visible emissions are observed, the permittee shall also note the following in the operation log:
 - a. The color of the emissions.

Emissions Unit ID: P027

- b. Whether the emissions are representative of normal operations.
- c. If the emissions are not representative of normal operations, the cause of the abnormal emissions.
- d. The total duration of any visible emission incident.
- e. Any corrective action taken to minimize or eliminate any abnormal visible emissions.

If visible emissions are present at greater than 10% opacity, a visible incident has occurred. The observer does not have to document the exact start and end time for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a metal other than aluminum was melted in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
 - a. All periods of time during which the static pressure drop across the scrubber did not comply with the static pressure drop requirements specified in Section C.2. above.
 - b. All periods of time during which the scrubber water flow rate did not comply with the water flow rate requirements specified in Section C.3. above.
 - c. All periods of time during which the fan speed did not comply with the fan speed requirements specified in Section C.4. above.

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- d. All periods of downtime for the capture (collection), control device, and monitoring equipment when the associated emissions unit was in operation.

The reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation occurred.

3. The permittee shall submit semiannual reports that (a) identify all days during which any visible particulate emissions were observed in excess of the allowable opacity limit specified above from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the abnormal visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

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E. Testing Requirements

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

- a. Emission Limitation -
The particulate emissions (PE) from this emissions unit shall not exceed 4.76 pounds per hour (lbs/hr).

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly production rate of aluminum (1.25 tons Al./hr) by the AP-42, Section 12.8 Secondary Aluminum operations, Table 12.8.2 (English Units) (10/86) emission factor of 4.3 lb PE / ton of scrap aluminum; and then multiplying by the manufacturer's design capture efficiency of 90% and control efficiency of 90% (i.e., $[(5.375 \text{ lb PE/hr} * (1-0.90))] + [5.375 * (1-0.10) * (1-0.90)]$).

- b. Emission Limitation -
The particulate emissions (PE) from this emissions unit shall not exceed 4.47 tons per year (TPY).

Applicable Compliance Method -
Compliance with the tons per year PE limitation shall be demonstrated through the recordkeeping requirements contained in Section C.

- c. 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 emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9

F. Miscellaneous Requirements

None

Yamada North America Inc
PTI Application: 08-04897
Issued: 2/12/2008

Facility ID: 0812080451

Emissions Unit ID: **P027**

SIC CODE 3714 SCC CODE _____ EMISSIONS UNIT ID P027

EMISSIONS UNIT DESCRIPTION AL2500 Jet Melter system

DATE INSTALLED After 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	attainment	4.76 lbs/hr	4.47 TPY	4.76 lbs/hr	4.47 TPY
PM ₁₀					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

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

Enter Determination BAT does not apply because the facility chose to take voluntary usage limitations to keep the particulate emissions below 10 TPY.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No
 OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

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 X NO

IDENTIFY THE AIR CONTAMINANTS: _____