



State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL CERTIFIED MAIL
AUGLAIZE COUNTY

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: 03-13403

DATE: 4/19/00

Amcast Automotive- Wapakoneta
Thomas Filbrun
13663 Short Road
Wapakoneta, OH 45895

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 by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

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

CC: USEPA

NWDO



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install

Issue Date: 4/19/00

FINAL PERMIT TO INSTALL 03-13403

Application Number: 03-13403
APS Premise Number: 0306020051
Permit Fee: **\$600**
Name of Facility: Amcast Automotive- Wapakoneta
Person to Contact: Thomas Filbrun
Address: 13663 Short Road
Wapakoneta, OH 45895

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

**13663 Short Road
Wapakoneta, Ohio**

Description of proposed emissions unit(s):

5500 lb/hr primary aluminum melt reverberatory 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 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 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 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

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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.

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 application must be made to the Director for the installation or modification of any other emissions unit(s).

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

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

14. Construction Compliance Certification

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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>
NOx	5.17
CO	11.65
PM	10.38
HF	0.004
Cl	0.001

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>	<u>Applicable Emissions Limitations/Control Measures</u>
5500 lb/hr primary aluminum melt reverberatory furnace	OAC rule 3745-31-05(A)	Use of low NO _x burners
		1.18 lbs nitrogen oxide (NO _x)/hour, 5.17 tons NO _x /year
		2.37 lbs particulate emissions (PE)/hour, 10.38 tons PE/year
		20% opacity as a six-minute average
		2.66 lbs carbon monoxide (CO)/hour, 11.65 tons CO/year
		0.02 lb hydrogen fluoride (HF)/day, 0.004 ton HF/yr
		0.006 lb chloride (Cl)/day, 0.001 ton Cl/yr
	OAC rule 3745-17-11(B)(2)	None, see A.I.2.a
	OAC rule 3745-17-07(A)	None, see A.I.2.b

2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II

of OAC rule 3745-17-11 does not apply.

- 2.b** This emissions unit is exempt from the visible PE limitations specified on OAC rule 3745-17-07 (A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

B. Operational Restrictions

1. The permittee shall only process "clean" raw materials in this emissions unit (i.e. free of oils, greases, solvents, etc.).

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the name and identification of each flux, as applied.
2. 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 operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - 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; and
 - e. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports which:
 - a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. describe any corrective actions taken to eliminate the visible particulate emissions.

9

Amca:

PTI A

Issued: 4/19/00

Emissions Unit ID: **P003**

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.

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.
 - b. The emission testing shall be conducted to demonstrate compliance with the following allowable mass emission rates:
 - i. 1.18 lb NO_x/hr;
 - ii. 0.02 lb HF/day; and
 - iii. 0.006 lb Cl/day

Compliance with the allowable mass emissions rates for HF and Cl shall be demonstrated by confirming company supplied emission factors of 0.0036 oz. HF/lb flux and 0.0014 oz. Cl/lb flux; see E.2.h. and E.2.j.

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for NO_x, Method 7 of 40 CFR Part 60, Appendix A; for HF, Method 13 of 40 CFR Part 60, Appendix A; and for Cl, Method 26 of 40 CFR Part 60, Appendix A. Alternate U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. 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).
- f. 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

Emissions Unit ID: P003

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.

- g. 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.
2. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:
- a. **Emission Limitation**
1.18 lbs NO_x/hr
- Applicable Compliance Method**
Compliance with the lb/hr limitation shall be demonstrated by the testing requirements in section E.
- b. **Emission Limitation**
5.17 tons NO_x/yr
- Applicable Compliance Method**
The ton/yr limitation was developed by multiplying the lb/hr limitation by a maximum operating schedule of 8760 hr/year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.
- c. **Emission Limitation**
2.66 lbs CO/hr
- Applicable Compliance Method**
The lb/hr limitation was developed in accordance with a manufacturer supplied emission factor of 0.222 lb CO/mmBtu multiplied by the maximum firing capacity of 12 mmBtu/hr. If required, compliance with the lb/hr limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 10 or 10B.
- d. **Emission Limitation**
11.65 tons CO/yr

Applicable Compliance Method

The ton/yr limitation was developed by multiplying the lb/hr limitation by a maximum operating schedule of 8760 hr/year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

e. **Emission Limitation**

2.37 lb PE/hr

Applicable Compliance Method

The lb/hr limitation was developed in accordance with a manufacturer supplied emission factor of 0.86 lb PE/ton multiplied by the maximum furnace capacity of 5500 lb/hr and dividing by 2000 lb/ton. If required, compliance with the lb/hr limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 5.

f. **Emission Limitation**

10.38 tons PE/yr

Applicable Compliance Method

The ton/yr limitation was developed by multiplying the lb/hr limitation by a maximum operating schedule of 8760 hr/year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

g. **Emission Limitation**

20% opacity as a six-minute average

Applicable Compliance Method

Compliance with the opacity restriction shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.

h. **Emission Limitation**

0.02 lb HF/day

Applicable Compliance Method

The lb/day limitation represents the potential to emit for this emissions unit based on a company supplied emission factor of 0.0036 oz. HF per lb of flux and a maximum flux usage rate of 70 lb per day. Compliance shall be demonstrated through the testing requirements in section E.1.

i. **Emission Limitation**

0.004 ton HF/yr

Applicable Compliance Method

The tons/yr emission limitation was developed by multiplying the lb/day limitation by a maximum operating schedule of 365 days/yr and dividing by 2000 lb/ton. Therefore, provided compliance is shown with the daily limitation, compliance will also be shown with the annual limitation.

j. **Emission Limitation**

0.006 lb Cl/day

Applicable Compliance Method

The lb/day limitation represents the potential to emit for this emissions unit based on a company supplied emission factor of 0.0014 oz. Cl per lb of flux and a maximum flux usage rate of 70 lb per day. Compliance shall be demonstrated through the testing requirements in section E.1.

k. **Emission Limitation**

0.001 ton Cl/yr

Applicable Compliance Method

The tons/yr emission limitation was developed by multiplying the lb/day limitation by a maximum operating schedule of 365 days/yr and dividing by 2000 lb/ton. Therefore, provided compliance is shown with the daily limitation, compliance will also be shown with the annual limitation.

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

NEW SOURCE REVIEW FORM B

PTI Number: 03-13403 Facility ID: 0306020051

FACILITY NAME Amcast Automotive- Wapakoneta

FACILITY DESCRIPTION 5500 lb/hr primary aluminum melt reverberatory furnace CITY/TWP Wapakoneta

SIC CODE 3363 SCC CODE 3-03-999-99 EMISSIONS UNIT ID P003

EMISSIONS UNIT DESCRIPTION 5500 lb/hour primary aluminum mlt reverberatory furnace

DATE INSTALLED Upon 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	2.37 lb/hr	10.38 TPY	2.37 lb/hr	10.38 TPY
PM ₁₀					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides	Attainment	1.18 lb/hr	5.17 TPY	1.18 lb/hr	5.17 TPY
Carbon Monoxide	Attainment	2.66 lb/hr	11.65 TPY	2.66 lb/hr	11.65 TPY
Lead					
Other: Air Toxics	Attainment- HF, Cl	HF: 0.02 lb/day; Cl: 0.006 lb/day	HF: 0.004 TPY; Cl: 0.001 TPY	HF: 0.02 lb/day; Cl: 0.006 lb/day	HF: 0.004 TPY; Cl: 0.001 TPY

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

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

Enter Determination Use of low NO_x burners, compliance with the terms and conditions of this permit

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: