



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

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

Mailing Address:
Lazarus Gov.
Center

Application No: 02-13824

DATE: 6/14/00

Ellwood Engineered Castings Co
Alex Pimpinella
4158 Hubbard-Masury Rd
Hubbard, OH 44425

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 Director's 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
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

NEDO



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

FINAL PERMIT TO INSTALL 02-13824

Application Number: 02-13824
APS Premise Number: 0278000025
Permit Fee: **\$200**
Name of Facility: Ellwood Engineered Castings Co
Person to Contact: Alex Pimpinella
Address: 4158 Hubbard-Masury Rd
Hubbard, OH 44425

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

7158 Hubbard-Masury Rd
Hubbard, Ohio

Description of proposed emissions unit(s):

Pangborn Shotblast Machine.

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. 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.

- 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 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

Ellwood Engineered Castings Co
PTI Application: 02-13824
Issued: June 14, 2000

Facility ID: 0278000025

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.

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

Ellwood Engineered Castings Co

PTI Application: 02-13824

Issued: June 14, 2000

Facility ID: 0278000025

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.

Ellwood Engineered Castings Co

Facility ID: 0278000025

PTI Application: 02-13824

Issued: June 14, 2000

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

Ellwood Engineered Castings Co
 PTI Application: 02-13824
 Issued: June 14, 2000

Facility ID: 0278000025

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.

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 Emissions(PE)	31.3

Ellwood Engineered Castings Co
PTI Application: 02-13824
Issued: June 14, 2000

Facility ID: 0278000025

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.

Ellwood

PTI A

Emissions Unit ID: P018

Issued: June 14, 2000

Part III - SPECIAL TERMS

MS 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>
P018 - pangborn shot blast machine with baghouse	OAC rule 3745-31-05(A)(3)	7.2 lbs/hr and 31.3 tons/year* particulate emissions. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC 3745-31-05(A)(3). *for purposes of PSD and OAC rule 3745-31-11 through 20, the tons per year particulate emissions are considered PM10.

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4 to 6 inches of water while the emissions unit is in operation.
2. All particulate emissions from this emissions unit shall be captured and vented to the baghouse.

III. Monitoring and/or Recordkeeping Requirements

1. 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 daily basis.

IV. Reporting Requirements

1. 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.
2. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(2).

V. Testing Requirements

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

- a. Emission Limitation: 20% opacity of visible particulate emissions

Applicable Compliance Method:
Compliance shall be determined based upon
OAC rule 3745-17-03(B)(1).

- b. Emission Limitation: 7.2 lbs/hr particulate emissions

Applicable Compliance Method: Compliance
shall be based upon OAC rule 3745-17-
03(B)(10).

- c. Emission Limitation: 31.3 tons/year particulate emissions

Applicable Compliance Method: To determine the maximum annual emission rate for particulate matter, the following equation shall be used:

$$E(\text{PE}) = (17 \text{ \#/ton})(35.8)(1 - .99)(8760/2000) , \text{ where}$$

E is the maximum annual emission rate of particulate emissions(PE)

17 #/ton is the emission factor for uncontrolled pm in lb.per ton of castings throughput, from AP-42 ,Table12.10-7

35.8 is the maximum hourly castings throughput weight used in this process , in tons

1-.99 is a correction for the collector efficiency of 99%.

8760 is maximum hours per year

2000 is pounds per ton

The permittee may also use the hourly mass emission rate for particulate matter as determined in section A.V.2.

2. 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 3 months after completion of construction;
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulate matter .

Emissions Unit ID: P018

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate matter, Method 5 of 40 CFR Part 60, Appendix A.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. 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 Northeast District Offices refusal to accept the results of the emission test(s).
- f. Personnel from the Ohio EPA Northeast District Office 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.
- 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 Ohio EPA Northeast District Office 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 Ohio EPA Northeast District Office.

VI. Miscellaneous Requirements

- 1. This permit to install shall cover a new shot blast machine which will replace an existing shot blast machine(P003). The existing emissions unit shall be phased out upon completion of construction and initiation of operations of the new system. This phase out is required for netting out the new emissions unit from the Prevention of Significant Deterioration (PSD) policy.
- 2. Emissions netting
 - a. Contemporaneous Emissions Increases and Decreases

Pangborn Shot Blast Machine	31.3 tons/yr particul ate emissio ns - maximum allowa ble
(to be installed in 2000)	

Mobile Continuous Mixer 10.1 tons/yr.
particulate
emissions -

(installed in 1998) maximum allowable

Increase 41.4 tons/yr. particulate
emissions

Casting Shot Blast Operation (P003)*

17.5
tons/yr
. actual
particulate
emissions
(to be shutdown in 2000)

*actual emissions for the existing shot blast
operation (P003) are:

1999 16.77 tons per year particulate
emissions
(PM-10)

1998 18.27 tons per year particulate
emissions
(PM-10)

Average emissions are 17.52 tons per year
particulate emissions (PM-10)

Engineering Casting Dept. Mixer** 11.6
tons/yr
. actual

(shutdown in 1998) emissions particulate

**actual emissions for the engineering casting dept. mixer (P009) replaced by air PTI no. 02-12212 are:

1996 12.0 tons per year particulate emissions (PM-10)

1997 11.1 tons per year particulate emissions (PM-10)

Average emissions are 11.6 tons per year particulate emissions (PM-10)

Decrease 29.1 tons/yr. particulate emissions

b. Net Emissions

Net Increase =41.4 TPY - 29.1 TPY =12.3 TPY particulate emissions

c. Conclusion

The new Shot Blast Machine with allowable emissions of 31.3 tons per year of particulate

emissions in conjunction with the contemporaneous addition and removal of various emissions units result in a net increase in facility emissions of 12.3 TPY particulate emissions. The PSD major modification significance threshold for particulate emissions is 15 TPY. Consequently, since the net change is less than this threshold, the new Shot Blast Machine has "netted out" of Prevention of Significant Deterioration review for particulate emissions.

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>
P018 - pangborn shot blast machine	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

None

NEW SOURCE REVIEW FORM B

PTI Number: 02-13824 Facility ID: 0278000025

FACILITY NAME Ellwood Engineered Castings Co

FACILITY DESCRIPTION Pangborn Shotblast Machine CITY/TWP Hubbard

SIC CODE 3321 SCC CODE 30400340 EMISSIONS UNIT ID P018

EMISSIONS UNIT DESCRIPTION pangborn shot blast machine

DATE INSTALLED 4/2000

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	6.1 #/hr	26.7	7.2 #/hr	31.3
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 controlled by baghouse

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*? No YES NO

IDENTIFY THE AIR CONTAMINANTS:

NEW SOURCE REVIEW FORM B

PTI Number: 02-13824 Facility ID: 0278000025

FACILITY NAME Ellwood Engineered Castings Co

FACILITY DESCRIPTION Pangborn Shotblast Machine CITY/TWP Hubbard

Please describe any hard copy information is being submitted with this recommendation (Please send hard copy information to Pam McGraner, DAPC Central Office - Air Quality Modeling and Planning):

calculations

Please provide any additional permit specific notes as you deem necessary:

NONE**Permit To Install Netting Determination Write-Up**

ELLWOOD ENGINEERED CASTINGS CO.
PTI NO. 02-13824

NETTING DETERMINATION3. Source Description

Ellwood Engineered Castings Co. is an existing foundry operation. They primarily make moulds used in the steel industry for making ingots. Ellwood is proposing to replace an existing shot blast machine with a new one. The new shot blast machine will have a tighter enclosure and thus better capture. It will be vented to the existing baghouse for control. This baghouse was installed in 1999 to replace a previous baghouse.

4. Facility Emissions

Ellwood currently operates as a major Title V facility for particulate emissions. Ellwood is located in Trumbull county which is designated attainment for particulate. The proposed new shot blast machine will have maximum allowable emissions of 31.3 tons per year particulate emissions (PM-10) based on a Best Available Technology (BAT) requirement for the controlled emissions.

5. Existing Source Credits

Ellwood will shutdown the existing shot blast operation (P003) upon completion of construction and commencement of operation of the new unit. For netting purposes, Ohio EPA will consider 1999 and 1998 actual emissions based on U.S. EPA emissions factors and control efficiencies listed in their Title V application. These emissions are taken from the Title V emissions fee reports submitted electronically to Ohio EPA. Therefore, actual emissions for the existing shot blast operation (P003) are:

1999 16.77 tons per year particulate emissions (PM-10)

1998 18.27 tons per year particulate emissions (PM-10)

Average emissions 17.52 tons per year particulate emissions (PM-10)

6. Contemporaneous Emissions Increases and Decreases

NEW SOURCE REVIEW FORM B

PTI Number: 02-13824 Facility ID: 0278000025

FACILITY NAME Ellwood Engineered Castings Co

FACILITY DESCRIPTION Pangborn Shotblast Machine CITY/TWP Hubbard

In 1998, Ellwood installed a mobile continuous mixer under PTI No. 02-12212. This mixer which is totally enclosed and vented to a baghouse had allowable emissions of 10.1 tons per year of particulate emissions. This mixer replaced another mixer, the Engineered Casting Department mixer which did not have as good a control system. Based on actual sand usage rates from 1996 and 1997, the actual emissions for the old mixer was 11.6 tons per year particulate emissions.

7. Emissions Netting

Based on the installation of new and proposed emissions units and the removal of existing emissions for the last five years at Ellwood Engineered Castings, the net emissions are as follows:

Pangborn Shot Blast Machine 31.3 tons/yr. particulate emissions -
(to be installed in 2000) maximum allowable

Mobile Continuous Mixer 10.1 tons/yr. particulate emissions -
(installed in 1998) maximum allowable

Increase 41.4 tons/yr. particulate emissions

Casting Shot Blast Operation 17.5 tons/yr. actual particulate
(to be shutdown in 2000) emissions

Engineering Casting Dept. Mixer 11.6 tons/yr. actual particulate
(shutdown in 1998) emissions

Decrease 29.1 tons/yr. particulate emissions

Net Increase = 41.4 TPY - 29.1 TPY
= 12.3 TPY particulate emissions

8. Conclusions

The installation of the new shot blast operation and the removal of the existing shot blast operation, along with contemporaneous emissions increases and decreases due to the replacement of an existing sand mixer by a continuous mobile mixer in 1998, will show a net increase in particulate emissions of 12.3 tons per year. Therefore, the new shot blast operation has "netted out" of prevention of significant deterioration (PSD) review for significant increases of 15 tons per year of particulate emissions.

Please fill in the following for this permit:

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS
Pollutant

NEW SOURCE REVIEW FORM B

PTI Number: 02-13824 Facility ID: 0278000025

FACILITY NAME Ellwood Engineered Castings Co

FACILITY DESCRIPTION Pangborn Shotblast Machine CITY/TWP Hubbard

Tons Per Year**31.3****Particulate
Emissions(PE)**