



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
WAYNE 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: 02-21983

Fac ID: 0285010001

DATE: 6/1/2006

The Quality Castings Company
Steve Steiner
1200 North Main Street
Orrville, OH 44667

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
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern

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

CC: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 6/1/2006
Effective Date: 6/1/2006**

FINAL PERMIT TO INSTALL 02-21983

Application Number: 02-21983
Facility ID: 0285010001
Permit Fee: **\$1000**
Name of Facility: The Quality Castings Company
Person to Contact: Steve Steiner
Address: 1200 North Main Street
Orrville, OH 44667

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1200 North Main Street
Orrville, Ohio**

Description of proposed emissions unit(s):
Modification for emission units P032 - Laempe L-40 and P034 - West Laempe L-20 Core Making 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 (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 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 (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, 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. If this permit is for an emissions unit located at a Title V facility, then 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.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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 re-issuance, or modification
- 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, 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 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.

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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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

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 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 and the State and by citizens (to the extent allowed by section 304 of the Act) 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 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 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 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 ninety (90) days after commencing operation of the source(s) covered by this permit.

11. 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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12. 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.

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13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit 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 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 (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. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder.

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The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

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4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit 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.

5. Construction of New Sources(s)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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.

6. 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.

7. 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).

8. Construction Compliance Certification

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If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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.

9. 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., postmarked), 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

**Summary (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	2.1
VOC	12.85

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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

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
	OAC rule 3745-17-08(B)
P032 - Laempe L-40 core making process modified to use a binder system with n,n-dimethyl isoproylamine (DMIPA) catalyst (instead of using the former system using methyl formate as a catalyst)	OAC rule 3745-31-05(A)(3)
	OAC rule 3745-17-07(B)
DMIPA is controlled by an acid scrubber.	OAC rule 3745-21-07(G)
The terms and conditions of this PTI supercede the terms and conditions of PTI 02-11420 for P032, issued on February 11, 1998.	

OAC rule 3745-17-11(B)(1)

OAC rule 3745-17-07(A)(1)

Applicable Emissions
Limitations/Control
Measures

Particulate emissions (PE) from all stacks associated with this emissions unit shall not exceed 0.02 lb/hr and 0.03 TPY.

Fugitive PE from this emissions unit shall not exceed 1.40 TPY.

Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 3.21 lbs/hr and 8.57 TPY.

Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a six-minute average.

Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a three-minute average.

The emission limitation established in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

The visible emission limitation specified in this rule is less stringent than the limitation established pursuant to OAC rule

3745-31-05(A)(3).

In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.

In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.

See A.2.a. below.

2. Additional Terms and Conditions

- 2.a** This emissions unit is exempt from this rule as no photochemically reactive liquid organic materials are employed.

II. Operational Restrictions

1. The pH of the scrubbing liquor shall be maintained between 0.0 and 4.5.
2. In order to avoid exceeding the above annual emission limitations, annual production from this emissions unit, in terms of sand processed, shall not exceed 8,000 tons per year, as a rolling, 12-month summation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pH of the scrubber liquor while the emissions unit is in operation and the DMIPA catalyst system is being used. The pH monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day that this emissions unit operates:

- a. The pH of the scrubber liquor.
 - b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubber serving this emissions unit, the bin vent serving this emissions unit, and for any visible fugitive particulate emissions from 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

- d. abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
3. The permittee shall maintain monthly records of the following information:
- a. The total production rate, in terms of sand processed, in tons per month.
 - b. The rolling, 12-month summations of the monthly total production rate, in terms of sand processed.

IV. Reporting Requirements

1. The permittee shall submit quarterly pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirement specified above.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubber serving this emissions unit, the bin vent serving this emissions unit, and for any visible fugitive particulate emissions from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month production restriction.

V. Testing Requirements

1. Compliance with the emission limitations specified in section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a PE from all stacks associated with this emissions unit shall not exceed 0.02 lb/hr and 0.03 TPY.

Applicable Compliance Method:

Compliance with the hourly and annual PE limitations shall be determined using an emission factor of 0.72 lbs/ton of sand processed from Table 11.12-2 of the document entitled AP-42 "Compilation of Air Pollutant Emission Factors," Fifth Edition, dated

Emissions Unit ID: P032

10/01.

- 1.b Emission Limitation:
Fugitive PE from this emissions unit shall not exceed 1.40 TPY.

Applicable Compliance Method:

Compliance with the annual fugitive PE limitation shall be determined using an emission factor of 0.35 lbs/ton from Table 2.7-1 of the Ohio EPA document entitled "Reasonably Available Control Measures for Fugitive Dust Sources," dated September, 1980.

- 1.c Emission Limitation:
VOC emissions from this emissions unit shall not exceed 3.21 lbs/hr and 8.57 TPY.

Applicable Compliance Method:

The hourly VOC emission limitation is based upon the potential to emit for this emissions unit. The annual VOC emission limitation is based on the production restriction of 8,000 tons of sand per year. Therefore, as long as compliance with the production restriction is maintained, compliance with the annual emission limitation is assumed. Compliance with the production restriction is based upon the record keeping in section A.III.3 of these terms and conditions.

- 1.d Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A.

- 1.e Emission Limitation:
Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a three-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A, except that the data reduction and average opacity calculation shall be based upon sets of twelve consecutive visible particulate emission observations recorded at fifteen-second intervals.

VI. Miscellaneous Requirements

None

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>
<p>P032 - Laempe L-40 core making process modified to use a binder system with n,n-dimethyl isoproylamine (DMIPA) catalyst (instead of using the former system using methyl formate as a catalyst)</p> <p>DMIPA is controlled by an acid scrubber.</p> <p>The terms and conditions of this PTI supercede the terms and conditions of PTI 02-11420 for P032, issued on February 11, 1998.</p>	<p>Air Toxics Policy</p>	<p>See section VI.1 below.</p>

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

The Quality Castings Company
PTI Application: 02-21002
Issue:

Facility ID: 0285010001

Emissions Unit ID: P032

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the increase in emissions due to the modification(s) to the emissions unit was less than 1 ton per year of each toxic pollutant that has a listed Threshold Limit Value (TLV), as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices").

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P034 - West Laempe L-20 core making process modified to use a binder system with n,n-dimethyl isoproylamine (DMIPA) catalyst (instead of using the former system using methyl formate as a catalyst)	OAC rule 3745-17-07(A)(1)
DMIPA is controlled by an acid scrubber and the sand hopper vent is controlled by a fabric filter.	OAC rule 3745-17-08(B)
The terms and conditions of this PTI supercede the terms and conditions of PTI 02-11952 for P032, issued on May 28, 1998.	OAC rule 3745-17-07(B)
	OAC rule 3745-21-07(G)(2)
	OAC rule 3745-17-11(B)(1)

**The C
PTI A
Issued: 6/1/2006**

Emissions Unit ID: P034

Applicable Emissions
Limitations/Control
Measures

Particulate emissions (PE) from all stacks associated with this emissions unit shall not exceed 0.01 lb/hr and 0.02 TPY.

Fugitive PE from this emissions unit shall not exceed 0.70 TPY.

Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 1.72 lbs/hr and 4.28 TPY.

Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a six-minute average.

Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a three-minute average.

The emission limitation established in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

The visible emission limitation specified in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

In accordance with paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) shall not apply to this emissions unit.

In accordance with paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) shall not apply to this emissions unit.

See A.2.a. below.

2. Additional Terms and Conditions

- 2.a** This emissions unit is exempt from this rule as no photochemically reactive liquid organic materials are employed.

II. Operational Restrictions

1. The pH of the scrubbing liquor shall be maintained between 0.0 and 4.5.
2. In order to avoid exceeding the above annual emission limitations, annual production from this emissions unit, in terms of sand processed, shall not exceed 4,000 tons per year, as a rolling, 12-month summation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. The pH of the scrubber liquor.
 - b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubber serving this emissions unit, the bin vent serving this emissions unit, and for any visible fugitive particulate emissions from 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

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- e. any corrective actions taken to eliminate the visible emissions.
3. The permittee shall maintain monthly records of the following information:
 - a. The total production rate, in terms of sand processed, in tons per month.
 - b. The rolling, 12-month summations of the monthly total production rate, in terms of sand processed.

IV. Reporting Requirements

1. The permittee shall submit quarterly pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirement specified above.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubber serving this emissions unit, the bin vent serving this emissions unit, and for any visible fugitive particulate emissions from this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month production restriction.

V. Testing Requirements

1. Compliance with the emission limitations specified in section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:
PE from all stacks associated with this emissions unit shall not exceed 0.01 lb/hr and 0.02 TPY.

Applicable Compliance Method:

Compliance with the hourly and annual PE limitations shall be determined using an emission factor of 0.72 lbs/ton of sand processed from Table 11.12-2 of the document entitled AP-42 "Compilation of Air Pollutant Emission Factors," Fifth Edition, dated 10/01.

- 1.b Emission Limitation:
Fugitive PE from this emissions unit shall not exceed 0.70 TPY.

Applicable Compliance Method:

Compliance with the annual fugitive PE limitation shall be determined using an

emission factor of 0.35 lbs/ton from Table 2.7-1 of the Ohio EPA document entitled "Reasonably Available Control Measures for Fugitive Dust Sources," dated September, 1980.

- 1.c Emission Limitation:
VOC emissions from this emissions unit shall not exceed 1.72 lb/hr and 4.28 TPY.

Applicable Compliance Method:

The hourly VOC emission limitation is based upon the potential to emit for this emissions unit. The annual VOC emission limitation is based on the production restriction of 4,000 tons of sand per year. Therefore, as long as compliance with the production restriction is maintained, compliance with the annual emission limitation is assumed. Compliance with the production restriction is based upon the record keeping in section A.III.3 of these terms and conditions.

- 1.d Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A.

- 1.e Emission Limitation:
Visible emissions of fugitive dust from this emissions unit shall not exceed 5% opacity, as a three-minute average.

Applicable Compliance Method:

If required, compliance with the above visible emission limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A, except that the data reduction and average opacity calculation shall be based upon sets of twelve consecutive visible particulate emission observations recorded at fifteen-second intervals.

VI. Miscellaneous Requirements

None

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>
<p>P034 - West Laempe L-20 core making process modified to use a binder system with n,n-dimethyl isoproylamine (DMIPA) catalyst (instead of using the former system using methyl formate as a catalyst)</p> <p>DMIPA is controlled by an acid scrubber and the sand hopper vent is controlled by a fabric filter.</p> <p>The terms and conditions of this PTI supercede the terms and conditions of PTI 02-11952 for P032, issued on May 28, 1998.</p>	<p>Air Toxics Policy</p>	<p>See section VI.1 below.</p>

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

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IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the increase in emissions due to the modification(s) to the emissions unit was less than 1 ton per year of each toxic pollutant that has a listed Threshold Limit Value (TLV), as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices").