



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

06/30/99

CERTIFIED MAIL

RE: Draft Title V Chapter 3745-77 permit

03-22-02-0044
G. & C. Foundry Co.
Richard L. Babcock
2806 W. Monroe St.
Sandusky, OH 44870

Dear Richard L. Babcock:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Northwest District Office within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

If you have any questions or comments concerning this draft Title V permit, please contact Northwest District Office.

Very truly yours,

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

cc: USEPA (electronic)
Jim Orlemann, DAPC Engineering
Michael Ahern, DAPC PMU
Northwest District Office
Michigan



Ohio EPA

State of Ohio Environmental Protection Agency

TITLE V PERMIT

Issue Date: 06/30/99

DRAFT

Effective Date:

Expiration Date:

This document constitutes issuance to:

G. & C. Foundry Co.
2806 W. Monroe St.
Sandusky, OH 44870

of a Title V permit for Facility ID: 03-22-02-0044

Emissions Unit ID (Company ID)/
Emissions Unit Activity Description:
F004 (Roadways and Parking Areas)
Plant roadways and parking areas.

F005 (13 TPH Electric Holding Furnace #1 incl. Ductile Inoc.)
13 TPH Electric Holding Furnace #1, includes charging, melting, tapping, transfer and ductile iron inoculation.

F009 (Mold Machine Line #1)
Hunter HMP 20 Turntable (20X24).

F010 (Mold Machine Line #2)
B&P Continumatic (16X20).

F011 (Mold Machine Line #3)
Hunter HMP 10 (14X19).

F012 (Mold Machine Line #4)
Hunter HMP 10 (14X19).

F013 (Mold Machine Line #5)
B&P Continumatic (16X20).

F029 (Pouring and Cooling Line #1)
Pouring/Cooling line associated with Hunter HMP 20 Turntable (20X24).

F030 (Pouring and Cooling Line #2)
Pouring/Cooling line associated with B&P Continumatic (16X20).

F031 (Pouring and Cooling Line #3)
Pouring/Cooling line associated with Hunter HMP 10 (14X19).

F032 (Pouring and Cooling Line #4)
Pouring/Cooling line associated with Hunter HMP 10 (14X19).

F033 (Pouring and Cooling Line #5)
Pouring/Cooling line associated with B&P Continumatic (16X20).

F034 (13 TPH Electric Holding Furnace #2 incl. Ductile Inoc.)
13 TPH Electric Holding Furnace #2, includes charging, melting, tapping, transfer and ductile iron inoculation.

P006 (Mold Sand System)
The preparation of green sand for mold line #1 - #5.

P007 (Shakeout Operations)
Shakeout

P008 (Grind Shop)
5 cast grinders and a cut-off saw.

P013 (9 TPH East Shotblast)
9 TPH East Shotblast

P014 (9 TPH West Shotblast)
9 TPH West Shotblast

P017 (Blow-out Bench)
High pressure air is used to blow sand out of internal spaces in castings.

P901 (13.2 TPH East Electric Induction Furnace #1)
13.2 TPH East Electric Induction Furnace #1 includes charging, melting and tapping.

P902 (13.2 TPH West Electric Induction Furnace #2
)
13.2 TPH West Electric Induction Furnace #2 includes charging, melting and tapping.

P903 (13.2 TPH Charge Handling, Conveying and Preheating
)
Outside storage and handling of raw materials and preheating.

Z045 (Didion Drum)
Was P020. Moved to Z045 so Ohio EPA can change source id to P9XX (2/99).

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419) 352-8461

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

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 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 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 promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. 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. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 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. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting

requirements. 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 submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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.

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

11. 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.

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V 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 paragraph (E) of OAC rule 3745-77-03.
 - 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.
 - d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:
 - i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. Permit Shield

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio

EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

16. Off Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any

defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

B. State Only Enforceable Section

1. Permit to Install Requirement

Prior to the “installation” or “modification” of any “air contaminant source,” as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

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. 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.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

None

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

annealing furnace (P003), core bake oven (P018), core machine #1 (Z012), core machine #2 (Z013), core machine #3 (Z014), core machine #4 (Z015), core machine #5 (Z016), core machine #6 (Z017), core machine #7 (Z018), core machine #8 (Z019), core machine #9 (Z020), core machine #10 (Z021), core machine #11 (Z022), core machine #12 (Z023), core machine #13 (Z024), core drying oven #1 (Z025), core drying oven #2 (Z026), core sand delivery & prep (Z027), oil core making (Z035), ladle preheating (Z042), hand held grinding (Z043), outside storage materials (Z030), and emergency generator (Z041).

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations as well as any emission limitations and/or control requirements contained within a PTI for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Roadways and Parking Areas (F004)
Activity Description: Plant roadways and parking areas.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
plant roadways and parking areas (4 paved and 1 unpaved)	OAC rule 3745-17-08 OAC rule 3745-17-07(B)	none (refer to section A.I.2.a of the terms and conditions of this permit) none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a** This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
plant roadways and parking areas (4 paved and 1 unpaved)	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 13 TPH Electric Holding Furnace #1 incl. Ductile Inoc. (F005)
Activity Description: 13 TPH Electric Holding Furnace #1, includes charging, melting, tapping, transfer and ductile iron inoculation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
13 TPH electric holding furnace #1, includes charging, melting, tapping and ductile or gray iron inoculation	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
13 TPH electric holding furnace #1, includes charging, melting, tapping and ductile or gray iron inoculation	OAC rule 3745-31-05 (PTI No. 03-11245)	<p>1.80 pounds fugitive particulate emissions (PE)/hour (0.75 pound fugitive PE/hour from charging and melting + 1.05 pound fugitive PE/hour from inoculation), 7.88 tons fugitive PE/year</p> <p>Visible fugitive PE shall be limited to 20 percent opacity, as a 3-minute average.</p> <p>0.07 pound organic compounds (OC)/hour (from inoculation), 0.31 ton OC/year</p>

2. Additional Terms and Conditions

- 2.a The 1.80 pounds/hour and 7.88 tons/year fugitive PE limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.
- 2.b The 0.07 pound/hour and 0.31 ton/year OC emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

1. Pursuant to Engineering Guide #69, modeling to demonstrate compliance with the Ohio EPA's Air Toxic Policy was not necessary since 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 result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitation(s) established in section B.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitations: 1.80 pounds of fugitive PE/hour, 7.88 tons fugitive PE/year

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined as follows:

i. For the holding furnace:

(1) multiply the maximum process weight rate (13 tons/hour) by the appropriate emission factor from AP-42, Table 12.5-1, revised 1/86 (0.19 pound PE/ton); and

(2) multiply the value from [1.a.i (1)] above by the estimated control factor of the building enclosure (1-0.70).

ii. For the inoculation:

(1) multiply the maximum process weight rate (13 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-7, revised 1/95 (1.8 pounds PE/ton);

(2) multiply the value from [1.a.ii (1)] above by the estimated control factor of the Tundish ladle lid (1-.85); and

(3) multiply the value from [1.a.ii (2)] above by the estimated control factor of the building enclosure (1-0.70).

iii. The total fugitive particulate emissions (pounds/hr) shall be the summation of [1.a.i (2)] and [1.a.ii (3)].

The ton/year PE limitation was developed by multiplying the pound/hour PE limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly PE limitation, compliance will also be shown with the annual PE limitation.

1.b Emission Limitations: 0.07 pound OC/hour, 0.31 ton OC/year

Applicable Compliance Method: Compliance with the hourly OC emission limitation shall be determined by multiplying the maximum process weight rate (13 tons/hour) by the appropriate emission factor from the Ohio EPA, Division of Air Pollution Control (DAPC) Emissions & Permitting Remote Data Entry Module (DEM) (0.005 pound OC/ton).

The ton/year OC emission limitation was developed by multiplying the pound/hour OC limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly OC limitation, compliance will also be shown with the annual OC limitation.

1.c Emission Limitation: Visible fugitive PE shall not exceed 20 percent opacity, as a 3-minute average.

Applicable Compliance Method: Visible emissions shall be evaluated using Method 22, which is located in 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Mold Machine Line #1 (F009)
Activity Description: Hunter HMP 20 Turntable (20X24).

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH mold machine #1	OAC rule 3745-21-07(G)	none (refer to section A.II.1 of the terms and conditions of this permit)
	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

1. The permittee shall not employ any material in this emissions unit that is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each day for this emissions unit:
 - a. the company identification of each material employed; and
 - b. documentation on whether or not each material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of non-complying materials (i.e., photochemically reactive materials) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation (the use of non-complying materials) occurs.

Facility Name: **The G&C Foundry Company**
Facility ID: **03-22-02-0044**
Emissions Unit: **Mold Machine Line #1 (F009)**

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH mold machine #1	OAC rule 3745-31-05 (PTI No. 03-11245)	0.99 pound fugitive PE/hour, 4.34 tons fugitive PE/year Visible fugitive PE shall not exceed 20 percent opacity, as a 3-minute average. 2.28 pounds organic compounds (OC)/hour from mold release, 9.99 tons OC/year

2. Additional Terms and Conditions

- 2.a The 0.99 pound/hour and 4.34 tons /year fugitive PE limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.
- 2.b The 2.28 pounds/hour and 9.99 tons/year OC emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

1. This permit allows the use of materials specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

 Pollutant: petroleum distillates
 TLV (ug/m3): 5,000
 Maximum Hourly Emission Rate (lbs/hr): 2.28
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 63.07
 MAGLC (ug/m3): 119.05
2. 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 the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":
 - 2.a changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;

II. Operational Restrictions (continued)

- 2.b** changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- 2.c** changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
- 2.d** changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.
- 3.** Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:
 - 3.a** the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
 - 3.b** the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
 - 3.c** prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

None

V. Testing Requirements

- 1.** Compliance Methods Requirements: Compliance with the emission limitation(s) established in section B.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):
 - 1.a** Emission Limitations: 0.99 pound of fugitive PE/hour, 4.34 tons fugitive PE/year

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined by multiplying the maximum process weight rate (3 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-7, revised 1/95 (1.1 pounds PE/ton) and multiplying by the estimated control factor of the building enclosure (1-0.70).

The ton/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

1.b Emission Limitations: 2.28 pounds of OC/hour, 9.99 tons OC/year

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined by multiplying the maximum amount of material applied (0.31 gallon/hour) by the maximum OC content of all materials (7.36 pounds OC/gallon).

The ton/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

1.c Emission Limitation: Visible fugitive PE shall not exceed 20 percent opacity, as a 3-minute average.

Applicable Compliance Method: Visible emissions shall be evaluated using Method 22, which is located in 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Mold Machine Line #2 (F010)
Activity Description: B&P Continumatic (16X20).

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH mold machine #2	OAC rule 3745-21-07(G)	none (refer to section A.II.1 of the terms and conditions of this permit)
	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

1. The permittee shall not employ any material in this emissions unit that is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each day for this emissions unit:
 - a. the company identification of each material employed; and
 - b. documentation on whether or not each material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of non-complying materials (i.e., photochemically reactive materials) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation (the use of non-complying materials) occurs.

Facility Name: **The G&C Foundry Company**
Facility ID: **03-22-02-0044**
Emissions Unit: **Mold Machine Line #2 (F010)**

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH mold machine #2	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Mold Machine Line #3 (F011)
Activity Description: Hunter HMP 10 (14X19).

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH mold machine #3	OAC rule 3745-21-07(G)	none (refer to section A.II.1 of the terms and conditions of this permit)
	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

1. The permittee shall not employ any material in this emissions unit that is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each day for this emissions unit:
 - a. the company identification of each material employed; and
 - b. documentation on whether or not each material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of non-complying materials (i.e., photochemically reactive materials) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation (the use of non-complying materials) occurs.

Facility Name: **The G&C Foundry Company**
Facility ID: **03-22-02-0044**
Emissions Unit: **Mold Machine Line #3 (F011)**

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH mold machine #3	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Mold Machine Line #4 (F012)
Activity Description: Hunter HMP 10 (14X19).

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH mold machine #4	OAC rule 3745-21-07(G)	none (refer to section A.II.1 of the terms and conditions of this permit)
	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

1. The permittee shall not employ any material in this emissions unit that is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each day for this emissions unit:
 - a. the company identification of each material employed; and
 - b. documentation on whether or not each material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of non-complying materials (i.e., photochemically reactive materials) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation (the use of non-complying materials) occurs.

Facility Name: **The G&C Foundry Company**
Facility ID: **03-22-02-0044**
Emissions Unit: **Mold Machine Line #4 (F012)**

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH mold machine #4	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Mold Machine Line #5 (F013)
Activity Description: B&P Continumatic (16X20).

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH mold machine #5	OAC rule 3745-21-07(G)	none (refer to section A.II.1 of the terms and conditions of this permit)
	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

1. The permittee shall not employ any material in this emissions unit that is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each day for this emissions unit:
 - a. the company identification of each material employed; and
 - b. documentation on whether or not each material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of non-complying materials (i.e., photochemically reactive materials) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation (the use of non-complying materials) occurs.

Facility Name: **The G&C Foundry Company**
Facility ID: **03-22-02-0044**
Emissions Unit: **Mold Machine Line #5 (F013)**

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH mold machine #5	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Pouring and Cooling Line #1 (F029)

Activity Description: Pouring/Cooling line associated with Hunter HMP 20 Turntable (20X24).

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH pouring and cooling line #1	OAC rule 3745-21-07(G)	none (refer to section A.II.1 of the terms and conditions of this permit)
	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

1. The permittee shall not employ any material in this emissions unit that is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each day for this emissions unit:
 - a. the company identification of each material employed; and
 - b. documentation on whether or not each material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of non-complying materials (i.e., photochemically reactive materials) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation (the use of non-complying materials) occurs.

Facility Name: **The G&C Foundry Company**
Facility ID: **03-22-02-0044**
Emissions Unit: **Pouring and Cooling Line #1 (F029)**

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH pouring and cooling line #1	OAC rule 3745-31-05 (PTI No. 03-11245)	0.39 pound fugitive PE/hour, 1.71 tons fugitive PE/year Visible fugitive PE shall not exceed 20 percent opacity, as a 3-minute average. 0.17 pound organic compounds (OC)/hour from mold release, 0.74 ton OC/year

2. Additional Terms and Conditions

- 2.a The 0.39 pound/hour and 1.71 tons/year fugitive PE limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.
- 2.b The 0.17 pound/hour and 0.74 ton/year OC emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

1. This permit allows the use of materials specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

 Pollutant: petroleum distillates
 TLV (ug/m3): 5,000
 Maximum Hourly Emission Rate (lbs/hr): 2.28
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 63.07
 MAGLC (ug/m3): 119.05
2. 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 the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":
 - 2.a changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;

II. Operational Restrictions (continued)

- 2.b** changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- 2.c** changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
- 2.d** changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.
- 3.** Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:
 - 3.a** the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
 - 3.b** the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
 - 3.c** prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

None

V. Testing Requirements

- 1.** Compliance Methods Requirements: Compliance with the emission limitation(s) established in section B.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):
 - 1.a** Emission Limitations: 0.39 pound of fugitive PE/hour, 1.71 tons fugitive PE/year

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined by multiplying the maximum process weight rate (3 tons/hour) by an emission factor of 0.43 pound PE/ton [based on the results of a stack test performed on a similar source] and multiplying by the estimated control factor of the building enclosure (1-0.70).

The ton/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

1.b Emission Limitations: 0.17 pound of OC/hour, 0.74 ton OC/year

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined by multiplying the maximum process weight rate (3 tons/hour) by the appropriate emission factor from the USEPA Fire Database (0.0553 pound OC/ton) [benzene emissions from pouring - 0.0057 pound/ton, benzene emissions from cooling- 0.045 pound/ton, formaldehyde emissions from pouring - 0.0032 pound/ton, and formaldehyde emissions from cooling - 0.0014 pound/ton].

The ton/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

1.c Emission Limitation: Visible fugitive PE shall not exceed 20 percent opacity, as a 3-minute average.

Applicable Compliance Method: Visible emissions shall be evaluated using Method 22, which is located in 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Pouring and Cooling Line #2 (F030)
Activity Description: Pouring/Cooling line associated with B&P Continumatic (16X20).

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH pouring and cooling line #2	OAC rule 3745-21-07(G)	none (refer to section A.II.1 of the terms and conditions of this permit)
	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

1. The permittee shall not employ any material in this emissions unit that is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each day for this emissions unit:
 - a. the company identification of each material employed; and
 - b. documentation on whether or not each material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of non-complying materials (i.e., photochemically reactive materials) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation (the use of non-complying materials) occurs.

Facility Name: **The G&C Foundry Company**
Facility ID: **03-22-02-0044**
Emissions Unit: **Pouring and Cooling Line #2 (F030)**

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH pouring and cooling line #2	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Pouring and Cooling Line #3 (F031)
Activity Description: Pouring/Cooling line associated with Hunter HMP 10 (14X19).

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH pouring and cooling line #3	OAC rule 3745-21-07(G)	none (refer to section A.II.1 of the terms and conditions of this permit)
	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

1. The permittee shall not employ any material in this emissions unit that is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each day for this emissions unit:
 - a. the company identification of each material employed; and
 - b. documentation on whether or not each material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of non-complying materials (i.e., photochemically reactive materials) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation (the use of non-complying materials) occurs.

Facility Name: **The G&C Foundry Company**
Facility ID: **03-22-02-0044**
Emissions Unit: **Pouring and Cooling Line #3 (F031)**

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH pouring and cooling line #3	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Pouring and Cooling Line #4 (F032)
Activity Description: Pouring/Cooling line associated with Hunter HMP 10 (14X19).

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH pouring and cooling line #4	OAC rule 3745-21-07(G)	none (refer to section A.II.1 of the terms and conditions of this permit)
	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

1. The permittee shall not employ any material in this emissions unit that is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each day for this emissions unit:
 - a. the company identification of each material employed; and
 - b. documentation on whether or not each material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of non-complying materials (i.e., photochemically reactive materials) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation (the use of non-complying materials) occurs.

Facility Name: **The G&C Foundry Company**
Facility ID: **03-22-02-0044**
Emissions Unit: **Pouring and Cooling Line #4 (F032)**

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH pouring and cooling line #4	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Pouring and Cooling Line #5 (F033)
Activity Description: Pouring/Cooling line associated with B&P Continumatic (16X20).

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH pouring and cooling line #5	OAC rule 3745-21-07(G)	none (refer to section A.II.1 of the terms and conditions of this permit)
	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

1. The permittee shall not employ any material in this emissions unit that is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each day for this emissions unit:
 - a. the company identification of each material employed; and
 - b. documentation on whether or not each material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of non-complying materials (i.e., photochemically reactive materials) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation (the use of non-complying materials) occurs.

Facility Name: **The G&C Foundry Company**
Facility ID: **03-22-02-0044**
Emissions Unit: **Pouring and Cooling Line #5 (F033)**

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
3 TPH pouring and cooling line #5	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 13 TPH Electric Holding Furnace #2 incl. Ductile Inoc. (F034)
Activity Description: 13 TPH Electric Holding Furnace #2, includes charging, melting, tapping, transfer and ductile iron inoculation.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
13 TPH electric holding furnace #2, includes charging, melting, tapping and ductile or gray iron inoculation	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
13 TPH electric holding furnace #2, includes charging, melting, tapping and ductile or gray iron inoculation	OAC rule 3745-31-05 (PTI No. 03-11245)	<p>1.80 pounds fugitive particulate emissions (PE)/hour (0.75 pound fugitive PE/hour from charging and melting + 1.05 pound fugitive PE/hour from inoculation), 7.88 tons fugitive PE/year</p> <p>Visible fugitive PE shall be limited to 20 percent opacity, as a 3-minute average.</p> <p>0.07 pound organic compounds (OC)/hour (from inoculation), 0.31 ton OC/year</p>

2. Additional Terms and Conditions

- 2.a The 1.80 pounds/hour and 7.88 tons/year fugitive PE limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.
- 2.b The 0.07 pound/hour and 0.31 ton/year OC emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

1. Pursuant to Engineering Guide #69, modeling to demonstrate compliance with the Ohio EPA's Air Toxic Policy was not necessary since 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 result in an increase in emissions of any pollutant that has a listed TLV to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitation(s) established in section B.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitations: 1.80 pounds of fugitive PE/hour, 7.88 tons fugitive PE/year

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined as follows:

i. For the holding furnace:

(1) multiply the maximum process weight rate (13 tons/hour) by the appropriate emission factor from AP-42, Table 12.5-1, revised 1/86 (0.19 pound PE/ton); and

(2) multiply the value from [1.a.i (1)] above by the estimated control factor of the building enclosure (1-0.70).

ii. For the inoculation:

(1) multiply the maximum process weight rate (13 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-7, revised 1/95 (1.8 pounds PE/ton);

(2) multiply the value from [1.a.ii (1)] above by the estimated control factor of the Tundish ladle lid (1-.85); and

(3) multiply the value from [1.a.ii (2)] above by the estimated control factor of the building enclosure (1-0.70).

iii. The total fugitive particulate emissions (pounds/hr) shall be the summation of [1.a.i (2)] and [1.a.ii (3)].

The ton/year PE limitation was developed by multiplying the pound/hour PE limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly PE limitation, compliance will also be shown with the annual PE limitation.

1.b Emission Limitations: 0.07 pound OC/hour, 0.31 ton OC/year

Applicable Compliance Method: Compliance with the hourly OC emission limitation shall be determined by multiplying the maximum process weight rate (13 tons/hour) by the appropriate emission factor from the Ohio EPA, Division of Air Pollution Control (DAPC) Emissions & Permitting Remote Data Entry Module (DEM) (0.005 pound OC/ton).

The ton/year OC emission limitation was developed by multiplying the pound/hour OC limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly OC limitation, compliance will also be shown with the annual OC limitation.

1.c Emission Limitation: Visible fugitive PE shall not exceed 20 percent opacity, as a 3-minute average.

Applicable Compliance Method: Visible emissions shall be evaluated using Method 22, which is located in 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Mold Sand System (P006)

Activity Description: The preparation of green sand for mold line #1 - #5.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
45 TPH mold sand system, with baghouse	OAC rule 3745-17-11(B) OAC rule 3745-17-07(A)	22.4 pounds particulate emissions (PE)/hour Visible PE shall not exceed 20 percent, as a six-minute average, except as otherwise provided by rule.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 2-5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- 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 a weekly basis.

IV. Reporting Requirements

- 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 in section A.II.1 of the terms and conditions of this permit.

V. Testing Requirements

- Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation: 22.4 pounds PE/hour

Applicable Compliance Method: The permittee shall demonstrate compliance with this emission limitation based upon multiplying the maximum process weight rate (45 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-7, revised 1/95 (3.6 pounds PE/hour) and multiplying by the estimated baghouse control factor (1-.87).

If required, the method to be employed to demonstrate compliance with this emission limitation shall be OAC rule 3745-17-03(B)(10).

1.b Emission Limitation: Visible PE shall not exceed 20 percent, as a six-minute average.

Applicable Compliance Method: OAC rule 3745-17-03(B)(1)

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
45 TPH mold sand system, with baghouse	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Shakeout Operations (P007)
Activity Description: Shakeout

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
10 TPH shakeout operation	OAC rule 3745-17-11(B)	5.9 pounds particulate emissions (PE)/hour
	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20 percent, as a six-minute average, except as otherwise provided by rule.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. 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 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.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all weeks 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. 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.

V. Testing Requirements

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

- 1.a** Emission Limitation: 5.9 pounds PE/hour

Applicable Compliance Method: The permittee shall demonstrate compliance with this emission limitation based upon multiplying the maximum process weight rate (10 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-7, revised 1/95 (3.2 pounds PE/hour).

If required, the method to be employed to demonstrate compliance with this emission limitation shall be OAC rule 3745-17-03(B)(10).

- 1.b** Emission Limitation: Visible PE shall not exceed 20 percent, as a six-minute average.

Applicable Compliance Method: OAC rule 3745-17-03(B)(1)

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
10 TPH shakeout operation	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Grind Shop (P008)
Activity Description: 5 cast grinders and a cut-off saw.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
grind shop consisting of 5 cast grinders and a cut-off saw, with baghouse	OAC rule 3745-17-11(B)	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(A)	none (refer to section A.I.2.b of the terms and conditions of this permit)

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. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Erie County, which is identified as a P-3 county.
- 2.b This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
grind shop consisting of 5 cast grinders and a cut-off saw, with baghouse	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 9 TPH East Shotblast (P013)
Activity Description: 9 TPH East Shotblast

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
9 TPH east shotblast, with baghouse	OAC rule 3745-17-11(B) OAC rule 3745-17-07(A)	19.8 pounds particulate emissions (PE)/hour Visible particulate emissions (PE) shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 2-5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- 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 a weekly basis.

IV. Reporting Requirements

- 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 in section A.II.1 of the terms and conditions of this permit.

V. Testing Requirements

- Compliance Methods Requirements: Compliance with the emission limitation(s) established in section A.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation: 19.8 pounds PE/hour

Applicable Compliance Method: The permittee shall demonstrate compliance with this emission limitation by multiplying the maximum process weight rate (9 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-7, revised 1/95 (15.5 pounds PE/ton) and multiplying by the estimated overall control factor of the baghouse (1-.99).

If required, the method to be employed to demonstrate compliance with the hourly emission limitation shall be based upon the methods and procedures in OAC rule 3745-17-03(B)(10).

1.b Emission Limitation: Visible particulate emissions (PE) shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method: OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
9 TPH east shotblast, with baghouse	OAC rule 3745-31-05 (PTI No. 03-11245)	1.40 pounds particulate emissions (PE)/hour, 6.13 tons PE/year

2. Additional Terms and Conditions

- 2.a The 1.40 pounds/hour and 6.13 tons/year PE emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitation(s) established in section B.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):

Emission Limitations: 1.40 pounds of PE/hour, 6.13 tons PE/year

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined by multiplying the maximum process weight rate (9 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-7, revised 1/95 (15.5 pounds PE/ton) and multiplying by the estimated overall control factor of the baghouse (1-0.99).

If required, the test method employed to demonstrate compliance with the hourly emission limitation shall be Method 5, which is located in 40 CFR Part 60, Appendix A.

The ton/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 9 TPH West Shotblast (P014)
Activity Description: 9 TPH West Shotblast

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
9 TPH west shotblast, with baghouse	OAC rule 3745-17-11(B) OAC rule 3745-17-07(A)	19.8 pounds particulate emissions (PE)/hour visible particulate emissions (PE) shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 2-5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- 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 a weekly basis.

IV. Reporting Requirements

- 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 in section A.II.1 of the terms and conditions of this permit.

V. Testing Requirements

- Compliance Methods Requirements: Compliance with the emission limitation(s) established in section A.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation: 19.8 pounds PE/hour

Applicable Compliance Method: The permittee shall demonstrate compliance with this emission limitation by multiplying the maximum process weight rate (9 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-7, revised 1/95 (15.5 pounds PE/ton) and multiplying by the estimated overall control factor of the baghouse (1-.99).

If required, the method to be employed to demonstrate compliance with the hourly emission limitation shall be based upon the methods and procedures in OAC rule 3745-17-03(B)(10).

1.b Emission Limitation: Visible particulate emissions (PE) shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method: OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
9 TPH west shotblast, with baghouse	OAC rule 3745-31-05 (PTI No. 03-11245)	1.40 pounds particulate emissions (PE)/hour, 6.13 tons PE/year

2. Additional Terms and Conditions

- 2.a The 1.40 pounds PE/hour and 6.13 tons PE/year emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitation(s) established in section B.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):

Emission Limitations: 1.40 pounds of PE/hour, 6.13 tons PE/year

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined by multiplying the maximum process weight rate (9 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-7, revised 1/95 (15.5 pounds PE/ton) and multiplying by the estimated overall control factor of the baghouse (1-0.99).

If required, the test method employed to demonstrate compliance with the hourly emission limitation shall be Method 5, which is located in 40 CFR Part 60, Appendix A.

The ton/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Blow-out Bench (P017)

Activity Description: High pressure air is used to blow sand out of internal spaces in castings.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
1.42 TPH castings blow-out operation, with baghouse	OAC rule 3745-17-11(B)	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(A)	none (refer to section A.I.2.b of the terms and conditions of this permit)

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. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Erie County, which is identified as a P-3 county.
- 2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
1.42 TPH castings blow-out operation, with baghouse	OAC rule 3745-31-05 (PTI No. 03-6270)	0.44 pound particulate emissions (PE)/hour

2. Additional Terms and Conditions

- 2.a** The 0.44 pound PE/hour emission limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with this limitation.

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 2-5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- 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 a weekly basis.

IV. Reporting Requirements

- 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 in section B.II.1 of the terms and conditions of this permit.

V. Testing Requirements

- Compliance Methods Requirements:** Compliance with the emission limitation(s) established in section B.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):

Emission Limitation: 0.44 pound PE/hour

Applicable Compliance Method: Compliance with this emission limitation shall be determined by multiplying the maximum process weight rate (1.42 tons/hour) by an emission factor of 6.7 pounds PE/ton [based on USEPA's Source Classification Code (SCC) document] and multiplying by the estimated control factor of the baghouse (1-.94).

If required, the test method employed to demonstrate compliance with the emission limitation shall be Method 5, which is located in 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 13.2 TPH East Electric Induction Furnace #1 (P901)

Activity Description: 13.2 TPH East Electric Induction Furnace #1 includes charging, melting and tapping.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
13.2 TPH east electric induction furnace #1 (includes charging, melting and tapping), with baghouse	OAC rule 3745-17-11(B)	2.38 pounds particulate emissions (PE)/hour (from emissions units P901, P902 and P903 combined)
	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20 percent, as a six-minute average, except as otherwise provided by rule.
	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2-5 inches of water while any of the emissions units (i.e., P901, P902, and P903) is in operation.
2. The permittee shall not operate emissions units P901 and P902 simultaneously.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while any of the emissions units (i.e., P901, P902, and P903) 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 a weekly 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 in section A.II.1 of the terms and conditions of this permit while any of the emissions units (i.e., P901, P902, and P903) was in operation.

V. Testing Requirements

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

- 1.a Emission Limitation: 2.38 pounds PE/hour

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined as follows:

- i. For emissions unit P901:

- (1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.9 pound PE/ton); and

- (2) multiply the value from [1.a.i.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-0.99)].

- ii. For emissions unit P902:

- (1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.9 pound PE/ton); and

- (2) multiply the value from [1.a.ii.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-0.99)].

- iii. For emissions unit P903:

- (1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.3 pound PE/ton); and

- (2) multiply the value from [1.a.iii.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-.99)].

- iv. For natural gas consumption:

- (1) multiply the maximum natural gas consumption rate (6,300 cubic feet/hour) by the appropriate emission factor from AP-42, Table 1.4-1, revised 7/98 (1.9 pounds PE (filtrable)/million cubic feet); and

- (2) multiply the value from [1.a.iv.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-.99)].

- v. The total particulate emissions (pounds/hour) shall be the sum of [1.a.i.(2)], [1.a.ii.(2)], [1.a.iii.(2)], and [1.a.iv.(2)].

If required, the test method employed to demonstrate compliance with the stack emission limitation shall be Method 5, which is located in 40 CFR Part 60, Appendix A.

- 1.b Emission Limitation: Visible PE shall not exceed 20 percent, as a six-minute average.

Applicable Compliance Method: OAC rule 3745-17-03(B)(1)

Facility Name: **The G&C Foundry Company**
Facility ID: **03-22-02-0044**
Emissions Unit: **13.2 TPH East Electric Induction Furnace #1 (P901)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
13.2 TPH east electric induction furnace #1 (includes charging, melting and tapping), with baghouse	OAC rule 3745-31-05 (PTI No. 03-11245)	See B.I.2.c. See B.I.2.d. Visible fugitive PE shall be limited to 20 percent opacity, as a 3-minute average.

2. Additional Terms and Conditions

- 2.a The 0.13 pound/hour and 0.57 ton/year PE limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.
- 2.b The 0.53 pound/hour and 2.32 tons/year fugitive PE limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c Particulate emissions from the stack of the baghouse serving emissions units P901, P902, and P903 shall not exceed 0.13 pound/hour and 0.57 ton/year*.

* The lb/hr and ton/year PE limitations are for emissions unit P901, P902 and P903 combined.
- 2.d Fugitive particulate emissions from this emissions unit shall not exceed 0.53 pound/hour and 2.32 tons/year.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations established in section B.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitations: 0.13 pound PE/hour, 0.57 ton PE/year

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined as follows:

i. For emissions unit P901:

(1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.9 pound PE/ton); and

(2) multiply the value from [1.a.i.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-0.99)].

ii. For emissions unit P902:

(1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.9 pound PE/ton); and

(2) multiply the value from [1.a.ii.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-0.99)].

iii. For emissions unit P903:

(1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.3 pound PE/ton); and

(2) multiply the value from [1.a.iii.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-.99)].

iv. For natural gas consumption:

(1) multiply the maximum natural gas consumption rate (6,300 cubic feet/hour) by the appropriate emission factor from AP-42, Table 1.4-1, revised 7/98 (1.9 pounds PE (filtrable)/million cubic feet); and

(2) multiply the value from [1.a.iv.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-.99)].

v. The total stack particulate emissions (pounds/hour) shall be the sum of [1.a.i.(2)], [1.a.ii.(2)], [1.a.iii.(2)], and [1.a.iv.(2)].

If required, the test method employed to demonstrate compliance with the stack emission limitation shall be Method 5, which is located in 40 CFR Part 60, Appendix A.

The ton/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

1.b Emission Limitations:
0.53 pound of fugitive PE/hour and 2.32 tons fugitive PE/year

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined as follows:

- i. multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.9 pound PE/ton);
- ii. multiply the value from [1.b.i] by the estimated capture factor of the baghouse (1-.85); and
- iii. multiply the value from [1.b.ii] by the estimated control factor of the building enclosure (1-.70).

The ton/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

1.c Emission Limitation: Visible fugitive PE shall not exceed 20 percent opacity, as a 3-minute average.

Applicable Compliance Method: Visible emissions shall be evaluated using Method 22, which is located in 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 13.2 TPH West Electric Induction Furnace #2 (P902)

Activity Description: 13.2 TPH West Electric Induction Furnace #2 includes charging, melting and tapping.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
13.2 TPH west electric induction furnace #2 (includes charging, melting and tapping), with baghouse	OAC rule 3745-17-11(B)	2.38 pounds particulate emissions (PE)/hour (from emissions units P901, P902 and P903 combined)
	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20 percent, as a six-minute average, except as otherwise provided by rule.
	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2-5 inches of water while any of the emissions units (i.e., P901, P902, and P903) is in operation.
2. The permittee shall not operate emissions units P901 and P902 simultaneously.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while any of the emissions units (i.e., P901, P902, and P903) 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 a weekly 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 in section A.II.1 of the terms and conditions of this permit while any of the emissions units (i.e., P901, P902, and P903) was in operation.

V. Testing Requirements

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

- 1.a Emission Limitation: 2.38 pounds PE/hour

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined as follows:

- i. For emissions unit P901:

- (1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.9 pound PE/ton); and

- (2) multiply the value from [1.a.i.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-0.99)].

- ii. For emissions unit P902:

- (1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.9 pound PE/ton); and

- (2) multiply the value from [1.a.ii.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-0.99)].

- iii. For emissions unit P903:

- (1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.3 pound PE/ton); and

- (2) multiply the value from [1.a.iii.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-.99)].

- iv. For natural gas consumption:

- (1) multiply the maximum natural gas consumption rate (6,300 cubic feet/hour) by the appropriate emission factor from AP-42, Table 1.4-1, revised 7/98 (1.9 pounds PE (filtrable)/million cubic feet); and

- (2) multiply the value from [1.a.iv.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-.99)].

- v. The total particulate emissions (pounds/hour) shall be the sum of [1.a.i.(2)], [1.a.ii.(2)], [1.a.iii.(2)], and [1.a.iv.(2)].

If required, the test method employed to demonstrate compliance with the stack emission limitation shall be Method 5, which is located in 40 CFR Part 60, Appendix A.

- 1.b Emission Limitation: Visible PE shall not exceed 20 percent, as a six-minute average.

Applicable Compliance Method: OAC rule 3745-17-03(B)(1)

Facility Name: **The G&C Foundry Company**
Facility ID: **03-22-02-0044**
Emissions Unit: **13.2 TPH West Electric Induction Furnace #2 (P902)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
13.2 TPH west electric induction furnace #2 (includes charging, melting and tapping), with baghouse	OAC rule 3745-31-05 (PTI No. 03-11245)	See B.I.2.c. See B.I.2.d. Visible fugitive PE shall be limited to 20 percent opacity, as a 3-minute average.

2. Additional Terms and Conditions

- 2.a The 0.13 pound/hour and 0.57 ton/year PE limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.
- 2.b The 0.53 pound/hour and 2.32 tons/year fugitive PE limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c Particulate emissions from the stack of the baghouse serving emissions units P901, P902, and P903 shall not exceed 0.13 pound/hour and 0.57 ton/year*.

* The lb/hr and ton/year PE limitations are for emissions unit P901, P902 and P903 combined.
- 2.d Fugitive particulate emissions from this emissions unit shall not exceed 0.53 pound/hour and 2.32 tons/year.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations established in section B.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitations: 0.13 pound PE/hour, 0.57 ton PE/year

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined as follows:

i. For emissions unit P901:

(1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.9 pound PE/ton); and

(2) multiply the value from [1.a.i.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-0.99)].

ii. For emissions unit P902:

(1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.9 pound PE/ton); and

(2) multiply the value from [1.a.ii.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-0.99)].

iii. For emissions unit P903:

(1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.3 pound PE/ton); and

(2) multiply the value from [1.a.iii.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-.99)].

iv. For natural gas consumption:

(1) multiply the maximum natural gas consumption rate (6,300 cubic feet/hour) by the appropriate emission factor from AP-42, Table 1.4-1, revised 7/98 (1.9 pounds PE (filtrable)/million cubic feet); and

(2) multiply the value from [1.a.iv.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-.99)].

v. The total stack particulate emissions (pounds/hour) shall be the sum of [1.a.i.(2)], [1.a.ii.(2)], [1.a.iii.(2)], and [1.a.iv.(2)].

If required, the test method employed to demonstrate compliance with the stack emission limitation shall be Method 5, which is located in 40 CFR Part 60, Appendix A.

The ton/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

- 1.b** Emission Limitations:
0.53 pound of fugitive PE/hour and 2.32 tons fugitive PE/year

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined as follows:

- i. multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.9 pound PE/ton);
- ii. multiply the value from [1.b.i] by the estimated capture factor of the baghouse (1-.85); and
- iii. multiply the value from [1.b.ii] by the estimated control factor of the building enclosure (1-.70).

The ton/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- 1.c** Emission Limitation: Visible fugitive PE shall not exceed 20 percent, as a 3-minute average.

Applicable Compliance Method: Visible emissions shall be evaluated using Method 22, which is located in 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 13.2 TPH Charge Handling, Conveying and Preheating (P903)
Activity Description: Outside storage and handling of raw materials and preheating.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
13.2 TPH charge handling, conveying and preheating operation, with baghouse	OAC rule 3745-17-11(B)	2.38 pounds particulate emissions (PE)/hour (from emissions units P901, P902 and P903 combined)
	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20 percent, as a six-minute average, except as otherwise provided by rule.
	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2-5 inches of water while any of the emissions units (i.e., P901, P902, and P903) is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while any of the emissions units (i.e., P901, P902, and P903) 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 a weekly 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 in section A.II.1 of the terms and conditions of this permit while any of the emissions units (i.e., P901, P902, and P903) was in operation.

V. Testing Requirements

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

- 1.a Emission Limitations: 2.38 pounds PE/hour

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined as follows:

- i. For emissions unit P901:

- (1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.9 pound PE/ton); and

- (2) multiply the value from [1.a.i.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-0.99)].

- ii. For emissions unit P902:

- (1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.9 pound PE/ton); and

- (2) multiply the value from [1.a.ii.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-0.99)].

- iii. For emissions unit P903:

- (1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.3 pound PE/ton); and

- (2) multiply the value from [1.a.iii.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-.99)].

- iv. For natural gas consumption:

- (1) multiply the maximum natural gas consumption rate (6,300 cubic feet/hour) by the appropriate emission factor from AP-42, Table 1.4-1, revised 7/98 (1.9 pounds PE (filtrable)/million cubic feet); and

- (2) multiply the value from [1.a.iv.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-.99)].

- v. The total particulate emissions (pounds/hour) shall be the sum of [1.a.i.(2)], [1.a.ii.(2)], [1.a.iii.(2)], and [1.a.iv.(2)].

If required, the test method employed to demonstrate compliance with the stack emission limitation shall be Method 5, which is located in 40 CFR Part 60, Appendix A.

- 1.b Emission Limitation: Visible PE shall not exceed 20 percent, as a six-minute average.

Applicable Compliance Method: OAC rule 3745-17-03(B)(1)

Facility Name: **The G&C Foundry Company**
Facility ID: **03-22-02-0044**
Emissions Unit: **13.2 TPH Charge Handling, Conveying and Preheating (I**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
13.2 TPH charge handling, conveying and preheating operation, with baghouse	OAC rule 3745-31-05 (PTI No. 03-11245)	See B.I.2.c. See B.I.2.d. Visible fugitive PE shall be limited to 20 percent, as a 3-minute average.

2. Additional Terms and Conditions

- 2.a The 0.13 pound/hour and 0.57 ton/year PE limitations were established for PTI purposes to reflect the potential to emit for this emissions unit.
- 2.b The 1.37 pound/hour and 6.0 tons/year fugitive PE limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.
- 2.c Particulate emissions from the stack of the baghouse serving emissions units P901, P902, and P903 shall not exceed 0.13 pound/hour and 0.57 ton/year*.

* The lb/hr and ton/year PE limitations are for emissions unit P901, P902 and P903 combined.
- 2.d Fugitive particulate emissions from this emissions unit shall not exceed 1.37 pounds PE/hour and 6.0 tons PE/year.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations established in section B.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitations: 0.13 pound PE/hour, 0.57 ton PE/year

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined as follows:

i. For emissions unit P901:

(1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.9 pound PE/ton); and

(2) multiply the value from [1.a.i.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-0.99)].

ii. For emissions unit P902:

(1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.9 pound PE/ton); and

(2) multiply the value from [1.a.ii.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-0.99)].

iii. For emissions unit P903:

(1) multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.3 pound PE/ton); and

(2) multiply the value from [1.a.iii.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-.99)].

iv. For natural gas consumption:

(1) multiply the maximum natural gas consumption rate (6,300 cubic feet/hour) by the appropriate emission factor from AP-42, Table 1.4-1, revised 7/98 (1.9 pounds PE (filtrable)/million cubic feet); and

(2) multiply the value from [1.a.iv.(1)] by the estimated capture and control factors of the baghouse [0.85 X (1-.99)].

v. The total stack particulate emissions (pounds/hour) shall be the sum of [1.a.i.(2)], [1.a.ii.(2)], [1.a.iii.(2)], and [1.a.iv.(2)].

If required, the test method employed to demonstrate compliance with the stack emission limitation shall be Method 5, which is located in 40 CFR Part 60, Appendix A.

The ton/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

- 1.b** Emission Limitations:
1.37 pound of fugitive PE/hour and 6.0 tons fugitive PE/year

Applicable Compliance Method: Compliance with the hourly emission limitation shall be determined as follows:

- i. multiply the maximum process weight rate (13.2 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-3, revised 1/95 (0.3 pound PE/ton);
- ii. multiply the value from [1.b.i] by the estimated capture factor of the baghouse (1-.85);
- iii. multiply the value from [1.b.ii] by the estimated control factor of the building enclosure (1-.70);
- iv. multiply the maximum natural gas combustion rate (6,300 cubic feet/hour) by the appropriate emission factor from AP-42, Table 1.4-1, revised 7/98 (1.9 (filterable) pounds PE/million cubic feet);
- v. multiply the value from [1.b.iv] by the estimated capture factor of the baghouse (1-.85);
- vi. multiply the value from [1.b.v] by the estimated control factor of the building enclosure (1-.70); and
- vii. the fugitive particulate emissions (pounds/hour) shall be the summation of [1.b.iii] and [1.b.vi].

The ton/year emission limitation was developed by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hours/year and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- 1.c** Emission Limitation: Visible fugitive PE shall not exceed 20 percent, as a 3-minute average.

Applicable Compliance Method: Visible emissions shall be evaluated using Method 22, which is located in 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Didion Drum (Z045)

Activity Description: Was P020. Moved to Z045 so Ohio EPA can change source id to P9XX (2/99).

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
10 TPH Didion drum, with baghouse (emissions unit P904)	OAC rule 3745-17-11(B)	5.9 pounds particulate emissions (PE)/hour
	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20 percent, as a six-minute average, except as otherwise provided by rule.
	OAC rule 3745-17-08	none (refer to section A.I.2.a of the terms and conditions of this permit)
	OAC rule 3745-17-07(B)	none (refer to section A.I.2.b of the terms and conditions of this permit)

2. Additional Terms and Conditions

- 2.a This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Erie County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2-5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping 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 a weekly 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 in section A.II.1 of the terms and conditions of this permit.

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitation(s) in section B.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):

1.a Emission Limitation: 5.9 pounds PE/hour

Applicable Compliance Method: The permittee shall demonstrate compliance with this limitation by multiplying the total maximum volumetric air flow rate from the baghouse stack (14,400 cubic feet/minute) by a maximum outlet grain loading of 0.015/cubic foot*. To convert from grain/minute to pound/hour, the permittee shall multiply the the grain/minute value by 60 and divide by 7000.

If required, the method to be employed to demonstrate compliance with the emission limitation shall be Method 5, which is located in 40 CFR Part 60, Appendix A.

* based on information supplied by the baghouse manufacturer

1.b Emission Limitation: Visible PE shall not exceed 20 percent, as a six-minute average.

Applicable Compliance Method: OAC rule 3745-17-03(B)(1)

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
10 TPH Didion drum, with baghouse (emissions unit P904)	OAC rule 3745-31-05 (PTI No. 03-9052)	1.85 pounds particulate emissions (PE)/hour from the baghouse stack 1.44 pounds fugitive PE/hour

2. Additional Terms and Conditions

- 2.a The 1.85 pounds/hour PE limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with this limitation.
- 2.b The 1.44 pounds/hour fugitive PE limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with this limitation.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitation(s) in section B.I of the terms and conditions of this permit shall be determined in accordance with the following method(s):
 - 1.a Emission Limitation: 1.85 pounds PE/hour from the baghouse stack

Applicable Compliance Method: The permittee shall demonstrate compliance with this limitation by multiplying the total maximum volumetric air flow rate from the baghouse stack (14,400 cubic feet/minute) by a maximum outlet grain loading of 0.015/cubic foot*. To convert from grain/minute to pound/hour, the permittee shall multiply the the grain/minute value by 60 and divide by 7000.

If required, the method to be employed to demonstrate compliance with the emission limitation shall be Method 5, which is located in 40 CFR Part 60, Appendix A.

* based on information supplied by the baghouse manufacturer

V. Testing Requirements (continued)

1.b Emission Limitation: 1.44 pounds fugitive PE/hour

Applicable Compliance Method: The permittee shall demonstrate compliance with this limitation as follows:

i. multiply the maximum process weight rate (10 tons/hour) by the appropriate emission factor from AP-42, Table 12.10-7, revised 1/95 (3.2 pounds PE/ton);

ii. multiply the value from [1.b.i] by the percentage of emissions not captured by the hood (0.15); and

iii. multiply the value from [1.b.ii] by the control factor of the building enclosure (1-0.70).

VI. Miscellaneous Requirements

None

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