



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

**RE: FINAL PERMIT TO INSTALL  
DELAWARE COUNTY  
Application No: 01-01350  
Fac ID: 0121010003**

**CERTIFIED MAIL**

	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
Y	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

**DATE: 8/15/2006**

Liberty Casting Company  
Renee Olney  
550 Liberty Road  
Delaware, OH 43015

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, OH 43215

Sincerely,

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

CC: USEPA

CDO



**Permit To Install  
Terms and Conditions**

**Issue Date: 8/15/2006  
Effective Date: 8/15/2006**

**FINAL PERMIT TO INSTALL 01-01350**

Application Number: 01-01350  
Facility ID: 0121010003  
Permit Fee: **\$2800**  
Name of Facility: Liberty Casting Company  
Person to Contact: Renee Olney  
Address: 550 Liberty Road  
Delaware, OH 43015

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**550 S. Liberty Road  
Delaware, Ohio**

Description of proposed emissions unit(s):  
**Chapter 31 modification of several emissions units.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

#### 1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written

reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
  - iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

## **2. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

## **3. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

**4. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

**5. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

**6. General Requirements**

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

**7. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

**8. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

**9. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

#### **10. Permit-To-Operate Application**

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

#### **11. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

#### **12. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**13. Permit-To-Install**

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

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

**1. Compliance Requirements**

The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

**2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**3. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**4. Authorization To Install or Modify**

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**5. Construction of New Sources(s)**

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

**6. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**7. Applicability**

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

**8. Construction Compliance Certification**

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the permit-to-install application and the terms and conditions of the permit-to-install. The

certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**C. Permit-To-Install Summary of Allowable Emissions**

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

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	62.8



P038	thermal sand reclaim unit	2.5	2.5	0.1	2.5	2.5	0.1
P055	5.5 tons/hr electric induction furnace (LRFU3)	4.3	4.1	-	4.3	4.1	-
P056	Large Chromite Sand Mixer LRMX5	-	-	61.5	-	-	61.5
P057	Large Chromite Area flow coat core wash station	-	-	22.0	-	-	22.0
P058	Sand Reclamation System (LRRC 1)	232.0	34.7	-	232.0	34.7	-
P059	Sand Reclamation System (LRRC 2)	-	-	-	-	-	-
P060	Vibramill Shakeout (LRVM 1)	232.0	34.7	90.0	232.0	34.7	90.0
P061	Vibramill Shakeout (LRVM 2)	-	-	-	-	-	-
P062	Vibramill Shakeout (LRVM 3)	-	-	-	-	-	-
P063	Vibramill Shakeout (LRVM 4)	-	-	-	-	-	-
<b>Total emissions increases for new or modified emissions units (project as defined within past 12 months) (tons)</b>		<b>470.8</b>	<b>76</b>	<b>173.6</b>	<b>470.8</b>	<b>76</b>	<b>173.6</b>

- b. If the values are greater than the significance level for the pollutants in question, then a significant emissions increase has occurred. (Based upon Table II, a Significant Modification will occur.)

**Table II:  
Summary Table**

	PE	PM10	VOC
New Emissions Units	470.8	76.0	173.6
Trigger Levels	25	15	40
Significant Emissions Increase?	Yes	Yes	Yes

Step 2. Calculate whether a net emissions increase will occur.

- a. With respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of (1) an increase in emissions; and (2) contemporaneous increases/decreases, exceeds zero. [OAC rule 3745-31-01(SSS)]

**Table III:  
Contemporaneous Increases/Decreases  
and Shutdowns during 5 year period**

Emission Units (EU)	EU Description	2 yr Average Actual (tpy)			Projected Actual (tpy)			Difference (tpy)		
		PE	PM10	VOC	PE	PM10	VOC	PE	PM10	VOC
P013	Shakeout Table <i>Shutdown in 01/06</i> <i>2 yr avg (2004&amp;2005)</i>	94.8	14.3	36.9	-	-	-	94.8	14.3	36.9
P030	Sand Reclamation System <i>Shutdown in 01/06</i> <i>2 yr avg (2004&amp;2005)</i>	94.8	14.3	-	-	-	-	94.8	14.3	-
P031	Furnace <i>Shutdown in 06/02</i> <i>2 yr avg (1998&amp;1999)</i>	1.3	1.3	-	-	-	-	1.3	1.3	-
P027	Furnace 1&2 <i>Shutdown in 02/06</i> <i>2 yr avg (2004&amp;2005)</i>	2.4	2.3	-	-	-	-	2.4	2.3	-
P045	Large core room sand mixer LRMX6 <i>Shutdown in 11/02</i> <i>2 yr avg (1998&amp;1999)</i>	-	-	1.8	-	-	-	-	-	1.8
P048-P053	Combined flow coat mold/core wash stations <i>2 yr avg (2004&amp;2005)</i>	-	-	39.4	-	-	19.2	-	-	20.2
<b>Total net increases/decreases</b>		<b>193</b>	<b>32.2</b>	<b>78.1</b>	<b>-</b>	<b>-</b>	<b>19.2</b>	<b>193</b>	<b>32.2</b>	<b>58.9</b>

**Table IV:**  
**Summary Table -**  
**sum of Table II and Table III**

	PE	PM10	VOC
Significant Emissions Increase	470.8	76.0	173.6
Contemporaneous Increases/Decreases	-193	-32.2	-58.9
Total Significant Net Emissions Increase	277.8	43.8	114.7
Trigger Levels	25	15	40
Significant Net Emissions Increase?	Yes	Yes	Yes

Therefore this project will result in a major modification because the NSR project causes a significant emissions increase and a significant net emissions increase. The permittee is proposing to accept synthetic minor limits for this project to avoid a major modification.

**Table V:**  
**Synthetic Minor Limitations\***

Emissions Unit (EU)	Description	Permit no.	PE PTE (tpy)		PM10 PTE (tpy)		VOC PTE (tpy)	
			Pre	Post	Pre	Post	Pre	Post
P038	thermal sand reclaim unit	01-01287	2.5	2.5	2.5	2.5	0.1	0.1
P055	5.5 tons/hr electric induction furnace (LRFU3)	01-01288	4.3	2.7*	4.1	2.6*	-	-
P056	Large Chromite Sand Mixer LRMX5	01-01344	-	-	-	-	61.5	5.0
P057	Large Chromite Area flow coat core wash station	01-01350	-	-	-	-	22.0	5.9
P058	Sand Reclamation System (LRRC 1)	01-12033	232.0	18.2	34.7	2.8	-	-
P059	Sand Reclamation System (LRRC 2)	01-12033	-	-	-	-	-	-
P060	Vibramill Shakeout (LRVM 1)	01-12033	232.0	18.2	34.7	2.8	90.0	87.8
P061	Vibramill Shakeout (LRVM 2)	01-12033	-	-	-	-	-	-
P062	Vibramill Shakeout (LRVM 3)	01-12033	-	-	-	-	-	-
P063	Vibramill Shakeout (LRVM 4)	01-12033	-	-	-	-	-	-
Total Synthetic Minor Limitations			-	41.6	-	10.7	-	98.8
Contemporaneous Increases/Decreases			-	-193	-	-32.2	-	-58.9

Total Increase	-	-151.4	-	-21.5	-	39.9
Trigger Levels	-	25	-	15	-	40
Significant Net Emissions Increase AFTER Synthetic Minor restrictions?	-	No	-	No	-	No

\* "Post" emission rates listed above are based upon the federally enforceable allowable emission rate, not the projected actual.

**Table VI:  
 Summary Table -  
 Final Determination**

	PE	PM10	VOC
Total Permitting Action without Synthetic Minor	470.8	76.0	173.6
Total Permitting Action with Synthetic Minor	41.6	10.7	98.8
Total Significant Net Emissions Increase with Synthetic Minor	-151.4	-2.51	39.9
Significance Levels	25	15	40
Significant Increase from Permitting Action?	No	No	No

Therefore this project will not result in a major modification because the NSR project does not cause a significant emissions increase.

**B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions**

None

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

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P048 - Main Line flow coat mold wash station (installation or modification of this emissions unit commenced prior to August 3, 2006)	OAC rule 3745-31-05(A)(3)	VOC emissions shall not exceed 25.38 lbs/hr.  See Section A.I.2.d below.  See Section A.I.2.a below.  The requirements of this rule shall also include compliance with the requirements of OAC 3745-31-05(C)(1).
	OAC rule 3745-21-07(G)	See Section A.I.2.b below.
	OAC rule 3745-31-05(C)(1)	See Section A.I.2.c and A.II.1-3 below.

**2. Additional Terms and Conditions**

- 2.a The 25.38 pounds VOC per hour emission limitation was written to reflect the potential to emit of this emissions unit when controlled by light-off. Therefore, additional monitoring, record keeping, and reporting requirements are not necessary to demonstrate compliance with this emission limitation.
- 2.b To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.c The total allowable emissions of VOC from emission unit P048 (Main Line flow coat mold wash station), P049 (Loop Line flow coat mold wash station), P050 (Liberty Flask Line flow coat mold wash station), P051 (South Core Room flow

coat core wash station no.1), P052 (South Core Room flow coat core wash station no.2), P053 (North Core Room core wash station) and P057 (Large Chromite Area flow coat core wash station) combined shall not exceed 62.8 tons per rolling, 12-month summation.

- 2.d** The permittee shall install and employ reasonably available control measures to minimize fugitive emissions of VOC from storage and application of mold/core wash and IPA.

## **II. Operational Restrictions**

1. All mold and/or core washes applied to molds and/or cores shall be lit-off within one minute of application.
2. The maximum mold and/or core wash VOC content shall not exceed 30%, by weight, excluding water and exempt solvents.
3. The maximum usage from emission units P048-P053 and P057 combined, shall not exceed 1,405,998 lbs of mold/core wash and/or 296,298 lbs of isopropyl alcohol (IPA) based upon a rolling, 12-month summation.

Since this is an existing operation, there are existing records of mold/core wash and IPA usage and therefore the amount of mold/core wash and IPA used during the first 12 months does not need to be established.

## **III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.
2. The permittee shall maintain daily records of the following information:
  - a. any mold and/or core wash application in which the mold and/or core wash was not lit off within one minute of application;
  - b. the reason for not lighting off the mold and/or core wash within one minute of application; and
  - c. the time, in minutes, before the mold and/or core wash was lit off.
3. The permittee shall maintain monthly records of the following information for emission units P048-P053 and P057 combined:
  - a. the company identification of each mold/core wash and IPA used;
  - b. the amount, in pounds, of each mold/core wash and IPA used;
  - c. the organic compound content of each mold/core wash and IPA, in pounds VOC per pound of wash and % VOC, by weight;
  - d. the rolling 12-month summation of mold/core wash and IPA used, in pounds;
  - e. the VOC emission rate based on a rolling, 12-month summation (sum of c x d for each mold/core wash and IPA), in tons.

**Liberty Casting Company**  
**PTI Application: 01-01350**  
**Issued: 8/15/2006**

**Facility ID: 0121010003**  
**Emissions Unit ID: P048**

#### **IV. Reporting Requirements**

1. The permittee shall submit to the Director (Central District Office) deviation (excursion) reports which identify all periods during which photochemically reactive materials were employed in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit to the Director (Central District Office ) deviation (excursion) reports which identify any day during which a mold and/or core wash was not lit off within one minute of application. Each report shall identify the reason for not lighting off the mold and/or core wash within one minute of application, and the estimated total quantity of material(s) emitted in pounds. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. the mold and/or core wash VOC content limit;
  - b. the combined rolling, 12-month mold/core wash and IPA usage limitations; and
  - c. the combined rolling, 12-month VOC emission limitation for P048-P053 and P057 combined.

These quarterly deviation (excursion) reports shall be submitted to the Ohio EPA, Central District Office by the dates described in Part I - General Terms and Conditions of this permit under section (A). If no deviations occurred during the calendar quarter, the permittee shall submit a report which states that no deviations occurred during the calendar quarter.

4. The permittee shall submit annual reports that specify the total VOC emissions from emission units P048-P053 and P057 combined for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for emission units P048-P053 and P057 combined in the annual Fee Emission Report.

#### **V. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:  
VOC emissions shall not exceed 25.38 lbs/hr.

Applicable Compliance Method:

Compliance shall be established by summing the mold/core wash and IPA emissions for storage and application. The storage mold/core wash emissions can be determined by multiplying the maximum usage of 284 lbs/hr by 0.3 lbs VOC/lb by the amount emitted during storage (1.0-0.5) by the control efficiency of

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(1.0-0.95). The storage IPA emissions can be determined by multiplying the maximum usage of 59.8 lbs/hr by 0.3 lbs VOC/lb by the amount emitted during storage (1.0-0.5) by the control efficiency of (1.0-0.95).

The application mold/wash emissions can be determined by multiplying the maximum mold/wash usage of 284 lbs/hr by 0.3 lb VOC/lb by the amount emitted during storage (1.0-0.5) by the destruction efficiency of (1.0-0.7) (AFS Casting Congress, "Measurement of Emissions Associated With the Application of a Flammable Solvent-based Core and Mold Coating" 05/98). The application IPA emissions can be determined by multiplying the maximum IPA usage of 59.8 lbs/hr by 1.0 lb VOC/lb by the amount emitted during storage (1.0-0.5) by the destruction efficiency of (1.0-0.7).

- b. Emission Limitation:  
VOC emissions from emission units P048-P053 and P057 combined shall not exceed 62.58 tons based on a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emissions limitation based on the record keeping under Section III.3.e above.

## **VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P048 - Main Line flow coat mold wash station (installation or modification of this emissions unit commenced prior to August 3, 2006)	None	None

**2. Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P049 - Loop Line flow coat mold wash station (installation or modification of this emissions unit commenced prior to August 3, 2006)	OAC rule 3745-31-05(A)(3)	VOC emissions shall not exceed 8.33 lbs/hr.  See Section A.I.2.d below.  See Section A.I.2.a below.  The requirements of this rule shall also include compliance with the requirements of OAC 3745-31-05(C)(1).
	OAC rule 3745-21-07(G)	See Section A.I.2.b below.
	OAC rule 3745-31-05(C)(1)	See Section A.I.2.c and A.II.1-3 below.

**2. Additional Terms and Conditions**

- 2.a The 8.33 pounds VOC per hour emission limitation was written to reflect the potential to emit of this emissions unit when controlled by light-off. Therefore, additional monitoring, record keeping, and reporting requirements are not necessary to demonstrate compliance with this emission limitation.
- 2.b To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.c The total allowable emissions of VOC from emission unit P048 (Main Line flow coat mold wash station), P049 (Loop Line flow coat mold wash station), P050 (Liberty Flask Line flow coat mold wash station), P051 (South Core Room flow

coat core wash station no.1), P052 (South Core Room flow coat core wash station no.2), P053 (North Core Room core wash station) and P057 (Large Chromite Area flow coat core wash station) combined shall not exceed 62.8 tons per rolling, 12-month summation.

- 2.d** The permittee shall install and employ reasonably available control measures to minimize fugitive emissions of VOC from storage and application of mold/core wash and IPA.

## **II. Operational Restrictions**

1. All mold and/or core washes applied to molds and/or cores shall be lit-off within one minute of application.
2. The maximum mold and/or core wash VOC content shall not exceed 30%, by weight, excluding water and exempt solvents.
3. The maximum usage from emission units P048-P053 and P057 combined, shall not exceed 1,405,998 lbs of mold/core wash and/or 296,298 lbs of isopropyl alcohol (IPA) based upon a rolling, 12-month summation.

Since this is an existing operation, there are existing records of mold/core wash and IPA usage and therefore the amount of mold/core wash and IPA used during the first 12 months does not need to be established.

## **III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.
2. The permittee shall maintain daily records of the following information:
  - a. any mold and/or core wash application in which the mold and/or core wash was not lit off within one minute of application;
  - b. the reason for not lighting off the mold and/or core wash within one minute of application; and
  - c. the time, in minutes, before the mold and/or core wash was lit off.
3. The permittee shall maintain monthly records of the following information for emission units P048-P053 and P057 combined:
  - a. the company identification of each mold/core wash and IPA used;
  - b. the amount, in pounds, of each mold/core wash and IPA used;
  - c. the organic compound content of each mold/core wash and IPA, in pounds VOC per pound of wash and % VOC, by weight;
  - d. the rolling 12-month summation of mold/core wash and IPA used, in pounds;
  - e. the VOC emission rate based on a rolling, 12-month summation (sum of c x d for each mold/core wash and IPA), in tons.

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#### **IV. Reporting Requirements**

1. The permittee shall submit to the Director (Central District Office) deviation (excursion) reports which identify all periods during which photochemically reactive materials were employed in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit to the Director (Central District Office ) deviation (excursion) reports which identify any day during which a mold and/or core wash was not lit off within one minute of application. Each report shall identify the reason for not lighting off the mold and/or core wash within one minute of application, and the estimated total quantity of material(s) emitted in pounds. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. the mold and/or core wash VOC content limit;
  - b. the combined rolling, 12-month mold/core wash and IPA usage limitations; and
  - c. the combined rolling, 12-month VOC emission limitation for P048-P053 and P057 combined.

These quarterly deviation (excursion) reports shall be submitted to the Ohio EPA, Central District Office by the dates described in Part I - General Terms and Conditions of this permit under section (A). If no deviations occurred during the calendar quarter, the permittee shall submit a report which states that no deviations occurred during the calendar quarter.

4. The permittee shall submit annual reports that specify the total VOC emissions from emission units P048-P053 and P057 combined for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for emission units P048-P053 and P057 combined in the annual Fee Emission Report.

#### **V. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
VOC emissions shall not exceed 8.33 lbs/hr.

Applicable Compliance Method:

Compliance shall be established by summing the mold/core wash and IPA emissions for storage and application. The storage mold/core wash emissions can be determined by multiplying the maximum usage of 93.18 lbs/hr by 0.3 lbs VOC/lb by the amount emitted during storage (1.0-0.5) by the control efficiency of

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(1.0-0.95). The storage IPA emissions can be determined by multiplying the maximum usage of 19.62 lbs/hr by 0.3 lbs VOC/lb by the amount emitted during storage (1.0-0.5) by the control efficiency of (1.0-0.95).

The application mold/wash emissions can be determined by multiplying the maximum mold/wash usage of 93.18 lbs/hr by 0.3 lb VOC/lb by the amount emitted during storage (1.0-0.5) by the destruction efficiency of (1.0-0.7) (AFS Casting Congress, "Measurement of Emissions Associated With the Application of a Flammable Solvent-based Core and Mold Coating" 05/98). The application IPA emissions can be determined by multiplying the maxim IPA usage of 19.62 lbs/hr by 1.0 lb VOC/lb by the amount emitted during storage (1.0-0.5) by the destruction efficiency of (1.0-0.7).

- b. Emission Limitation:  
VOC emissions from emission units P048-P053 and P057 combined shall not exceed 62.8 tons based on a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emissions limitation based on the record keeping under Section III.3.e above.

## **VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P049 - Loop Line flow coat mold wash station (installation or modification of this emissions unit commenced prior to August 3, 2006)	None	None

**2. Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P050 - Flask Line flow coat mold wash station (installation or modification of this emissions unit commenced prior to August 3, 2006)	OAC rule 3745-31-05(A)(3)	VOC emissions shall not exceed 15.09 lbs/hr.  See Section A.I.2.d below.  See Section A.I.2.a below.
	OAC rule 3745-21-07(G)	The requirements of this rule shall also include compliance with the requirements of OAC 3745-31-05(C)(1).  See Section A.I.2.b below.
	OAC rule 3745-31-05(C)(1)	See Section A.I.2.c and A.II.1-3 below.

**2. Additional Terms and Conditions**

- 2.a The 15.09 pounds VOC per hour emission limitation was written to reflect the potential to emit of this emissions unit when controlled by light-off. Therefore, additional monitoring, record keeping, and reporting requirements are not necessary to demonstrate compliance with this emission limitation.
- 2.b To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.c The total allowable emissions of VOC from emission unit P048 (Main Line flow coat mold wash station), P049 (Loop Line flow coat mold wash station), P050 (Liberty Flask Line flow coat mold wash station), P051 (South Core Room flow

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coat core wash station no.1), P052 (South Core Room flow coat core wash station no.2), P053 (North Core Room core wash station) and P057 (Large Chromite Area flow coat core wash station) combined shall not exceed 62.8 tons per rolling, 12-month summation.

- 2.d** The permittee shall install and employ reasonably available control measures to minimize fugitive emissions of VOC from storage and application of mold/core wash and IPA.

## **II. Operational Restrictions**

1. All mold and/or core washes applied to molds and/or cores shall be lit-off within one minute of application.
2. The maximum mold and/or core wash VOC content shall not exceed 30%, by weight, excluding water and exempt solvents.
3. The maximum usage from emission units P048-P053 and P057 combined, shall not exceed 1,405,998 lbs of mold/core wash and/or 296,298 lbs of isopropyl alcohol (IPA) based upon a rolling, 12-month summation.

Since this is an existing operation, there are existing records of mold/core wash and IPA usage and therefore the amount of mold/core wash and IPA used during the first 12 months does not need to be established.

## **III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.
2. The permittee shall maintain daily records of the following information:
  - a. any mold and/or core wash application in which the mold and/or core wash was not lit off within one minute of application;
  - b. the reason for not lighting off the mold and/or core wash within one minute of application; and
  - c. the time, in minutes, before the mold and/or core wash was lit off.
3. The permittee shall maintain monthly records of the following information for emission units P048-P053 and P057 combined:
  - a. the company identification of each mold/core wash and IPA used;
  - b. the amount, in pounds, of each mold/core wash and IPA used;
  - c. the organic compound content of each mold/core wash and IPA, in pounds VOC per pound of wash and % VOC, by weight;
  - d. the rolling 12-month summation of mold/core wash and IPA used, in pounds;
  - e. the VOC emission rate based on a rolling, 12-month summation (sum of c x d for each mold/core wash and IPA), in tons.

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#### **IV. Reporting Requirements**

1. The permittee shall submit to the Director (Central District Office) deviation (excursion) reports which identify all periods during which photochemically reactive materials were employed in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit to the Director (Central District Office ) deviation (excursion) reports which identify any day during which a mold and/or core wash was not lit off within one minute of application. Each report shall identify the reason for not lighting off the mold and/or core wash within one minute of application, and the estimated total quantity of material(s) emitted in pounds. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. the mold and/or core wash VOC content limit;
  - b. the combined rolling, 12-month mold/core wash and IPA usage limitations; and
  - c. the combined rolling, 12-month VOC emission limitation for P048-P053 and P057 combined.

These quarterly deviation (excursion) reports shall be submitted to the Ohio EPA, Central District Office by the dates described in Part I - General Terms and Conditions of this permit under section (A). If no deviations occurred during the calendar quarter, the permittee shall submit a report which states that no deviations occurred during the calendar quarter.

4. The permittee shall submit annual reports that specify the total VOC emissions from emission units P048-P053 and P057 combined for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for emission units P048-P053 and P057 combined in the annual Fee Emission Report.

#### **V. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:  
VOC emissions shall not exceed 15.09 lbs/hr.

Applicable Compliance Method:

Compliance shall be established by summing the mold/core wash and IPA emissions for storage and application. The storage mold/core wash emissions can be determined by multiplying the maximum usage of 168.9 lbs/hr by 0.3 lbs VOC/lb by the amount emitted during storage (1.0-0.5) by the control efficiency of

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(1.0-0.95). The storage IPA emissions can be determined by multiplying the maximum usage of 35.53 lbs/hr by 0.3 lbs VOC/lb by the amount emitted during storage (1.0-0.5) by the control efficiency of (1.0-0.95).

The application mold/wash emissions can be determined by multiplying the maximum mold/wash usage of 168.9 lbs/hr by 0.3 lb VOC/lb by the amount emitted during storage (1.0-0.5) by the destruction efficiency of (1.0-0.7) (AFS Casting Congress, "Measurement of Emissions Associated With the Application of a Flammable Solvent-based Core and Mold Coating" 05/98). The application IPA emissions can be determined by multiplying the maximum IPA usage of 35.53 lbs/hr by 1.0 lb VOC/lb by the amount emitted during storage (1.0-0.5) by the destruction efficiency of (1.0-0.7).

- b. Emission Limitation:  
VOC emissions from emission units P048-P053 and P057 combined shall not exceed 62.8 tons based on a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emissions limitation based on the record keeping under Section III.3.e above.

## **VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P050 - Flask Line flow coat mold wash station (installation or modification of this emissions unit commenced prior to August 3, 2006)	None	None

**2. Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P051 - South Core Room flow coat core wash station no.1 (installation or modification of this emissions unit commenced prior to August 3, 2006)	OAC rule 3745-31-05(A)(3)	VOC emissions shall not exceed 0.93 lbs/hr.  See Section A.I.2.d below.  See Section A.I.2.a below.
	OAC rule 3745-21-07(G)	The requirements of this rule shall also include compliance with the requirements of OAC 3745-31-05(C)(1).  See Section A.I.2.b below.
	OAC rule 3745-31-05(C)(1)	See Section A.I.2.c and A.II.1-3 below.

**2. Additional Terms and Conditions**

- 2.a** The 0.93 pounds VOC per hour emission limitation was written to reflect the potential to emit of this emissions unit when controlled by light-off. Therefore, additional monitoring, record keeping, and reporting requirements are not necessary to demonstrate compliance with this emission limitation.
- 2.b** To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.c** The total allowable emissions of VOC from emission unit P048 (Main Line flow coat mold wash station), P049 (Loop Line flow coat mold wash station), P050 (Liberty Flask Line flow coat mold wash station), P051 (South Core Room flow

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coat core wash station no.1), P052 (South Core Room flow coat core wash station no.2), P053 (North Core Room core wash station) and P057 (Large Chromite Area flow coat core wash station) combined shall not exceed 62.8 tons per rolling, 12-month summation.

- 2.d** The permittee shall install and employ reasonably available control measures to minimize fugitive emissions of VOC from storage and application of mold/core wash and IPA.

## **II. Operational Restrictions**

1. All mold and/or core washes applied to molds and/or cores shall be lit-off within one minute of application.
2. The maximum mold and/or core wash VOC content shall not exceed 30%, by weight, excluding water and exempt solvents.
3. The maximum usage from emission units P048-P053 and P057 combined, shall not exceed 1,405,998 lbs of mold/core wash and/or 296,298 lbs of isopropyl alcohol (IPA) based upon a rolling, 12-month summation.

Since this is an existing operation, there are existing records of mold/core wash and IPA usage and therefore the amount of mold/core wash and IPA used during the first 12 months does not need to be established.

## **III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.
2. The permittee shall maintain daily records of the following information:
  - a. any mold and/or core wash application in which the mold and/or core wash was not lit off within one minute of application;
  - b. the reason for not lighting off the mold and/or core wash within one minute of application; and
  - c. the time, in minutes, before the mold and/or core wash was lit off.
3. The permittee shall maintain monthly records of the following information for emission units P048-P053 and P057 combined:
  - a. the company identification of each mold/core wash and IPA used;
  - b. the amount, in pounds, of each mold/core wash and IPA used;
  - c. the organic compound content of each mold/core wash and IPA, in pounds VOC per pound of wash and % VOC, by weight;
  - d. the rolling 12-month summation of mold/core wash and IPA used, in pounds;
  - e. the VOC emission rate based on a rolling, 12-month summation (sum of c x d for each mold/core wash and IPA), in tons.

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#### **IV. Reporting Requirements**

1. The permittee shall submit to the Director (Central District Office) deviation (excursion) reports which identify all periods during which photochemically reactive materials were employed in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit to the Director (Central District Office ) deviation (excursion) reports which identify any day during which a mold and/or core wash was not lit off within one minute of application. Each report shall identify the reason for not lighting off the mold and/or core wash within one minute of application, and the estimated total quantity of material(s) emitted in pounds. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. the mold and/or core wash VOC content limit;
  - b. the combined rolling, 12-month mold/core wash and IPA usage limitations; and
  - c. the combined rolling, 12-month VOC emission limitation for P048-P053 and P057 combined.

These quarterly deviation (excursion) reports shall be submitted to the Ohio EPA, Central District Office by the dates described in Part I - General Terms and Conditions of this permit under section (A). If no deviations occurred during the calendar quarter, the permittee shall submit a report which states that no deviations occurred during the calendar quarter.

4. The permittee shall submit annual reports that specify the total VOC emissions from emission units P048-P053 and P057 combined for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for emission units P048-P053 and P057 combined in the annual Fee Emission Report.

#### **V. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:  
VOC emissions shall not exceed 0.93 lbs/hr.

Applicable Compliance Method:

Compliance shall be established by summing the mold/core wash and IPA emissions for storage and application. The storage mold/core wash emissions can be determined by multiplying the maximum usage of 10.39 lbs/hr by 0.3 lbs VOC/lb by the amount emitted during storage (1.0-0.5) by the control efficiency of

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(1.0-0.95). The storage IPA emissions can be determined by multiplying the maximum usage of 2.19 lbs/hr by 0.3 lbs VOC/lb by the amount emitted during storage (1.0-0.5) by the control efficiency of (1.0-0.95).

The application mold/wash emissions can be determined by multiplying the maximum mold/wash usage of 10.39 lbs/hr by 0.3 lb VOC/lb by the amount emitted during storage (1.0-0.5) by the destruction efficiency of (1.0-0.7) (AFS Casting Congress, "Measurement of Emissions Associated With the Application of a Flammable Solvent-based Core and Mold Coating" 05/98). The application IPA emissions can be determined by multiplying the maxim IPA usage of 2.19 lbs/hr by 1.0 lb VOC/lb by the amount emitted during storage (1.0-0.5) by the destruction efficiency of (1.0-0.7).

- b. Emission Limitation:  
VOC emissions from emission units P048-P053 and P057 combined shall not exceed 62.8 tons based on a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emissions limitation based on the record keeping under Section III.3.e above.

## **VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P051 - South Core Room flow coat core wash station no.1 (installation or modification of this emissions unit commenced prior to August 3, 2006)	None	None

2. **Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P052 - South Core Room flow coat core wash station no.2 (installation or modification of this emissions unit commenced prior to August 3, 2006)	OAC rule 3745-31-05(A)(3)	VOC emissions shall not exceed 0.93 lbs/hr.  See Section A.I.2.d below.  See Section A.I.2.a below.  The requirements of this rule shall also include compliance with the requirements of OAC 3745-31-05(C)(1).
	OAC rule 3745-21-07(G)	See Section A.I.2.b below.
	OAC rule 3745-31-05(C)(1)	See Section A.I.2.c and A.II.1-3 below.

**2. Additional Terms and Conditions**

- 2.a The 0.93 pounds VOC per hour emission limitation was written to reflect the potential to emit of this emissions unit when controlled by light-off. Therefore, additional monitoring, record keeping, and reporting requirements are not necessary to demonstrate compliance with this emission limitation.
- 2.b To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.c The total allowable emissions of VOC from emission unit P048 (Main Line flow coat mold wash station), P049 (Loop Line flow coat mold wash station), P050 (Liberty Flask Line flow coat mold wash station), P051 (South Core Room flow

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coat core wash station no.1), P052 (South Core Room flow coat core wash station no.2), P053 (North Core Room core wash station) and P057 (Large Chromite Area flow coat core wash station) combined shall not exceed 62.8 tons per rolling, 12-month summation.

- 2.d** The permittee shall install and employ reasonably available control measures to minimize fugitive emissions of VOC from storage and application of mold/core wash and IPA.

## **II. Operational Restrictions**

1. All mold and/or core washes applied to molds and/or cores shall be lit-off within one minute of application.
2. The maximum mold and/or core wash VOC content shall not exceed 30%, by weight, excluding water and exempt solvents.
3. The maximum usage from emission units P048-P053 and P057 combined, shall not exceed 1,405,998 lbs of mold/core wash and/or 296,298 lbs of isopropyl alcohol (IPA) based upon a rolling, 12-month summation.

Since this is an existing operation, there are existing records of mold/core wash and IPA usage and therefore the amount of mold/core wash and IPA used during the first 12 months does not need to be established.

## **III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.
2. The permittee shall maintain daily records of the following information:
  - a. any mold and/or core wash application in which the mold and/or core wash was not lit off within one minute of application;
  - b. the reason for not lighting off the mold and/or core wash within one minute of application; and
  - c. the time, in minutes, before the mold and/or core wash was lit off.
3. The permittee shall maintain monthly records of the following information for emission units P048-P053 and P057 combined:
  - a. the company identification of each mold/core wash and IPA used;
  - b. the amount, in pounds, of each mold/core wash and IPA used;
  - c. the organic compound content of each mold/core wash and IPA, in pounds VOC per pound of wash and % VOC, by weight;
  - d. the rolling 12-month summation of mold/core wash and IPA used, in pounds;
  - e. the VOC emission rate based on a rolling, 12-month summation (sum of c x d for each mold/core wash and IPA), in tons.

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#### **IV. Reporting Requirements**

1. The permittee shall submit to the Director (Central District Office) deviation (excursion) reports which identify all periods during which photochemically reactive materials were employed in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit to the Director (Central District Office ) deviation (excursion) reports which identify any day during which a mold and/or core wash was not lit off within one minute of application. Each report shall identify the reason for not lighting off the mold and/or core wash within one minute of application, and the estimated total quantity of material(s) emitted in pounds. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. the mold and/or core wash VOC content limit;
  - b. the combined rolling, 12-month mold/core wash and IPA usage limitations; and
  - c. the combined rolling, 12-month VOC emission limitation for P048-P053 and P057 combined.

These quarterly deviation (excursion) reports shall be submitted to the Ohio EPA, Central District Office by the dates described in Part I - General Terms and Conditions of this permit under section (A). If no deviations occurred during the calendar quarter, the permittee shall submit a report which states that no deviations occurred during the calendar quarter.

4. The permittee shall submit annual reports that specify the total VOC emissions from emission units P048-P053 and P057 combined for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for emission units P048-P053 and P057 combined in the annual Fee Emission Report.

#### **V. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:  
VOC emissions shall not exceed 0.93 lbs/hr.

Applicable Compliance Method:

Compliance shall be established by summing the mold/core wash and IPA emissions for storage and application. The storage mold/core wash emissions can be determined by multiplying the maximum usage of 10.39 lbs/hr by 0.3 lbs VOC/lb by the amount emitted during storage (1.0-0.5) by the control efficiency of

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(1.0-0.95). The storage IPA emissions can be determined by multiplying the maximum usage of 2.19 lbs/hr by 0.3 lbs VOC/lb by the amount emitted during storage (1.0-0.5) by the control efficiency of (1.0-0.95).

The application mold/wash emissions can be determined by multiplying the maximum mold/wash usage of 10.39 lbs/hr by 0.3 lb VOC/lb by the amount emitted during storage (1.0-0.5) by the destruction efficiency of (1.0-0.7) (AFS Casting Congress, "Measurement of Emissions Associated With the Application of a Flammable Solvent-based Core and Mold Coating" 05/98). The application IPA emissions can be determined by multiplying the maxim IPA usage of 2.19 lbs/hr by 1.0 lb VOC/lb by the amount emitted during storage (1.0-0.5) by the destruction efficiency of (1.0-0.7).

- b. Emission Limitation:  
VOC emissions from emission units P048-P053 and P057 combined shall not exceed 62.8 tons based on a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emissions limitation based on the record keeping under Section III.3.e above.

## **VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P052 - South Core Room flow coat core wash station no.2 (installation or modification of this emissions unit commenced prior to August 3, 2006)	None	None

**2. Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P053 - North Core Room core wash station (installation or modification of this emissions unit commenced prior to August 3, 2006)	OAC rule 3745-31-05(A)(3)	VOC emissions shall not exceed 1.36 lbs/hr.  See Section A.I.2.d below.  See Section A.I.2.a below.  The requirements of this rule shall also include compliance with the requirements of OAC 3745-31-05(C)(1).
	OAC rule 3745-21-07(G)	See Section A.I.2.b below.
	OAC rule 3745-31-05(C)(1)	See Section A.I.2.c and A.II.1-3 below.

**2. Additional Terms and Conditions**

- 2.a The 1.36 pounds VOC per hour emission limitation was written to reflect the potential to emit of this emissions unit when controlled by light-off. Therefore, additional monitoring, record keeping, and reporting requirements are not necessary to demonstrate compliance with this emission limitation.
- 2.b To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.c The total allowable emissions of VOC from emission unit P048 (Main Line flow coat mold wash station), P049 (Loop Line flow coat mold wash station), P050 (Liberty Flask Line flow coat mold wash station), P051 (South Core Room flow

coat core wash station no.1), P052 (South Core Room flow coat core wash station no.2), P053 (North Core Room core wash station) and P057 (Large Chromite Area flow coat core wash station) combined shall not exceed 62.8 tons per rolling, 12-month summation.

- 2.d** The permittee shall install and employ reasonably available control measures to minimize fugitive emissions of VOC from storage and application of mold/core wash and IPA.

## **II. Operational Restrictions**

1. All mold and/or core washes applied to molds and/or cores shall be lit-off within one minute of application.
2. The maximum mold and/or core wash VOC content shall not exceed 30%, by weight, excluding water and exempt solvents.
3. The maximum usage from emission units P048-P053 and P057 combined, shall not exceed 1,405,998 lbs of mold/core wash and/or 296,298 lbs of isopropyl alcohol (IPA) based upon a rolling, 12-month summation.

Since this is an existing operation, there are existing records of mold/core wash and IPA usage and therefore the amount of mold/core wash and IPA used during the first 12 months does not need to be established.

## **III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.
2. The permittee shall maintain daily records of the following information:
  - a. any mold and/or core wash application in which the mold and/or core wash was not lit off within one minute of application;
  - b. the reason for not lighting off the mold and/or core wash within one minute of application; and
  - c. the time, in minutes, before the mold and/or core wash was lit off.
3. The permittee shall maintain monthly records of the following information for emission units P048-P053 and P057 combined:
  - a. the company identification of each mold/core wash and IPA used;
  - b. the amount, in pounds, of each mold/core wash and IPA used;
  - c. the organic compound content of each mold/core wash and IPA, in pounds VOC per pound of wash and % VOC, by weight;
  - d. the rolling 12-month summation of mold/core wash and IPA used, in pounds;
  - e. the VOC emission rate based on a rolling, 12-month summation (sum of c x d for each mold/core wash and IPA), in tons.

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#### **IV. Reporting Requirements**

1. The permittee shall submit to the Director (Central District Office) deviation (excursion) reports which identify all periods during which photochemically reactive materials were employed in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit to the Director (Central District Office ) deviation (excursion) reports which identify any day during which a mold and/or core wash was not lit off within one minute of application. Each report shall identify the reason for not lighting off the mold and/or core wash within one minute of application, and the estimated total quantity of material(s) emitted in pounds. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. the mold and/or core wash VOC content limit;
  - b. the combined rolling, 12-month mold/core wash and IPA usage limitations; and
  - c. the combined rolling, 12-month VOC emission limitation for P048-P053 and P057 combined.

These quarterly deviation (excursion) reports shall be submitted to the Ohio EPA, Central District Office by the dates described in Part I - General Terms and Conditions of this permit under section (A). If no deviations occurred during the calendar quarter, the permittee shall submit a report which states that no deviations occurred during the calendar quarter.

4. The permittee shall submit annual reports that specify the total VOC emissions from emission units P048-P053 and P057 combined for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for emission units P048-P053 and P057 combined in the annual Fee Emission Report.

#### **V. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
VOC emissions shall not exceed 1.36 lbs/hr.

Applicable Compliance Method:

Compliance shall be established by summing the mold/core wash and IPA emissions for storage and application. The storage mold/core wash emissions can be determined by multiplying the maximum usage of 15.28 lbs/hr by 0.3 lbs VOC/lb by the amount emitted during storage (1.0-0.5) by the control efficiency of

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(1.0-0.95). The storage IPA emissions can be determined by multiplying the maximum usage of 3.22 lbs/hr by 0.3 lbs VOC/lb by the amount emitted during storage (1.0-0.5) by the control efficiency of (1.0-0.95).

The application mold/wash emissions can be determined by multiplying the maximum mold/wash usage of 15.28 lbs/hr by 0.3 lb VOC/lb by the amount emitted during storage (1.0-0.5) by the destruction efficiency of (1.0-0.7) (AFS Casting Congress, "Measurement of Emissions Associated With the Application of a Flammable Solvent-based Core and Mold Coating" 05/98). The application IPA emissions can be determined by multiplying the maxim IPA usage of 3.22 lbs/hr by 1.0 lb VOC/lb by the amount emitted during storage (1.0-0.5) by the destruction efficiency of (1.0-0.7).

- b. Emission Limitation:  
VOC emissions from emission units P048-P053 and P057 combined shall not exceed 62.8 tons based on a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emissions limitation based on the record keeping under Section III.3.e above.

## **VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P053 - North Core Room core wash station (installation or modification of this emissions unit commenced prior to August 3, 2006)	None	None

**2. Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P057 - Large Chromite Area flow coat core wash station (installation or modification of this emissions unit commenced prior to August 3, 2006)	OAC rule 3745-31-05(A)(3)	VOC emissions shall not exceed 1.35 lbs/hr.  See Section A.I.2.d below.  See Section A.I.2.a below.
	OAC rule 3745-21-07(G)	The requirements of this rule shall also include compliance with the requirements of OAC 3745-31-05(C)(1).  See Section A.I.2.b below.
	OAC rule 3745-31-05(C)(1)	See Section A.I.2.c and A.II.1-3 below.

**2. Additional Terms and Conditions**

- 2.a The 1.35 pounds VOC per hour emission limitation was written to reflect the potential to emit of this emissions unit when controlled by light-off. Therefore, additional monitoring, record keeping, and reporting requirements are not necessary to demonstrate compliance with this emission limitation.
- 2.b To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as raw materials or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

- 2.c The total allowable emissions of VOC from emission unit P048 (Main Line flow coat mold wash station), P049 (Loop Line flow coat mold wash station), P050 (Liberty Flask Line flow coat mold wash station), P051 (South Core Room flow

coat core wash station no.1), P052 (South Core Room flow coat core wash station no.2), P053 (North Core Room core wash station) and P057 (Large Chromite Area flow coat core wash station) combined shall not exceed 62.8 tons per rolling, 12-month summation.

- 2.d** The permittee shall install and employ reasonably available control measures to minimize fugitive emissions of VOC from storage and application of mold/core wash and IPA.

## **II. Operational Restrictions**

1. All mold and/or core washes applied to molds and/or cores shall be lit-off within one minute of application.
2. The maximum mold and/or core wash VOC content shall not exceed 30%, by weight, excluding water and exempt solvents.
3. The maximum usage from emission units P048-P053 and P057 combined, shall not exceed 1,405,998 lbs of mold/core wash and/or 296,298 lbs of isopropyl alcohol (IPA) based upon a rolling, 12-month summation.

Since this is an existing operation, there are existing records of mold/core wash and IPA usage and therefore the amount of mold/core wash and IPA used during the first 12 months does not need to be established.

## **III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain records for each material employed in this emissions unit that indicate whether or not the material is a photochemically reactive material.
2. The permittee shall maintain daily records of the following information:
  - a. any mold and/or core wash application in which the mold and/or core wash was not lit off within one minute of application;
  - b. the reason for not lighting off the mold and/or core wash within one minute of application; and
  - c. the time, in minutes, before the mold and/or core wash was lit off.
3. The permittee shall maintain monthly records of the following information for emission units P048-P053 and P057 combined:
  - a. the company identification of each mold/core wash and IPA used;
  - b. the amount, in pounds, of each mold/core wash and IPA used;
  - c. the organic compound content of each mold/core wash and IPA, in pounds VOC per pound of wash and % VOC, by weight;
  - d. the rolling 12-month summation of mold/core wash and IPA used, in pounds;
  - e. the VOC emission rate based on a rolling, 12-month summation (sum of c x d for each mold/core wash and IPA), in tons.

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#### **IV. Reporting Requirements**

1. The permittee shall submit to the Director (Central District Office) deviation (excursion) reports which identify all periods during which photochemically reactive materials were employed in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit to the Director (Central District Office ) deviation (excursion) reports which identify any day during which a mold and/or core wash was not lit off within one minute of application. Each report shall identify the reason for not lighting off the mold and/or core wash within one minute of application, and the estimated total quantity of material(s) emitted in pounds. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. the mold and/or core wash VOC content limit;
  - b. the combined rolling, 12-month mold/core wash and IPA usage limitations; and
  - c. the combined rolling, 12-month VOC emission limitation for P048-P053 and P057 combined.

These quarterly deviation (excursion) reports shall be submitted to the Ohio EPA, Central District Office by the dates described in Part I - General Terms and Conditions of this permit under section (A). If no deviations occurred during the calendar quarter, the permittee shall submit a report which states that no deviations occurred during the calendar quarter.

4. The permittee shall submit annual reports that specify the total VOC emissions from emission units P048-P053 and P057 combined for the previous calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for emission units P048-P053 and P057 combined in the annual Fee Emission Report.

#### **V. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:  
VOC emissions shall not exceed 1.35 lbs/hr.

Applicable Compliance Method:

Compliance shall be established by summing the mold/core wash and IPA emissions for storage and application. The storage mold/core wash emissions can be determined by multiplying the maximum usage of 15.0 lbs/hr by 0.3 lbs VOC/lb by the amount emitted during storage (1.0-0.5) by the control efficiency of

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Emissions Unit ID: P057

(1.0-0.95). The storage IPA emissions can be determined by multiplying the maximum usage of 3.18 lbs/hr by 0.3 lbs VOC/lb by the amount emitted during storage (1.0-0.5) by the control efficiency of (1.0-0.95).

The application mold/wash emissions can be determined by multiplying the maximum mold/wash usage of 15.0 lbs/hr by 0.3 lb VOC/lb by the amount emitted during storage (1.0-0.5) by the destruction efficiency of (1.0-0.7) (AFS Casting Congress, "Measurement of Emissions Associated With the Application of a Flammable Solvent-based Core and Mold Coating" 05/98). The application IPA emissions can be determined by multiplying the maximum IPA usage of 3.18 lbs/hr by 1.0 lb VOC/lb by the amount emitted during storage (1.0-0.5) by the destruction efficiency of (1.0-0.7).

- b. Emission Limitation:  
VOC emissions from emission units P048-P053 and P057 combined shall not exceed 62.8 tons based on a rolling, 12-month summation.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emissions limitation based on the record keeping under Section III.3.e above.

## **VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P057 - Large Chromite Area flow coat core wash station (installation or modification of this emissions unit commenced prior to August 3, 2006)	None	None

2. **Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None