

Synthetic Minor Determination and/or **Netting Determination**

Permit To Install 01-08278

A. Source Description

Buckeye Steel Castings located in Franklin County submitted a Permit to Install application which proposes a federally enforceable operational restriction on production. This synthetic minor Permit to Install limits organic compound emissions from the cooling and cleaning of steel castings. The operating restriction will effectively limit the affected facility's Potential to Emit (PTE) below those levels which trigger PSD review for organic compound emissions.

BSC proposes to increase organic compound emissions to 38.5 ton OC/yr and include emissions from the new Didion sand breaker.

B. Facility Emissions and Attainment Status

BSC has the potential to emit more than 250 tons of particulate emissions and is considered a major source for PSD review.

Franklin County is designated attainment for all criteria pollutants.

C. Source Emissions

The Ohio EPA issued PTI 01-2520 on April 18, 1990 for the moldmaster casting system (P906) with annual allowables of 61.7 tons PM and 43.2 tons PM10 emissions at an operational restriction of 6,000 hours per year.

This permit proposes to restrict the processing of steel castings to 110,000 tons metal per rolling twelve month period and limit emissions from P906 to 95.3 tons PM, 40.6 tons PM10 and 38.5 tons OC per year.

This will result in a maximum net increase of 33.6 tons PM/yr and 38.5 tons OC/per year, with a net decrease of 2.6 tons PM10/yr.

Upon issuance of the synthetic minor PTI, Buckeye Steel's PTE from the emission unit presented will be as described in the table below.

EU IDs	EPA ID	PM10 Ton/yr	PM Ton/yr	OC Ton/yr
Moldmaster Cooling	P906	40.6	95.3	38.5

Therefore, Buckeye Steel's facility-wide PTE upon issuance of the PTI will be below those levels which trigger PSD review for OC emissions.

D. Conclusion

This permit restricts the process weight rate to 110,000 tons/yr resulting in a potential net increase of 38.5 ton OC/yr, which is below the PSD increment of 40 ton OC/yr.



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

State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL
FRANKLIN COUNTY
Application No: 01-08278**

CERTIFIED MAIL

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

DATE: 6/26/2001

Buckeye Steel Castings Co
Kim Myers
2211 Parsons Ave
Columbus, OH 43207

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$2000** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

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



**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 01-08278

Application Number: 01-08278

APS Premise Number: 0125040020

Permit Fee: **To be entered upon final issuance**

Name of Facility: Buckeye Steel Castings Co

Person to Contact: Kim Myers

Address: 2211 Parsons Ave
Columbus, OH 43207

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

**2211 Parsons Ave
Columbus, Ohio**

Description of proposed emissions unit(s):

Moldmaster castings system.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

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

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.10 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

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

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

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

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

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

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally 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 To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is

granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

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.

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

1. Compliance Requirements

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

3. Permit Transfers

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

4. Air Pollution Nuisance

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

5. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may

be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

6. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

7. Public Disclosure

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

8. Applicability

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

9. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

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

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

C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	95.3
PM10	40.6
OC	38.5

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

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

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P906 - Moldmaster casting cooling and processing system (Modification of PTI 01-2520 issued June 6, 1990).	OAC rule 3745-31-05(A)(3)	<p>Particulate stack emissions shall not exceed 12.3 pounds per hour and 36.9 tons per year.(See A.I.2.c., below)</p> <p>Fugitive particulate emissions shall not exceed 24.5 pounds per hour and 58.4 tons per year.</p> <p>PM-10 emission shall not exceed 19.4 pounds per hour and 40.6 tons per year.</p> <p>Organic compound emissions shall not exceed 19.25 pounds per hour and 38.5 tons per year.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and (B), 3745-17-08(B) and 3745-15-06(D).</p>
	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)	See section A.I.2.a. and A.III.2., below.
	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See section A.I.2.b., below.)
	OAC rule 3745-17-11(A)(1)	See A.I.2.c., below.

OAC rule 3745-15-06(D)

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

See A.III.3., below.

2. Additional Terms and Conditions

- 2.a** Visible particulate emissions of fugitive dust source shall not exceed 20% opacity, as a three-minute average. For the purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to: doorways, windows, and roof monitors.
- 2.b** The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but not be limited to, the following:
- i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust; and
 - ii. the collection efficiency shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.
- 2.c** The hourly particulate stack emission rate is calculated at an outlet loading not to exceed 0.015 grains per dry standard cubic foot of airflow from baghouse B-3639 and 0.006 gr/dscf of airflow from B-3640.
- 2.d** This PTI replaces PTI 01-2520, as issued June 6, 1990, and represent net increase of 33.6 tons PM/yr and 38.5 tons OC/per year, with a net decrease of 2.6 tons PM10/yr. The hourly and annual organic compound emission rate is based on a CERP emission factor of 0.7 lb/ton metal processed.

II. Operational Restrictions

1. The maximum annual metal castings processed from this emissions unit shall not exceed 110,000 tons, based upon a rolling, twelve-month summation of the metal castings processed.
2. The maximum annual operating hours for this emissions unit shall not exceed 6,000.
3. The pressure drop across baghouse B-3639 and B-3640 shall be maintained within the range of 2 to 10 inches of water while the emissions unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse B-3639 and B-3640 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 following in the operations log (Form 35, 5/95 & Form 36, 5/95):
 - a. pressure drop across the baghouse for each day of operation, and
 - b. a log or record of downtime for the control device and monitoring equipment, when the associated emissions unit is in operation.

2. The permittee shall perform daily checks for visible particulate emissions from the non-stack egress points from the building housing this emissions unit. These egress points shall include, but not be limited to: doorways, windows, and roof monitors. 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.

Note: The presence of any visible particulate emissions may or may not indicate a violation of the particulate mass emissions limitation and/or visible emission limitation. If required by the Ohio EPA Central District Office, compliance with the particulate mass emission limitation and the visible emission limitation shall be determined by performing concurrent mass emission tests and visible emissions readings, using USEPA methods and procedures. The results of any required emissions tests and visible emission readings shall be used in determining whether or not the presence of any visible particulate emissions is indicative of a possible violation of the particulate mass emission limitation and/or visible emission limitation.

3. The permittee shall maintain this emission units and associated air pollution control equipment in accordance with the Preventative Maintenance and Malfunction Abatement Plan (PM&MAP) as approved on August 15, 1995, in accordance with OAC rule 3745-15-06(D). Any changes in the PM&MAP shall be approved in writing by Ohio EPA prior to implementation.

The permittee shall maintain a daily record of the control device operation in the monitoring log for each day of emission unit operation, in accordance with procedures outlined in the PM&MAP (Page 55).

4. The permittee shall maintain monthly records of the following information,

- a. a summation of the tons of metal casting processed for each day,
- b. a summation of the daily operating hours for this emissions unit, and
- c. after the initial twelve months of operation following issuance of this permit, a summation of the tons of castings processed for each month during the rolling, 12- month period.

IV. Reporting Requirements

1. In accordance with paragraph A.2.b. of the General Terms and Conditions the permittee shall submit quarterly deviation(excursion) reports for the following:
 - a. all exceedances of the rolling, 12-month operational restriction on tons of metal castings cleaned as specified in A.II.1., above, and determined through record keeping in A.III.3; above.
 - b. any exceedance of the visible particulate emission limitation specified in A.I.1. above, as determined through monitoring in A.III.3. above; and
 - c. all exceedances during which the pressure drop across the fabric filter did not comply with the allowable range specified in restriction A.II.2., as determined through monitoring in A.III.1. above and any actions taken to return the pressure drop to a compliant operating range.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible emissions were observed from the non-stack egress points from the building housing this emissions unit and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the Director (the Ohio EPA Central District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit annual reports which identify any exceedances of the 6,000 hour operating hours limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

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

- a. Emission Limitation:
Particulate stack emissions shall not exceed 12.3 pounds per hour and 36.9 tons per year.

Applicable Compliance Method:

Compliance shall be determined for the hourly emission rate by multiplying the grain loading from each baghouse by the maximum flow rate at the stack with the annual emission rate at 6,000 hours per year:

Stack B-3640 @ 40,000 cfm * 0.006 gr/dscf * 60 min/hr * 1 lb/7,000 gr = 2.0 lb PM/hr
Stack B-36 39 @ 80,000 cfm * 0.015 gr/dscf * 60 min/hr * 1 lb/7,000 gr = 10.3 lb PM/hr
6,000 hrs * (10.29 lb PM/hr + 2.05 lb PM/hr) * 1 ton/2,000 lbs = 36.9 tons PM/yr

If required, the permittee shall conduct, or have conducted, emission testing for this emissions unit. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): 40 CFR Part 60 Appendix A, Method 5 - if applicable. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- b. Emission Limitation:
Fugitive particulate emissions shall not exceed 24.5 pounds per hour and 58.4 tons per year.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum process weight rate times SCC emission factors and the capture efficiency of hooding resulting in an overall emission factor of 0.9 lb PM/ton metal and by monitoring under term A.III.2., above.

SCC 3-04-007-06 20 ton/hr * 0.65 lb PM/ton * 0.02 = 0.3 lb PM/hr
SCC 3-04-007-09 27.5 ton/yr * 32 lb PM/ton * 0.02 = 17.6 lb PM/hr
SCC 3-04-007-11 27.5 ton/hr * 17 lb PM/ton * 0.02 = 4.7 lb PM/hr
SCC 3-04-007-13 27.5 ton/hr * 1.4 lb PM/ton * 0.05 = 1.9 lb PM/hr
SCC 3-04-007-06 90,000 ton/yr * 0.65 lb/ton * 0.02 * 1 ton/2,000 lb = 0.6 ton/yr
SCC 3-04-007-09 110,000 ton/yr * 32 lb/ton * 0.02 * 1 ton/2,000 lb = 35.2 ton/yr
SCC 3-04-007-11 110,000 ton/yr * 17 lb/ton * 0.02 * 1 ton/2,000 lb = 18.7 ton/yr
SCC 3-04-007-13 110,000 ton/yr * 1.4 lb/ton * 0.05 * 1 ton/2,000 lb = 3.85 ton/yr

- c. Emission Limitation:
PM-10 emission shall not exceed 19.4 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum process weight rate times an SCC emission factor times the capture efficiency of the hooding system plus the grain loading from the baghouse.

SCC 3-04-007-06 20 ton/hr * 0.54 lb PM10/ton * 0.02 = 0.2 lb PM10/hr
SCC 3-04-007-09 27.5 ton/yr * 26.2 lb PM10/ton * 0.02 = 14.4 lb PM10/hr
SCC 3-04-007-11 27.5 ton/hr * 1.7 lb PM10/ton * 0.02 = 0.5 lb PM10/hr
SCC 3-04-007-13 27.5 ton/hr * 1.4 lb PM10/ton * 0.05 = 1.9 lb PM10/hr
B-3640 @ 40,000 cfm * 0.003 gr/dscf * 60 min/hr * 1 lb/7,000 gr = 1.0 lb PM10/hr
B-3639 @ 80,000 cfm * 0.002 gr/dscf * 60 min/hr * 1 lb/7,000 gr = 1.4 lb PM10/hr
17 lb PM10 + 2.4 lb PM10/hr = 19.4 lb PM10/hr

- d. Emission Limitation:
PM-10 emission shall not exceed 40.6 tons per year.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum process weight rate times an SCC emission factor times the capture efficiency of the hooding system and by monitoring under term A.III.2., above.

SCC 3-04-007-06 90,000 ton/yr * 0.54 lb/ton * 0.02 * 1 ton/2,000 lb = 0.5 ton/yr

SCC 3-04-007-09 110,000 ton/yr*26.2 lb/ton * 0.02 *1 ton/2,000 lb =28.2 ton/yr

SCC 3-04-007-11 110,000 ton/yr * 1.7 lb/ton * 0.02* 1 ton/2,000 lb= 0.9 ton/yr

SCC 3-04-007-13 110,000 ton/yr * 1.4 lb/ton * 0.05* 1 ton/2,000 lb = 3.8 ton/yr

Stack PM10 6.000 hrs * 2.4 lb PM10/hr * 1 ton/2,000 lbs = 7.2 ton PM10/yr

7.2 ton PM10/yr + 33.4 ton PM10/yr = 40.6 ton PM10

- e. Emission Limitation:
Organic compound emissions shall not exceed 19.25 pounds per hour and 38.5 tons per year

Applicable Compliance Method:

Compliance shall be determined for the hourly emission rate by multiplying the CERP emission factor of 0.7 lb OC /ton metal times the maximum process weight rate 27.5 ton metal/hr to equal 19.25 lb OC/hr. Compliance for the annual emission rate shall be determined by multiplying the CERP emission factor of 0.7 lb OC /ton metal times the maximum process weight rate and by monitoring under term A.III.4.b., above,

0.7 lb OC /ton metal * 110,000 ton metal/yr * 1 ton/2,000 lbs = 38.5 ton OC/yr.

- f. Emission Limitation:
Visible particulate emissions from the stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in section A.III.2. of this permit and, if required, compliance shall be demonstrated by visible emissions monitoring performed in accordance with 40CFR Part 60, Appendix A, Method 9 using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

- g. Emission Limitation:
Visible particulate emissions from any fugitive dust source shall not exceed 20% opacity, as a three-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in section A.III.2. of this permit and, if required, compliance shall be demonstrated by visible emissions monitoring performed in accordance with 40CFR Part 60, Appendix A, Method 9 using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

Buckeye Steel Castings Co

PTI Application: 01-08278

Issued: To be entered upon final issuance

Facility ID: 0125040020

Emissions Unit ID: P906

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>
P906 - Moldmaster casting cooling and processing system (Modification of PTI 01-2520 issued June 6, 1990).		Compliance with Air Toxic Policy

2. **Additional Terms and Conditions**

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit P906 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Benzene

TLV (mg/m3): 1.6

Maximum Hourly Emission Rate (lbs/hr): 3.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 36.3

MAGLC (ug/m3): 38

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the “Air Toxic Policy” is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the “Air Toxic Policy” will still be still satisfied. If, upon evaluation, the permittee determines that the “Air Toxic Policy” will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the “Air Toxic Policy” include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), 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 previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the “Air Toxic Policy” will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a “modification” under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the “Air Toxic Policy:”

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the “Air Toxic Policy”; and
- c. where computer modeling is performed, 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

Buckeye Steel Castings Co

PTI Application: 01-08278

Issued: To be entered upon final issuance

Facility ID: 0125040020

Emissions Unit ID: P906

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 01-08278

Facility ID: 0125040020

FACILITY NAME Buckeye Steel Castings Co

FACILITY DESCRIPTION Moldmaster castings system. CITY/TWP Columbus

SIC CODE 3325 SCC CODE 3-04-007-09 EMISSIONS UNIT ID P906

EMISSIONS UNIT DESCRIPTION Moldmaster casting cooling and processing system (Modification of PTI 01-2520 issued June 6, 1990).

DATE INSTALLED 10/90

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment			36.8	95.3
PM ₁₀	Attainment			24.5	40.6
Sulfur Dioxide					
Organic Compounds	Attainment			19.4	38.5
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics	benzene			3.8	7.7

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination RACM to control fugitive dust, not more than 0.01 grain/dscf airflow and compliance with the toxic policy.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? x YES _____ NO _____

IDENTIFY THE AIR CONTAMINANTS: benzene

NEW SOURCE REVIEW FORM B

PTI Number: 01-08278

Facility ID: 0125040020

FACILITY NAME Buckeye Steel Castings Co

FACILITY DESCRIPTION Moldmaster castings system.

CITY/TWP Columbus

Ohio EPA Permit to Install Information Form Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit **hard copy items to Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to **airpti@epa.state.oh.us**

<i>Please fill out the following. If the checkbox does not work, replace it with an 'X'</i>	<u>Electronic</u>	<u>Additional information File Name Convention (your PTI # plus this letter)</u>	<u>Hard Copy</u>	<u>None</u>
<u>Calculations (required)</u>	<input checked="" type="checkbox"/>	0000000c.wpd	<input type="checkbox"/>	
<u>Modeling form/results</u>	<input type="checkbox"/>	0000000s.wpd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>PTI Application (complete or partial)*</u>	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>BAT Study</u>	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Other/misc.</u>	<input type="checkbox"/>	0000000t.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>

* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

NSR Discussion

PTI 01-08278

Casting Cooling and Processing System (P906) Modification

A. General Information

BSC initially submitted an application for controlling particulate emissions using reasonably available control measures during removal, cooling and abrasive cleaning of steel casting for which Ohio EPA issued PTI 01-2520 on June 6, 1990. This application quantifies organic compound emissions based on a foundry study completed in November, 1999 from core sand breakout. In addition, this permit will allow for an increase in particulate emissions from the Didon rotary sand reclaim system and for an additional 1.25 tons in the hourly process weight rate.

B. Applicable RulesOAC rule 3745-31-05:

Particulate emission rates include both a fugitive component based on the maximum process weight rate times SCC emission factors at allowable capture efficiencies and stack emissions using flow rates at outlet grain loadings from the baghouse.

The organic compound emission rate is derived from a November 1, 1999 Casting Emission Reduction Program (CERP) study with allowable emissions based on a 0.7 lb OC/ton metal emission factor. BSC proposes to restrict the annual through put of metal to 110,000 ton per year to keep the net increase below the 40 tons VOC PSD increment for a major source.

In order to comply with the Ohio Toxic policy and using HAP emission data from the CERP study, CDO performed Screen 3 modeling for benzene emissions at 3.8 lb/hr assuming at 50% capture efficiency vented through 5 stacks.

NEW SOURCE REVIEW FORM B

PTI Number: 01-08278

Facility ID: 0125040020

FACILITY NAME Buckeye Steel Castings Co

FACILITY DESCRIPTION Moldmaster castings system.CITY/TWP Columbus**OAC rule 3745-17-07(A)(1)(a)**

The emission unit vents through two baghouses with stacks. Visible stack emissions may not exceed 20% opacity, as a six-minute average, except as provided by rule.

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

A component of the hourly allowable is not captured and vented as fugitive particulate emissions through vents and openings. Visible fugitive emissions may not exceed 20% opacity, as a three-minute average, except as provided by rule.

OAC rule 3745-17-08(B)(3)

Buckeye Steel is located in a RACM area, These sources were subject to a RACM study and have been enclosed and vented to baghouses. The grain loading is more stringent than required by rule.

C. Miscellaneous:

The application listed the organic compound emissions as fugitive, however, following breakout, the

operations are hooded and vented to fabric filters with stacks. Two of the baghouses are listed at 95 ft to the property line (28 meters). The third baghouse is located at 315 feet (100 meters) to the property line. The toxics release was developed

NEW SOURCE REVIEW FORM B

PTI Number: 01-08278

Facility ID: 0125040020

FACILITY NAME Buckeye Steel Castings Co

FACILITY DESCRIPTION Moldmaster castings system.CITY/TWP Columbus

based on
emission
factors
from the
CERP
study for
benzene
and
toluene,
the
releases
were
modeled
assuming
50 capture
efficiency

Screen input: $3.8 \text{ lb benzene/hour} * 454 \text{ g/lb} * 1 \text{ hr}/60 \text{ min} * 1 \text{ min}/60 \text{ sec} = 0.48 \text{ g benzene/sec}$
 $0.48 \text{ g benzene/sec} * 0.5 \text{ (capture)} * 0.2 \text{ (5 stacks)} = 0.05 \text{ gr/sec}$ from one stack resulted in a maximum
concentration at 60 meters for two stacks of $9.7 \text{ ug/m}^3 * 2 = 19.4 \text{ ug/m}^3$ plus
concentration at 100 meter from three stacks of $5.6 \text{ ug/m}^3 * 3 = 16.8 \text{ ug/m}^3 + 19.4 \text{ ug/m}^3 = 36.3 \text{ ug/m}^3$ therefore
passes toxics.

Ground level concentration = 36.3 ug/m^3

The MAGLC for benzene at $1.6 \text{ mg/m}^3 * 1000/42 = 38 \text{ ug/m}^3$.

Assuming 50% capture of organic compound emissions, stack emissions of 3.8 lbs benzene/hr divided equally
among 5 stacks would result in a maximum ground level concentration of 36.3 ug/m^3 at 60 meters from two closest
stacks. The emissions would not exceed the MAGLC for benzene of 38 ug/m^3 , demonstrating compliance with
the toxic policy.

D. Fee :

BSC operates under SIC code 3325 at a process weight rate of 55,000 lb/hr for the moldmaster casting cleaning
operation resulting in a fee of \$1,000 that would be doubled because it was modified in July, 1999.

Calculations

Organic Compound emissions

$0.7 \text{ lb OC /ton metal} * 27.5 \text{ ton metal/hr} = 19.25 \text{ lb OC/hr}$

$0.7 \text{ lb OC /ton metal} * 110,000 \text{ ton metal/yr} * 1 \text{ ton}/2,000 \text{ lbs} = 38.5 \text{ ton OC/yr}$

$0.14 \text{ lb benzene/ton metal} * 27.5 \text{ ton metal/hour} = 3.8 \text{ lb benzene/hour}$

$0.14 \text{ lb benzene/ton metal} * 110,000 \text{ ton metal /yr} * 1 \text{ ton}/2,000 \text{ lbs} = 7.7 \text{ ton benzene/yr}$

$0.03 \text{ lb toluene/ton metal} * 27.5 \text{ ton metal/hour} = 0.82 \text{ lb toluene/hr}$

$0.03 \text{ lb toluene/ton metal} * 110,000 \text{ ton metal/yr} * 1 \text{ ton}/2,000 \text{ lbs} = 1.65 \text{ ton toluene/yr}$

HAP emissions $3.85 \text{ lb/hr} + 0.82 \text{ lb/hr} = 4.67 \text{ lb/hr}$

NEW SOURCE REVIEW FORM B

PTI Number: 01-08278

Facility ID: 0125040020

FACILITY NAME Buckeye Steel Castings Co

FACILITY DESCRIPTION		CITY/TWP	
Moldmaster castings system.		Columbus	

Fugitive PM10 emissions

Didion-Sand handling SCC 3-04-007-06 20 ton/hr * 0.54 lb PM10/ton * 0.02 = 0.2 lb PM10/hr
 Shakeout-Casting shakeout SCC 3-04-007-09 27.5 ton/yr * 26.2 lb PM10/ton * 0.02 = 14.4lb PM10/hr
 Shotblast - Casting cleaning SCC 3-04-007-11 27.5 ton/hr * 1.7 lb PM10/ton * 0.02= 0.5 lb PM10/hr
 Knock off -Casting cooling SCC 3-04-007-13 27.5 ton/hr * 1.4 lb PM10/ton * 0.05 = 1.9 lbPM10/hr

Stack PM10 emission B-3640@ 40,000 cfm * 0.003 gr/dscf * 60 min/hr * 1 lb/7,000 gr = 1.0 lb PM10/hr
 B-3639 @ 80,000 cfm * 0.002 gr/dscf * 60 min/hr * 1 lb/7,000 gr = 1.4 lb PM10/hr
 17 lb PM10/hr + 2.4 lb PM10/hr = 19.4 lb PM10/hr

Didion-Sand handling SCC 3-04-007-06 90,000 ton/yr * 0.54 lb/ton * 0.02 * 1 ton/2,000 lb = 0.5 ton/yr
 Shakeout-Casting shakeout SCC 3-04-007-09 110,000 ton/yr*26.2 lb/ton * 0.02 *1 ton/2,000 lb =28.2 ton/yr
 Shotblast - Casting cleaning SCC 3-04-007-11 110,000 ton/yr * 1.7 lb/ton * 0.02* 1 ton/2,000 lb= 0.9 ton/yr
 Knock off -Casting cooling SCC 3-04-007-13 110,000 ton/yr * 1.4 lb/ton * 0.05* 1 ton/2,000 lb = 3.8 ton/yr
 Stack PM10 6.000 hrs * 2.4 lb PM10/hr * 1 ton/2,000 lbs = 7.2 ton PM10/yr
 7.2 ton PM10/yr + 33.4 ton PM10/yr = 40.6 ton PM10

Fugitive PM emissions

Didion-Sand handling SCC 3-04-007-06 20 ton/hr * 0.65 lb PM/ton * 0.02 = 0.3 lb PM/hr
 Shakeout-Casting shakeout SCC 3-04-007-09 27.5 ton/yr * 32 lb PM/ton * 0.02 = 17.6 lb PM/hr
 Shotblast - Casting cleaning SCC 3-04-007-11 27.5 ton/hr * 17 lb PM/ton * 0.02= 4.7 lb PM/hr
 Knock off -Casting cooling SCC 3-04-007-13 27.5 ton/hr * 1.4 lb PM/ton * 0.05 = 1.9 lb PM/hr

Stack PM Emissions B-3640 @ 40,000 cfm * 0.006 gr/dscf * 60 min/hr * 1 lb/7,000 gr = 2.0 lb PM/hr
 B-36 39 @ 80,000 cfm * 0.015 gr/dscf * 60 min/hr * 1 lb/7,000 gr = 10.3 lb PM/hr
 24.5 lb PM/hr + 10.3 lb PM/hr + 2 lb PM/hr = 36.8 lb PM/hr

Didion-Sand handling SCC 3-04-007-06 90,000 ton/yr * 0.65 lb/ton * 0.02 * 1 ton/2,000 lb = 0.6 ton/yr
 Shakeout-Casting shakeout SCC 3-04-007-09 110,000 ton/yr * 32 lb/ton * 0.02 * 1 ton/2,000 lb =35.2 ton/yr
 Shotblast - Casting cleaning SCC 3-04-007-11 110,000 ton/yr * 17 lb/ton * 0.02* 1 ton/2,000 lb= 18.7 ton/yr
 Knock off -Casting cooling SCC 3-04-007-13 110,000 ton/yr * 1.4 lb/ton * 0.05* 1 ton/2,000 lb = 3.85ton/yr

Stack PM Emissions 6,000 hrs/yr * (10.29 lb PM/hr + 2.05 lb PM/hr) * 1 ton/2,000 lbs = 36.9 tonPM/yr
 58.4 ton PM/yr + 36.9 ton PM/yr = 95.3 ton PM/yr

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

Synthetic Minor Determination and/or **Netting Determination**

Permit To Install 01-08278

A. Source Description

Buckeye Steel Castings located in Franklin County submitted a Permit to Install application which proposes a federally enforceable operational restriction on production. This synthetic minor Permit to Install limits organic

NEW SOURCE REVIEW FORM B

PTI Number: 01-08278

Facility ID: 0125040020

FACILITY NAME Buckeye Steel Castings CoFACILITY DESCRIPTION Moldmaster castings system.CITY/TWP Columbus

compound emissions from the cooling and cleaning of steel castings. The operating restriction will effectively limit the affected facility's Potential to Emit (PTE) below those levels which trigger PSD review for organic compound emissions.

BSC proposes to increase organic compound emissions to 38.5 ton OC/yr and include emissions from the new Didion sand breaker.

B. Facility Emissions and Attainment Status

BSC has the potential to emit more than 250 tons of particulate emissions and is considered a major source for PSD review.

Franklin County is designated attainment for all criteria pollutants.

C. Source Emissions

The Ohio EPA issued PTI 01-2520 on April 18, 1990 for the moldmaster casting system (P906) with annual allowables of 61.7 tons PM and 43.2 tons PM10 emissions at an operational restriction of 6,000 hours per year.

This permit proposes to restrict the processing of steel castings to 110,000 tons metal per rolling twelve month period and limit emissions from P906 to 95.3 tons PM, 40.6 tons PM10 and 38.5 tons OC per year.

This will result in a maximum net increase of 33.6 tons PM/yr and 38.5 tons OC/per year, with a net decrease of 2.6 tons PM10/yr.

Upon issuance of the synthetic minor PTI, Buckeye Steel's PTE from the emission unit presented will be as described in the table below.

EU IDs	EPA ID	PM10 Ton/yr	PM Ton/yr	OC Ton/yr
Moldmaster Cooling	P906	40.6	95.3	38.5

Therefore, Buckeye Steel's facility-wide PTE upon issuance of the PTI will be below those levels which trigger PSD review for OC emissions.

D. Conclusion

This permit restricts the process weight rate to 110,000 tons/yr resulting in a potential net increase of 38.5 ton OC/yr, which is below the PSD increment of 40 ton OC/yr.

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

NONE

Please complete:

SUMMARY (for informational purposes only)

PTI Number: 01-08278

Facility ID: 0125040020

FACILITY NAME Buckeye Steel Castings Co

FACILITY DESCRIPTION Moldmaster castings system.

CITY/TWP Columbus

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	95.3
PM10	40.6
OC	38.5

PTI Number: 01-08278

Facility ID: 0125040020

FACILITY NAME Buckeye Steel Castings Co

FACILITY DESCRIPTION Moldmaster castings system.

CITY/TWP Columbus