



Street Address:

Lazarus Gov. Center
State of Ohio Environmental Protection Agency

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

Mailing Address:

Lazarus Gov.
Center

**RE: DRAFT PERMIT TO INSTALL MODIFICATION
WARREN COUNTY
Application No: 14-05111**

CERTIFIED MAIL

DATE: 5/10/2001

A & B Foundry
Terry Smith
835 North Main Street
Franklin, OH

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install modification for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit modification. 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 modification 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 modification 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 modification a fee of **\$ 400** 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, Manager
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

HCDES



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

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

DRAFT MODIFICATION OF PERMIT TO INSTALL

14-05111

Application Number: 14-05111
APS Premise Number: 1483040399
Permit Fee: **To be entered upon final issuance**
Name of Facility: A & B Foundry
Person to Contact: Terry Smith
Address: 835 North Main Street
Franklin, OH 45005

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

Description of proposed emissions unit(s):
Modification to emissions unit F003 to increase the allowable OC emissions limit.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

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Issued: To be entered upon final issuance

Facility ID: 1483040399

Part I - GENERAL TERMS AND CONDITIONS

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

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

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representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. 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.

9. 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

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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.

10. 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.

11. 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).

12. 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.

13. Source Operation and Operating Permit Requirements After Completion of Construction

- 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

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modified

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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..

14. 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.

15. 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.

B. 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	0.14
PM10	0.13
OC	18.3

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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>
F003 - Vacuum mold making and core dip/flow coat	OAC rule 3745-31-05(A)(3)	0.03 lb/hr PM; 0.14 TPY PM 0.027 lb/hr PM10; 0.13 TPY PM10 0.093 lb/hr OC from the mold release 10.5 lb/hour OC from the core wash (includes mold spray, alcohol, and mold release).
		Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-35-07(B).
	OAC rule 3745-35-07(B)	18.3 TPY OC, based on a rolling, 12-month summation
		See term B.2

2. Additional Terms and Conditions

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the annual mold spray usage limit and the annual alcohol usage limit, compliance with the mold spray OC content limitation, compliance with the OC and PM/PM10 emissions

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limitations, compliance with the Ohio Air Toxics Policy and enclosure of the emissions unit within the building.

- 2.b** The OC content of any mold spray material employed in this emissions unit shall not exceed 45% by weight (0.45 lb. OC/ lb. mold spray).
- 2.c** The hourly and annual PM/PM10 emission limitations outlined above are based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with these limits.
- 2.d** The hourly OC emission limitations outlined above are based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with these limits.
- 2.e** The OC content of any mold release material employed in this emissions unit shall not exceed 93% by weight (0.93 lb. OC/ lb. mold release).

B. Operational Restrictions

1. The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5) is prohibited in this emissions unit.
2. The maximum annual mold spray material usage shall not exceed 25,000 pounds per year and the maximum annual supplemental alcohol usage in the core washing process shall not exceed 25,000 pounds per year, based upon rolling, 12-month summation of the usage figures.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the material usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Mold Spray Usage (lbs)</u>	<u>Maximum Allowable Cumulative Alcohol Usage (lbs)</u>
1	12500	12500
1-2	12500	12500
1-3	12500	12500
1-4	12500	12500
1-5	12500	12500
1-6	12500	12500
1-7	14583	14583

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Issue

Facility ID: 1483040399

Emissions Unit ID: F003

1-8	16667	16667
1-9	18750	18750
1-10	20833	20833
1-11	22917	22917
1-12	25000	25000

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After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual mold spray material usage and supplemental alcohol usage limitations shall be based upon rolling, 12-month summations of the usage figures.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:
 - a. the name and company identification of each mold spray and mold release material employed and the name and identification of each alcohol employed in the core wash;
 - b. the quantity of each mold spray material employed, in pounds;
 - c. the quantity of each alcohol employed in the core wash, in pounds;
 - d. the quantity of mold release material employed, in pounds;
 - e. the OC content of each mold spray material employed, in percent (%) by weight (lb. OC/lb. mold spray);
 - f. the OC content of each alcohol employed, in percent (%) by weight (lb. OC/lb. alcohol);
 - g. the OC content of each mold release material employed, in percent (%) by weight (lb. OC/lb. mold release);
 - h. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative mold spray material usage and the cumulative supplemental alcohol usage for each calendar month;
 - i. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the mold spray material usage, in pounds;
 - j. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the supplemental alcohol usage, in pounds; and
 - k. the monthly OC emissions from usage of the mold spray material, mold release material and supplemental alcohol, in pounds $[(b \times e) + (c \times f) + (d \times g)]$

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2. The permittee shall collect and record the following information each month for this emissions unit:
 - a. the company identification of each liquid organic material employed in this emissions unit;
and

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- b. a record of each liquid organic material employed in this emissions unit indicating whether or not the liquid organic material is photochemically reactive as identified in OAC rule 3745-21-01(C)(5).
3. The permit to install for this emissions unit (F003) 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 Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: n-hexane

TLV (ug/m3): 176,230

Maximum Hourly Emission Rate (lbs/hr): 10.5

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 3764

MAGLC (ug/m3): 4196

Physical changes to or 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 Toxics 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 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 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;

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Issue**Facility ID: 1483040399****Emissions Unit ID: F003**

- 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 with 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 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. when the 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.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all exceedances of the mold spray OC content limitation outlined in term A.2.b. The permittee shall state the probable cause of the deviations and any corrective actions or preventative measure which have been or will be taken. If no deviations occurred, the permittee shall state so in the report.
2. The permittee shall submit deviation (excursion) reports that identify all exceedances of the mold spray and alcohol usage limitations outlined in term B.2. The permittee shall state the probable cause of the deviations and any corrective actions or preventative measure which have been or will be taken. If no deviations occurred, the permittee shall state so in the report.
3. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive material [as defined in OAC rule

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3745-21-01(C)(5)] was employed in this emissions unit. This report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of organic compound emissions emitted each such day. This report shall be submitted to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.

4. The permittee shall submit annual reports which specify the updated rolling, 12-month OC emissions for each month from this emissions unit for the previous calendar year. The report shall be submitted by January 31 of each year.
5. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Emissions Limitations

0.03 lb/hr PM; 0.14 TPY PM
0.027 lb/hr PM10; 0.13 TPY PM10

Compliance with the PM emissions limitations in section A.1. shall be demonstrated by the following calculations using $\frac{1}{2}$ the emission factor (per the American Foundrymen's Society for vacuum mold making - aluminum castings) in RACM Chapter 2.8 (0.04 lbs/ton). Compliance with the PM10 emissions limitations shall be demonstrated by multiplying the PM emissions by 90%, based on AP-42, Table 12.10-9, 1995:

- a. vacuum mold making actual production (tons metal/hr) x $\frac{1}{2}$ RACM EF (0.02 lbs/ton) = lbs/hr PM; and
- b. vacuum mold making actual production (tons metal/yr) x $\frac{1}{2}$ RACM EF (0.02 lbs/ton) x ton/2000 lbs = TPY PM.

2. Emissions Limitations

10.5 lbs/hr OC; 18.3 TPY OC

Compliance with the OC emissions limitations in term A.1. shall be demonstrated by the following calculations using the OC percent (%), by weight, from the Material Safety Data Sheet (MSDS) of each mold spray material and supplementary alcohol :

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Issue**Facility ID: 1483040399**Emissions Unit ID: **F003**

- a. $[\text{actual mold spray usage (lbs/hr)} \times \text{weight percent OC (lbs OC/lb mold spray)}] + [\text{actual alcohol usage (lbs/hr)} \times \text{weight percent OC (lbs OC/lb alcohol)}] + [\text{actual mold release usage (lbs/hr)} \times \text{weight percent OC (lbs OC/lb mold release)}] = \text{lbs/hr OC}$
 - b. $[\text{actual mold spray usage (lbs/yr)} \times \text{weight percent OC (lbs OC/lb mold spray)}] + [\text{actual alcohol usage (lbs/yr)} \times \text{weight percent OC (lbs OC/lb alcohol)}] + [\text{actual mold release usage (lbs/yr)} \times \text{weight percent OC (lbs OC/lb mold release)}] \times \text{ton/2000 lbs} = \text{TPY OC}$.
3. Compliance with the fugitive visible particulate emissions limitation in term A.1. shall be demonstrated by Method 9 visible emissions readings as outlined in 40 CFR 60, Appendix A.
 4. Formulation data or USEPA method 24 or 24A shall be used to determine the OC contents of the mold spray and alcohol.
 5. Compliance with the rolling, 12-month mold spray and alcohol usage limits in term B.2. shall be demonstrated by the recordkeeping requirements in term C.1.

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 14-04394 as issued on December 8, 1999.

NEW SOURCE REVIEW FORM B

PTI Number: 14-05111 Facility ID: 1483040399

FACILITY NAME A & B Foundry

FACILITY DESCRIPTION Modification to emissions unit F003 to increase the allowable OC emissions limit. CITY/TWP Franklin

SIC CODE 3365 SCC CODE 3-04-050-99 EMISSIONS UNIT ID F003

EMISSIONS UNIT DESCRIPTION Vacuum mold making and core dip/flow coat

DATE INSTALLED December 2000

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment	0.03	0.14	0.03	0.14
PM ₁₀	Attainment	0.027	0.13	0.027	0.13
Sulfur Dioxide					
Organic Compounds	Attainment	10.5	8.00	10.5	18.3
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

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

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the annual mold spray usage limit and the annual alcohol usage limit, compliance with the mold spray OC content limitation, compliance with the OC and PM/PM10 emissions limitations, compliance with the Ohio Air Toxics Policy and enclosure of the emissions unit within the building.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$0

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? x YES NO

IDENTIFY THE AIR CONTAMINANTS: n-hexane

NEW SOURCE REVIEW FORM B

PTI Number: 14-05111 Facility ID: 1483040399

FACILITY NAME A & B Foundry

FACILITY DESCRIPTION	Modification to emissions unit F003 to increase the allowable OC emissions limit.	CITY/TWP	Franklin
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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

Please fill out the following. If the checkbox does not work, replace it with an 'X'

	Electronic	<u>Additional information</u> File Name Convention (your PTI # plus this letter)	Hard Copy	None
Calculations (required)	<input type="checkbox"/>	0000000c.wpd	<input checked="" type="checkbox"/>	
Modeling form/results	<input type="checkbox"/>	0000000s.wpd	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PTI Application (complete or partial)*	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BAT Study	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other/misc.	<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 14-05111

A&B Foundry, Inc.
835 N. Main Street
Franklin, Ohio 45005

OEPA Facility ID# 1483040399

This permit brings A&B Foundry's vacuum mold making process (F003) into compliance by allowing the facility an increase in the permitted OC emissions. This Chapter 31 Modification became necessary due to a report submitted by the permittee which indicated an exceedance in emissions unit F003's allowable annual OC emissions limit pursuant to PTI 14-4394. That PTI had limited F003 to 7.00 TPY OC, which A&B Foundry exceeded by approximately 1 TPY.

On February 12, 2001, HCDES sent the permittee a Notice of Violation letter for violation of the terms and conditions of the PTI. HCDES requested a compliance plan which the permittee submitted in the form of this PTI application on March 2, 2001. The exceedance was explained by the use of additional isopropyl alcohol in the core washing process.

Applicable Regulations: OAC rule 3745-31-05(A)(3). Note: OAC rules 3745-17-07(B) and 17-08(B) do not apply since the facility is located in a non-Appendix A area. The requirements of OAC rule 3745-21-07(G) do not apply since the facility is prohibited from employing PRMs in this emissions unit.

Best Available Technology: Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the annual mold spray usage limit and the annual alcohol usage limit, compliance with the mold spray OC content limitation, compliance with the OC and PM/PM10 emissions limitations, compliance with the Ohio Air Toxics

NEW SOURCE REVIEW FORM B

PTI Number: 14-05111 Facility ID: 1483040399

FACILITY NAME A & B Foundry

FACILITY DESCRIPTION	Modification to emissions unit F003 to increase the allowable OC emissions limit.	CITY/TWP	Franklin
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Policy and enclosure of the emissions unit within the building.

Allowable Emissions: 10.53 lbs/hr OC, 18.3 TPY OC; 0.03 lb/hr PM, 0.14 TPY PM; 0.027 lb/hr PM10, 0.13 TPY PM10

Ohio EPA's Air Toxics Policy applies to this emissions unit. Modeling of the maximum OC emissions rate, as n-hexane, indicates compliance with the Air Toxics Policy. Since the maximum uncontrolled Potential to Emit (PTE) OC emissions (at 8760 hours per year) now exceeds 100 TPY, this PTI will be a Synthetic Minor PTI for OC emissions, with rolling, 12-month limitations and recordkeeping requirements applying in order to avoid the Title V requirements.

Permit fee: PWR 1001-5000 lbs/hr = \$400

Prepared by: Kurt Smith
Date Prepared: April 10, 2001

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 **14-05111**

A. Source Description

A&B Foundry maintains a foundry operation for aluminum castings in Franklin, Ohio. The facility consists of mold and core making, sand handling, sand/binder mixing and vacuum mold making emissions units with associated processes. Emissions unit F003 is a vacuum mold making and core dip/flow coat process with fugitive emissions.

B. Facility Emissions and Attainment Status

A&B Foundry's air emissions consist of PM, PM10, and OC emissions. Franklin, Ohio is located in Warren

NEW SOURCE REVIEW FORM B

PTI Number: 14-05111 Facility ID: 1483040399

FACILITY NAME A & B Foundry

FACILITY DESCRIPTION	Modification to emissions unit F003 to increase the allowable OC emissions limit.	CITY/TWP	Franklin
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County which is designated as attainment for PM, PM10, and ozone.

C. Source Emissions

The facility's Potential to Emit for OC emissions before PTI 14-05111 was 80.3 TPY OC (13.80 TPY from F003), uncontrolled at 8760 hours per year. Thus, no Synthetic Minor PTI was necessary. A&B Foundry submitted this PTI application for an increase in the allowable short term and annual OC emissions from emissions unit F003 (due to an exceedance). The PTE for OC from emissions unit F003 after the increase is 46.12 TPY OC and the facility PTE for OC after the increase is 112.62 TPY. Therefore, this PTI will restrict the annual OC emissions from emissions unit F003 to 18.3 TPY, through Synthetic Minor Terms and Conditions, thus making the facility PTE for OC equal to 84.8 TPY OC. Usage limits have been placed on the mold spray and alcohol usage to restrict the emissions. The facility will maintain monthly records to document compliance.

D. Conclusion

The permittee shall maintain compliance with the Synthetic Minor limitations through the record keeping and reporting requirements thus avoiding the Part 70 Title V requirements.

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

NONE

Please complete:

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	0.14
PM10	0.13
OC	18.3