State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
UNION COUNTY

Street Address: Mailing Address: Lazarus Gov. Center
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329

Application No: 01-08084

DATE: 3/29/00

Schmitt Marble Inc
Carl Ahrens VP
100 Commerce Blvd
Loveland, OH 45140

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

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

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

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

CC: **USEPA** **CDO**

FINAL PERMIT TO INSTALL 01-08084

Application Number:	01-08084
APS Premise Number:	0180000176
Permit Fee:	**$2200**
Name of Facility:	Schmitt Marble Inc
Person to Contact:	Carl Ahrens VP
Address:	100 Commerce Blvd Loveland, OH 45140

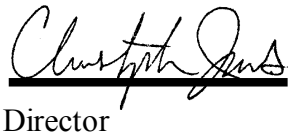
Location of proposed air contaminant source(s) [emissions unit(s)]:
8163 Business Way
Plain City, Ohio

Description of proposed emissions unit(s):
Cast polymer (cultured marble) products; three emissions units: mold cleaning, resin mixing/filling, and gel coat spray booth.

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.11 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.

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 are inadequate 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 prove to be inadequate 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. 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.

10. 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.

11. 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

Pollutant	Tons Per Year
OC	27.63

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

Issued: 3/29/00

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P001 - Mold Cleaning Operation	OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 2.41 pounds per hour and 40 pounds per day and 5.73 tons per year, including clean-up material(s).
	OAC rule 3745-21-07(G)(2)	The emissions limitations in this rule are less stringent than the emissions limits established by BAT.

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:

a. the company identification of each mold cleaning material and mold cleaning clean-up material employed in this emissions unit;

b. the number of gallons of each mold cleaning material and mold cleaning clean-up material employed per day;

c. the organic compound content of each mold cleaning material and mold cleaning clean-up material employed in pounds per gallon;

d. the total organic compound emission rate for all mold cleaning materials and mold cleaning clean-up material employed in pounds per day;

e. the total organic compound emission rate for all mold cleaning materials and mold cleaning clean-up material employed each day;

f. the number of hours of operations of the emissions unit each day; and,

g. the average emissions of organic compounds employed in pounds per hour (e divided by f above).

2. The permittee shall collect and record the following information each month for the purpose of determining annual organic compound emissions:

a. The company identification for each mold cleaning material and mold cleaning clean-up material employed.

b. The number of gallons of each mold cleaning material and mold cleaning clean-up material employed.

c. The organic compound content for all mold cleaning material and mold cleaning clean-up material, in pounds per gallon.

d. The total organic compound emission rate all mold cleaning materials and mold cleaning clean-up material, in pounds.

[Note: The coating information must be for the mold cleaning materials as employed, including any thinning solvents added at the emissions unit. Also, the definitions of "photochemically reactive" and "nonphotochemically reactive" are based upon OAC rule 3745-21-01(C)(5).]

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

   a. An identification of each day during which the average hourly organic compound emissions from the mold cleaning materials and the clean-up materials employed exceeded 2.41 pounds per hour as an actual average hourly organic compound emissions for each such day;

   b. An identification of each day during which the organic compound emissions from the mold cleaning materials and the clean-up materials employed exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

2. An identification of each year during which the organic compound emissions from the mold cleaning materials and the clean-up materials employed exceeded 5.73 tons per year.

V. Testing Requirements

Compliance with the emissions limitations listed above shall be determined in accordance with the following methods:

a. Emission Limitation:
Organic emissions shall not exceed 2.41 pounds per hour.

Applicable Compliance Method:
Compliance shall be demonstrated based on the record keeping requirements in Section III.1. of this emissions unit.

b. Emission Limitation:
40 pounds of organic compounds per day.

Applicable Compliance Method:
Recordkeeping requirements of III.1.d. of this emissions unit.

c. Emission Limitation:

Emissions Unit ID: P001

Organic emissions shall not exceed 5.73 tons per year.

Applicable Compliance Method:
Compliance shall be determined by the sum of the daily emissions for a calender year.

d. Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the mold cleaning materials and clean-up materials employed.

VI. Miscellaneous Requirements

None

Issued: 3/29/00

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P001 - Mold Cleaning Operation	OAC rule 3745-31-05(A)(3)	Compliance with Ohio EPA Air Toxics Policy

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Air Toxic Policy Clarifying Language

The permit to install for this emissions unit P001 was evaluated based on the actual materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application. To fulfill the best available technology requirements of OAC rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model (or other Ohio EPA approved model) and compared the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Styrene

TLV (ug/m3): 213,000

Maximum Hourly Emission Rate (lbs/hr): 26.41 (includes the hourly emissions for P001, R001, R002, and R003)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 739.7

MAGLC (ug/m3): 14,047

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.

Issued: 3/29/00

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
R001 - Resin Mixing Pot	OAC rule 3745-31-05(A)(3) OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8.0 pounds per hour and 40.0 pounds per day of photochemically reactive organic compounds and 7.3 tons per year, including clean-up material(s).

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:

a. the company identification for each resin applied and clean-up material;

b. the number of pounds of resin applied and clean-up material;

c. the organic compound (styrene) content of each resin and the organic compound content of the clean-up material, in percent weight;

d. the total organic compound (styrene) emission rate for all resins and the total organic compound emission rate of the clean-up material in pounds per day;

e. the total number of hours the emissions unit was in operation; and,

f. the average hourly organic compound (styrene) emission rate for all resins and clean-up material, i.e., (d) / (e), in pounds per hour (average).

2. The permittee shall collect and record the following information each month for the purpose of determining annual organic compound emissions:

a. The company identification for each mold cleaning material and mold cleaning clean-up material employed.

b. The number of gallons of each mold cleaning material and mold cleaning clean-up material employed.

c. The organic compound content for all mold cleaning material and mold cleaning clean-up material, in pounds per gallon.

d. The total organic compound emission rate all mold cleaning materials and mold cleaning clean-up material, in pounds.

[Note: The coating information must be for the resin as employed, including any thinning solvents added. Also, the definitions of "photochemically reactive" and "nonphotchemically reactive" are based upon OAC rule 3745-21-01(C)(5).]

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

a. An identification of each day during which the average hourly organic compound emissions from the resins and clean-up materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.

b. An identification of each day during which the organic compound emissions from the resins and cleanup materials employed exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

c. An identification of each year during which the organic compound emissions from the resins and cleanup materials employed exceeded 7.3 tons per year.

V. Testing Requirements

1. Compliance with the emissions limitations listed above shall be determined in accordance with the following methods:

a. Emission Limitation:

8 pounds organic compounds per hour.

Applicable Compliance Method:
(percent styrene content) * (0.03) * (pounds of resin made during the day) / (hours of production for each day).

b. Emission Limitation:

40 pounds of organic compounds per day.

Applicable Compliance Method:
(percent styrene content) * (0.03) * (pounds of resin made during the day).

c. Emission Limitation:

7.3 tons organic compounds per year.

Applicable Compliance Method:
Compliance shall be determined by the sum of the daily organic compound emissions for a calender year.

2. Formulation data or USEPA method 24 shall be used to determine the organic compound (styrene) contents of the resin(s) and the clean-up material(s).

Emissions Unit ID: R001

VI. Miscellaneous Requirements

None

Issued: 3/29/00

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
R001 - Resin Mixing Pot	OAC rule 3745-31-05(A)(3)	Compliance with Ohio EPA Air Toxics Policy.

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Air Toxic Policy Clarifying Language

The permit to install for this emissions unit P001 was evaluated based on the actual materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application. To fulfill the best available technology requirements of OAC rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model (or other Ohio EPA approved model) and compared the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Styrene

TLV (ug/m3): 213,000

Maximum Hourly Emission Rate (lbs/hr): 26.41 (includes the hourly emissions for P001, R001, R002, and R003)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 739.7

MAGLC (ug/m3): 14,047

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.

Issued: 3/29/00

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
R002 - Gel Coat Spay Booth #1	OAC rule 3745-31-05(A)(3) OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8.0 pounds per hour and 40.0 pounds per day of photochemically reactive organic compounds and 7.3 tons per year of photochemically reactive organic compounds, including clean-up materials.

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day for the coating operation:

a. the company identification for each type of gel coat coating and cleanup material employed;

b. the number of gallons of gel coat and cleanup material employed;

c. the percent of styrene present per gallon of each coating and cleanup material, in pounds per gallon;

d. the total styrene emissions rate for all coatings and cleanup materials, in pounds per day;

e. the total number of hours the emissions unit was in operation; and,

f. the average hourly styrene emissions rate for all coatings and cleanup materials, i.e., (d)/(e), in pounds per hour (average).

2. The permittee shall collect and record the following information each month for the purpose of determining annual organic compound emissions:

a. The company identification for each mold cleaning material and mold cleaning clean-up material employed.

b. The number of gallons of each mold cleaning material and mold cleaning clean-up material employed.

c. The organic compound content for all mold cleaning material and mold cleaning clean-up material, in pounds per gallon.

d. The total organic compound emission rate all mold cleaning materials and mold cleaning clean-up material, in pounds.

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Also, the definitions of "photochemically reactive" and "nonphotochemically reactive" are based upon OAC rule 3745-21-01(C)(5).]

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

a. an identification of each day during which the average hourly styrene emissions from the coatings and clean-up materials exceeded 8 pounds per hour, and the actual total average hourly organic compound emissions for each such day; and,

b. an identification of each day during which the styrene emissions from the coatings and clean-up materials exceeded 40 pounds per day, and the actual total organic compound emissions for each such day.

c. An identification of each year during which the organic compound emissions from the coatings and clean-up materials employed exceeded 7.3 tons per year.

V. Testing Requirements

1. Compliance with the emissions limitations listed above shall be determined in accordance with the following methods:

a. Emission Limitation:

8 pounds organic compounds per hour.

Applicable Compliance Method:
Compliance shall be demonstrated based on the record keeping requirements in Section III.1. of this emissions unit.

b. Emission Limitation:

40 pounds of organic compounds per day.

Applicable Compliance Method:
Compliance shall be demonstrated based on the record keeping requirements in Section III.1. of this emissions unit.

c. Emission Limitation:

7.3 tons organic compounds per year.

Applicable Compliance Method:
Compliance shall be determined by the sum of the daily organic compound emissions for a calender year.

VI. Miscellaneous Requirements

None

Emissions Unit ID: R002

Issued: 3/29/00

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
R002 - Gel Coat Spay Booth #1	OAC rule 3745-31-05(A)(3)	Compliance with Ohio EPA Air Toxics Policy.

2. Additional Terms and Conditions

2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

Air Toxic Policy Clarifying Language

The permit to install for this emissions unit P001 was evaluated based on the actual materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application. To fulfill the best available technology requirements of OAC rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model (or other Ohio EPA approved model) and compared the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Styrene

TLV (ug/m3): 213,000

Maximum Hourly Emission Rate (lbs/hr): 26.41 (includes the hourly emissions for P001, R001, R002, and R003)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 739.7

MAGLC (ug/m3): 14,047

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.

Issued: 3/29/00

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
R003 - Gel Coat Booth #2	OAC rule 3745-31-05(A)(3) OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8.0 pounds per hour and 40.0 pounds per day of photochemically reactive organic compounds and 7.3 tons per year of photochemically reactive organic compounds, including clean-up materials.

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day for the coating operation:

a. the company identification for each type of gel coat coating and cleanup material employed;

b. the number of gallons of gel coat and cleanup material employed;

c. the percent of styrene present per gallon of each coating and cleanup material, in pounds per gallon;

d. the total styrene emissions rate for all coatings and cleanup materials, in pounds per day;

e. the total number of hours the emissions unit was in operation; and,

f. the average hourly styrene emissions rate for all coatings and cleanup materials, i.e., (d)/(e), in pounds per hour (average).

2. The permittee shall collect and record the following information each month for the purpose of determining annual organic compound emissions:

a. The company identification for each mold cleaning material and mold cleaning clean-up material employed.

b. The number of gallons of each mold cleaning material and mold cleaning clean-up material employed.

c. The organic compound content for all mold cleaning material and mold cleaning clean-up material, in pounds per gallon.

d. The total organic compound emission rate all mold cleaning materials and mold cleaning clean-up material, in pounds.

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Also, the definitions of "photochemically reactive" and "nonphotochemically reactive" are based upon OAC rule 3745-21-01(C)(5).]

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

a. An identification of each day during which the average hourly styrene emissions from the coatings and clean-up materials exceeded 8 pounds per hour, and the actual total average hourly organic compound emissions for each

such day; and,

b. An identification of each day during which the styrene emissions from the coatings and clean-up materials exceeded 40 pounds per day, and the actual total organic compound emissions for each such day.

c. An identification of each year during which the organic compound emissions from the coatings and clean-up materials employed exceeded 7.3 tons per year.

V. Testing Requirements

1. Compliance with the emissions limitations listed above shall be determined in accordance with the following methods:

a. Emission Limitation:

8 pounds organic compounds per hour.

Applicable Compliance Method:
Compliance shall be demonstrated based on the record keeping requirements in Section III.1. of this emissions unit.

b. Emission Limitation:

40 pounds of organic compounds per day.

Applicable Compliance Method:
Compliance shall be demonstrated based on the record keeping requirements in Section III.1. of this emissions unit.

c. Emission Limitation:

7.3 tons organic compounds per year.

Applicable Compliance Method:
Compliance shall be determined by the sum of the daily organic compound emissions for a calender year.

V. Miscellaneous Requirements

Emissions Unit ID: R003

None

Issued: 3/29/00

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
R003 - Gel Coat Booth #2	OAC rule 3745-31-05(A)(3)	Compliance with Ohio EPA Air Toxics Policy.

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Air Toxic Policy Clarifying Language

The permit to install for this emissions unit P001 was evaluated based on the actual materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application. To fulfill the best available technology requirements of OAC rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model (or other Ohio EPA approved model) and compared the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Styrene

TLV (ug/m3): 213,000

Maximum Hourly Emission Rate (lbs/hr): 26.41 (includes the hourly emissions for P001, R001, R002, and R003)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 739.7

MAGLC (ug/m3): 14,047

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.

NEW SOURCE REVIEW FORM B

PTI Number: 01-08084 Facility ID: 0180000176

FACILITY NAME Schmitt Marble Inc

FACILITY DESCRIPTION Cast polymer (cultured marble) products; four emissions units: mold cleaning, resin mixing/filling, and 2 gel coat spray booth. CITY/TWP Plain City

SIC CODE 3088 SCC CODE 40202202 EMISSIONS UNIT ID P001

EMISSIONS UNIT DESCRIPTION Mold Cleaning Operation

DATE INSTALLED 2-28-00

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					
PM_{10}					
Sulfur Dioxide					
Organic Compounds	Attainment	2.41	5.73	2.41	5.73
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 permitted emission limits & applicable rules, compliance with the Ohio Air Toxics 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 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: MEK

NEW SOURCE REVIEW FORM B

PTI Number: 01-08084 Facility ID: 0180000176

FACILITY NAME Schmitt Marble Inc

FACILITY DESCRIPTION Cast polymer (cultured marble) products; four emissions units: mold cleaning, resin mixing/filling, and 2 gel coat spray booth. CITY/TWP Plain City

SIC CODE 3088 SCC CODE 30101817 EMISSIONS UNIT ID R001

EMISSIONS UNIT DESCRIPTION Resin Mixing Pot

DATE INSTALLED 2-28-00

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					
PM_{10}					
Sulfur Dioxide					
Organic Compounds	Attainment	8	7.3	8	7.3
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 permitted emission limits & applicable rules, compliance with the Ohio Air Toxics 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 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: Styrene

3975.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 01-08084 Facility ID: 0180000176

FACILITY NAME Schmitt Marble Inc

FACILITY DESCRIPTION Cast polymer (cultured marble) products; four emissions units: mold cleaning, resin mixing/filling, and 2 gel coat spray booth. CITY/TWP Plain City

SIC CODE 3088 SCC CODE 40202202 EMISSIONS UNIT ID R002

EMISSIONS UNIT DESCRIPTION Gel Coat Spay Booth #1

DATE INSTALLED 2-28-00

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					
PM_{10}					
Sulfur Dioxide					
Organic Compounds	Attainment	8	7.3	8	7.3
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 permitted emission limits & applicable rules, compliance with the Ohio Air Toxics 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 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: Styrene

3975.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 01-08084 Facility ID: 0180000176

FACILITY NAME Schmitt Marble Inc

FACILITY DESCRIPTION Cast polymer (cultured marble) products; four emissions units: mold cleaning, resin mixing/filling, and 2 gel coat spray booth. CITY/TWP Plain City

SIC CODE 3088 SCC CODE 40202202 EMISSIONS UNIT ID R003

EMISSIONS UNIT DESCRIPTION Gel Coat Booth #2

DATE INSTALLED 2-28-00

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					
PM_{10}					
Sulfur Dioxide					
Organic Compounds	Attainment	8	7.3	8	7.3
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 permitted emission limits & applicable rules, compliance with the Ohio Air Toxics 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 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: Styrene

NEW SOURCE REVIEW FORM B

PTI Number: 01-08084	Facility ID: 0180000176		
FACILITY NAME	Schmitt Marble Inc		
FACILITY DESCRIPTION	Cast polymer (cultured marble) products; four emissions units: mold cleaning, resin mixing/filling, and 2 gel coat spray booth.	CITY/TWP	Plain City

Please describe any hard copy information is being submitted with this recommendation (Please send hard copy information to Pam McGraner, DAPC Central Office - Air Quality Modeling and Planning):

Air Toxics Modeling for styrene

The TLV for MEK is 590 mg/m^3.
The MAGLC for MEK computes to a value of 14,047 µg/m^3.

The TLV for styrene is 213 mg/m^3.
The MAGLC for styrene computes to a value of 5,071.43 µg/m^3.

The first modeling run was done using the worst possible case scenario for the toxic emissions. This was accomplished using styrene since it has the lowest TLV and is the primary toxic emissions coming from the other emissions units (R001-R003). Since the sum of all the emissions from P001 and R001-R003 passed using Styrene as a basis, the MEK would also pass.

The modeling shows that the worst case maximum 1-hour concentration was located 912 meters from the point source and had a concentration of 739.7 µg/m^3 which is much less than the MAGLIC for styrene.

Emissions Calculations

P001

Mold Cleaning Operations:

The mold cleaning operation is accomplished by wiping the molds with rags. The worst case PTE is based on the rate at which molds could be cleaned. The maximum mold cleaning solvent which could possibly be used is 6 gallons per day based on the maximum capacity of the operations.

The density of the mold cleaning solvent is 6.65 lbs/hr and it is assumed that the actual emissions are equal to the potential emissions due to vaporization losses.

{{6.65~{lbs~OC} over gallon}~*~{6~gallons over day}} over {24~hrs over day}~=~1.66~{lbs~OC} over hour

Short Term Limit (mold cleaning solvent)

The permitted limit is equal to the PTE.

NEW SOURCE REVIEW FORM B

PTI Number: 01-08084	Facility ID: 0180000176		
FACILITY NAME	Schmitt Marble Inc		
FACILITY DESCRIPTION	Cast polymer (cultured marble) products; four emissions units: mold cleaning, resin mixing/filling, and 2 gel coat spray booth.	CITY/TWP	Plain City

{{730~gallons over year}~*~{0.65~{pounds~OC} over gallon}} over {2000~{pounds~OC} over {ton~OC}}~=~2.43~{tons~OC} over year

Long Term Limit (mold cleaning solvent)

{{1.66~{pounds~OC} over hour}~*~{8760~hours over year}} over {2000~{pounds~OC} over {ton~OC}}~=~7.3~{tons~OC} over year

In reality Schmitt Marble does not use nearly the PTE from the short term limit on an annual basis. They request to limit their gallons of mold cleaning solvent to 730 gallons per year.

The annual PTE based on the short term limit is:

A second type of solvent used for this emissions unit is called Frecote WOLO. It is applied as a mold release.

{{5.92~{lbs~OC} over gallon}~*~{3~gallons over day}} over {24~hrs over day}~=~0.75~{lbs~OC} over hour

The density of this solvent is 5.92 pounds per gallon.

Short Term Limit (mold release)

The short term limit is based on the company's maximum potential to emit of 1 gallons per day.

Long Term Limit (mold release)

{{0.75~{pounds~OC} over hour}~*~{8760~hours over year}} over {2000~{pounds~OC} over {ton~OC}}~=~3.3~{tons~OC} over year

Schmitt Marble has requested to use the actual short term limit to calculate their long term limit. Therefore, the long term limit is also their PTE for the mold release solvent.

The annual PTE based on the short term limit is:

{0.25~{gallon~solvent} over hour}~*~3.36~{pounds~HAPs} over {gallon~solvent}~=~0.84~{pound~HAPs} over hour

The mold cleaning material also has HAPs. The density of the HAPs in the solvent is 3.36 pounds per gallon per gallon of solvent used.

Short Term Limit (HAPs)

NEW SOURCE REVIEW FORM B

PTI Number: 01-08084	Facility ID: 0180000176		
FACILITY NAME	Schmitt Marble Inc		
FACILITY DESCRIPTION	Cast polymer (cultured marble) products; four emissions units: mold cleaning, resin mixing/filling, and 2 gel coat spray booth.	CITY/TWP	Plain City

{ton~HAP}}~—~5.68~{tons~HAP} over year

Long Term Limit (HAPs)

The total OCs for this emissions unit are:

Short term limits (OC)

Long term limits (OC)

NEW SOURCE REVIEW FORM B

PTI Number: 01-08084 Facility ID: 0180000176

FACILITY NAME Schmitt Marble Inc

FACILITY DESCRIPTION	Cast polymer (cultured marble) products; four emissions units: mold cleaning, resin mixing/filling, and 2 gel coat spray booth.	CITY/TWP	Plain City

P T E (O C)

Mold Cleaning Solvent **1.66 lb/hr**
2.43 tons/yr7.3 tons/yr

Mold Release Solvent **0.75 lb/hr** **3.3**
tons/yr3.3 tons/yr

2.41

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NEW SOURCE REVIEW FORM B

PTI Number: 01-08084 Facility ID: 0180000176

FACILITY NAME	Schmitt Marble Inc		
FACILITY DESCRIPTION	Cast polymer (cultured marble) products; four emissions units: mold cleaning, resin mixing/filling, and 2 gel coat spray booth.	CITY/TWP	Plain City

y
r

The total HAPs for this emissions unit are:

Short term limits (HAP)

Long term limits (HAP)

P

NEW SOURCE REVIEW FORM B

PTI Number: 01-08084 Facility ID: 0180000176

FACILITY NAME Schmitt Marble Inc

FACILITY DESCRIPTION	Cast polymer (cultured marble) products; four emissions units: mold cleaning, resin mixing/filling, and 2 gel coat spray booth.	CITY/TWP	Plain City

TE (HAP)

Mold Cleaning Solvent **0.84 lb/hr**
3.68 tons/yr3.68 tons/yr

R001

Resin Mixing Pot:

The resin mixing pot uses a liquid monomer (a polymer) which contains styrene. Styrene is a liquid organic compound and is photochemically reactive.

0.03~{lbs~emissions} over {lb~styrene~present}~*~0.35~{lbs~styrene} over {lb~resin}~*~760~{lbs~resin} over hr~=~7.98~{lbs~styrene~(OC)} over hr

Per AP-42, Styrene loss is between 1-3% by weight. Schmitt Marble assumes 3% for a worst case scenario. The resin contains a maximum styrene content of 35%. The maximum amount of resin used is 760 pounds per hour

0.03~{lbs~emissions} over {lb~styrene~present}~*~0.35~{lbs~styrene} over {lb~resin}~*~3800~{lbs~resin} over hr~=~39.9~{lbs~styrene~(OC)} over hr

and 3,800 pounds per day.

39.9~{lbs~OC} over day~*~365~days over yr~*~1~{ton~OC} over {2000~lbs~OC}~=~7.3~{tons~OC} over yr

Short Term Limit (OC/hourly)

Short Term Limit (OC/daily)

Long Term Limit (OC/annual)

NEW SOURCE REVIEW FORM B

PTI Number: 01-08084	Facility ID: 0180000176		
FACILITY NAME	Schmitt Marble Inc		
FACILITY DESCRIPTION	Cast polymer (cultured marble) products; four emissions units: mold cleaning, resin mixing/filling, and 2 gel coat spray booth.	CITY/TWP	Plain City

Resin Clean-up Solvent:

This emissions unit also has organic emissions as a result of the use of a clean-up solvent. The density of the

55~{gallons~clean-up~solvent} over month~*~8.86~{lbs~clean-up~solvent} over {gallons~clean-up~solvent}~=~487.3~{lbs~clean-up~solvent} over {month}

vent is 8.86 lbs/hr. They will be permitted to use no more than 55 gallons of clean-up material per month or 660 gallons per year. Schmitt marble plans to operate 260 days per year. All of the resin pot emissions are HAPs while the clean-up material is not.

660~{gal's~clean-up~solv't} over yr~*~8.86~{lbs~clean-up~solv't} over {gal's~clean-up~solv't}~*~{1~ton} over {2000~lbs}=~2.92~{lbs~clean-up~solv't} over {yr}

ort Term Limit (OC/monthly)

Long Term Limit (OC/annual)

The total OCs for this emissions unit are:

Short term limits (OC)

Long te

NEW SOURCE REVIEW FORM B

PTI Number: 01-08084 Facility ID: 0180000176

FACILITY NAME Schmitt Marble Inc

FACILITY DESCRIPTION	Cast polymer (cultured marble) products; four emissions units: mold cleaning, resin mixing/filling, and 2 gel coat spray booth.	CITY/TWP	Plain City

						rmlimits (OC) PTE (OC)
Resin mixing Pot Emissions		**7.98 lb/hr**		**7.3**		
tons/yr7.3 tons/yr						
Clean-up Material Solvent						
0.75 lb/hr3.3 tons/yr3.3 tons/yr						
				487.3		**lb/month 2.92**

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NEW SOURCE REVIEW FORM B

PTI Number: 01-08084	Facility ID: 0180000176		
FACILITY NAME	Schmitt Marble Inc		
FACILITY DESCRIPTION	Cast polymer (cultured marble) products; four emissions units: mold cleaning, resin mixing/filling, and 2 gel coat spray booth.	CITY/TWP	Plain City

tons/yr 2.92 tons/yr

The total HAPs for this emissions unit are:

Short term limits (HAP) Longt

NEW SOURCE REVIEW FORM B

PTI Number: 01-08084	Facility ID: 0180000176		
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FACILITY DESCRIPTION	Cast polymer (cultured marble) products; four emissions units: mold cleaning, resin mixing/filling, and 2 gel coat spray booth.	CITY/TWP	Plain City

		Emissions limits (HAP)	**PTE (HAP)**
Resin Mixing Pot HAPs	**7.98 lb/hr 7.3 tons/yr**		**7.3 tons/yr**

R002 and R003

Gel Coat Spray Booths:

The two gel coat spray booths are limited by the SIP rule 3745-21-07(G)(2). This is the 8 pound per hour and 40 pounds per day.

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NEW SOURCE REVIEW FORM B

PTI Number: 01-08084	Facility ID: 0180000176		
FACILITY NAME	Schmitt Marble Inc		
FACILITY DESCRIPTION	Cast polymer (cultured marble) products; four emissions units: mold cleaning, resin mixing/filling, and 2 gel coat spray booth.	CITY/TWP	Plain City

NONE

Please fill in the following for this permit:

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
OC	27.63