State of Ohio Environmental Protection Agency

RE: DRAFT PERMIT TO INSTALL **CERTIFIED MAIL**
HAMILTON COUNTY

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

Application No: 14-05618
Fac ID: 1431150060

DATE: 10/7/2004

General Electric - AEBG
Robert Drexelius
1 Neumann Way
Cincinnati, OH 45215

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

A Permit to Install may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **$1000** 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.

Sincerely,

Michael W. Ahern

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

CC: USEPA HCDES Ohio-Kentucky-Indiana Regional Council of Governments KY IN

HAMILTON COUNTY

PUBLIC NOTICE
ISSUANCE OF DRAFT PERMIT TO INSTALL **14-05618** FOR AN AIR CONTAMINANT SOURCE FOR
General Electric - AEBG

On 10/7/2004 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **General Electric - AEBG**, located at **1 Neumann Way, Cincinnati**, Ohio.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 14-05618:

Five ceramic slurry robotic spray systems.

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Brad Miller, Hamilton County Department of Environmental Services, 250 William Howart Taft Pkwy, Cincinnati, OH 45219-2660 [(513)946-7777]

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install | **Issue Date: To be entered upon final issuance**
Terms and Conditions | **Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 14-05618

Application Number:	14-05618
Facility ID:	1431150060
Permit Fee:	**To be entered upon final issuance**
Name of Facility:	General Electric - AEBG
Person to Contact:	Robert Drexelius
Address:	1 Neumann Way Cincinnati, OH 45215

Location of proposed air contaminant source(s) [emissions unit(s)]:
1 Neumann Way
Cincinnati, Ohio

Description of proposed emissions unit(s):
Five ceramic slurry robotic spray systems.

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

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 <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, 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.9 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted 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 ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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

12. Air Pollution Nuisance

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

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

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. 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.

5. Construction of New Sources(s)

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

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

6. Public Disclosure

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

7. Applicability

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

8. Construction Compliance Certification

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

9. Additional Reporting Requirements When There Are No Deviations of Federally

Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., 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	22.5
PM/PM10	0.15

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

None

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

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
K030 - Ceramic Slurry Robotic Spray System (EA-449)	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-11(B)
		40 CFR 63 Subpart GG
	OAC rule 3745-21-07(G)(2)	
	OAC rule 3745-21-09(U)	
	OAC rule 3745-17-07(A)	

Applicable Emissions Limitations/Control Measures	
Organic compound (OC) emissions shall not exceed 4.5 tons per year (TPY), including cleanup materials. See terms and conditions A.I.2.a , A.II.1 and A.II.2 below. Particulate matter (PM) and particulate matter less than 10 microns in diameter (PM10) shall not exceed 0.01 lb/hr and 0.03 ton per year. The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-21-07(G)(2). OC emissions shall not exceed 8 lbs/hr and 40 lbs/day, including cleanup materials. Exempt, per OAC rule 3745-21-09(U)(2)(b). The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). Exempt per 40 CFR 63.741(f) since the emissions unit employs specialty coatings as outlined in this rule.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the mass emission limitations, visible emission limitations and OC content limitations.

II. Operational Restrictions

1. The OC content as applied, of each coating employed shall not exceed 8.2 pounds of OC per gallon of coating.

2. The OC content as applied, of each cleanup material employed shall not exceed 6.6 pounds of OC per gallon of cleanup material.

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 coating and cleanup material employed.

   b. The number of gallons of each coating and cleanup material employed.

   c. The organic compound content of each coating and cleanup material, in pounds per gallon.

   d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day.

   e. The total number of hours the emissions unit was in operation.

   f. The average hourly organic compound emission rate for all coatings and cleanup materials, i.e., (d)/(e), in pounds per hour (average).

   g. Documentation indicating whether each coating employed meets the definition of an "exempt specialty coating" per 40 CFR Part 63, Subpart GG.

   [Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

2. The permittee shall maintain monthly records of the OC emissions from the coatings and cleanup materials for this emissions unit. The OC emissions shall be summarized in tons per year at the end of each calendar year.

IV. Reporting Requirements

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

   a. An identification of each day during which the average hourly organic compound emissions from the coatings and cleanup 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 coatings and cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

2. The permittee shall submit deviation reports which identify all exceedances of the OC content limits in terms and conditions A.II.1 and A.II.2.

3. The permittee shall submit annual reports which specify the total organic compound emissions from emissions unit K030 for the previous calendar year. These reports shall be submitted by April 15 of each year. The reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

4. Unless specified, the deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the OC content limitation in term A.II.1 and A.II.2 shall be demonstrated by the record keeping requirements specified in term A.III.1.

2. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:

   Emission Limitation(s):
   8 lbs OC/hour
   40 lbs OC/day
   4.5 TPY

Applicable Compliance Method:
Compliance with the OC emission limitation in these terms and conditions shall be demonstrated by the record keeping requirements specified in term A.III.1 and A.III.2.

3. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the coatings.

4. Emission Limitation:
Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

5. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:

Emission Limitation(s):
0.01 lb PM/PM10/hr

Applicable Compliance Method:
Compliance with the hourly allowable PM and PM10 limitation may be determined in accordance with the following method:

To determine the actual worst case emission rate for PM/PM10, the following equation shall be used:

E = maximum coating solids usage rate (in pounds per hour) X (1-TE) X (1-CE)

where:

E = PM/PM10 rate (lbs/hr)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used.

CE = control efficiency of the water wash curtain.

If required, the permittee shall demonstrate compliance with the hourly allowable PM/PM10

limitation in accordance with Methods 1 through 5 in Appendix A of 40 CFR, Part 60.

6. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:

Emission Limitation(s):
0.03 TPY of PM/PM10

Applicable Compliance Method:
Compliance shall be determined by multiplying 0.01 lb/hr by 5400 hours per year and then dividing by 2000 pounds per ton. 5400 hours per year is the maximum application rate as recorded in the PTI application 14-05596, as received on July 19, 2004.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K030 - Ceramic Slurry Robotic Spray System (EA-449)	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (K030) 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: toluene

   TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 40

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4214

MAGLC (ug/m3): 4476

Physical changes to or in the method of operation of the emissions unit after it's 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;

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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, 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 it's 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.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
K031 - Ceramic Slurry Robotic Spray System (EA-450)	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-11(B)
		40 CFR 63 Subpart GG
	OAC rule 3745-21-07(G)(2)	
	OAC rule 3745-21-09(U)	
	OAC rule 3745-17-07(A)	

Applicable Emissions Limitations/Control Measures	
Organic compound (OC) emissions shall not exceed 4.5 tons per year (TPY), including cleanup materials See terms and conditions A.I.2.a , A.II.1 and A.II.2 below. Particulate matter (PM) and particulate matter less than 10 microns in diameter (PM10) shall not exceed 0.01 lb/hr and 0.03 ton per year. The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-21-07(G)(2). OC emissions shall not exceed 8 lbs/hr and 40 lbs/day, including cleanup materials. Exempt, per OAC rule 3745-21-09(U)(2)(b). The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). Exempt per 40 CFR 63.741(f) since the emissions unit employs specialty coatings as outlined in this rule

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the mass emission limitations, visible emission limitations and OC content limitations.

II. Operational Restrictions

1. The OC content as applied, of each coating employed shall not exceed 8.2 pounds of OC per gallon of coating.

2. The OC content as applied, of each cleanup material employed shall not exceed 6.6 pounds of OC per gallon of cleanup material.

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 coating and cleanup material employed.

   b. The number of gallons of each coating and cleanup material employed.

   c. The organic compound content of each coating and cleanup material, in pounds per gallon.

   d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day.

   e. The total number of hours the emissions unit was in operation.

   f. The average hourly organic compound emission rate for all coatings and cleanup materials, i.e., (d)/(e), in pounds per hour (average).

   g. Documentation indicating whether each coating employed meets the definition of an "exempt specialty coating" per 40 CFR Part 63, Subpart GG.

   [Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

2. The permittee shall maintain monthly records of the OC emissions from the coatings and cleanup materials for this emissions unit. The OC emissions shall be summarized in tons per year at the end of each calendar year.

IV. Reporting Requirements

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

   a. An identification of each day during which the average hourly organic compound emissions from the coatings and cleanup 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 coatings and cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

2. The permittee shall submit deviation reports which identify all exceedances of the OC content limits in terms and conditions A.II.1 and A.II.2.

3. The permittee shall submit annual reports which specify the total organic compound emissions from emissions unit K031 for the previous calendar year. These reports shall be submitted by April 15 of each year. The reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

4. Unless specified, the deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the OC content limitation in term A.II.1 and A.II.2 shall be demonstrated by the record keeping requirements specified in term A.III.1.

2. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:

   Emission Limitation(s):
   8 lbs OC/hour
   40 lbs OC/day
   4.5 TPY

   Applicable Compliance Method:
   Compliance with the OC emission limitation in these terms and conditions shall be demonstrated by the record keeping requirements specified in term A.III.1 and A.III.2.

3. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the coatings.

4. Emission Limitation:
Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

5. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:

Emission Limitation(s):
0.01 lb PM/PM10/hr

Applicable Compliance Method:
Compliance with the hourly allowable PM and PM10 limitation may be determined in accordance with the following method:

To determine the actual worst case emission rate for PM/PM10, the following equation shall be used:

E = maximum coating solids usage rate (in pounds per hour) X (1-TE) X (1-CE)

where:

E = PM/PM10 rate (lbs/hr)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used.

CE = control efficiency of the water wash curtain.

If required, the permittee shall demonstrate compliance with the hourly allowable PM/PM10 limitation in accordance with Methods 1 through 5 in Appendix A of 40 CFR, Part 60.

6. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:

Emissions Unit ID: K031

Emission Limitation(s):
0.03 TPY of PM/PM10

Applicable Compliance Method:

Compliance shall be determined by multiplying 0.01 lb/hr by 5400 hours per year and then dividing by 2000 pounds per ton. 5400 hours per year is the maximum application rate as recorded in the PTI application 14-05596, as received on July 19, 2004.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K031 - Ceramic Slurry Robotic Spray System (EA-450)	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (K031) 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: toluene

   TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 40

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4214

MAGLC (ug/m3): 4476

Physical changes to or in the method of operation of the emissions unit after it's 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;

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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, 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 it's 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.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
K032 - Ceramic Slurry Robotic Spray System (EA-451)	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-11(B)
		40 CFR 63 Subpart GG
	OAC rule 3745-21-07(G)(2)	
	OAC rule 3745-21-09(U)	
	OAC rule 3745-17-07(A)	

Applicable Emissions Limitations/Control Measures	
Organic compound (OC) emissions shall not exceed 4.5 tons per year (TPY), including cleanup materials.	
See terms and conditions A.I.2.a , A.II.1 and A.II.2 below.	
Particulate matter (PM) and particulate matter less than 10 microns in diameter (PM10) 0.01 lb/hr and 0.03 ton per year.	
The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-21-07(G)(2).	
OC emissions shall not exceed 8 lbs/hr and 40 lbs/day, including cleanup materials.	
Exempt, per OAC rule 3745-21-09(U)(2)(b).	
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).	
The emission limitation	specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). Exempt per 40 CFR 63.741(f) since the emissions unit employs specialty coatings as outlined in this rule.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the mass emission limitations, visible emission limitations and OC content limitations.

II. Operational Restrictions

1. The OC content as applied, of each coating employed shall not exceed 8.2 pounds of OC per gallon of coating.

2. The OC content as applied, of each cleanup material employed shall not exceed 6.6 pounds of OC per gallon of cleanup material.

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 coating and cleanup material employed.

   b. The number of gallons of each coating and cleanup material employed.

   c. The organic compound content of each coating and cleanup material, in pounds per gallon.

   d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day.

   e. The total number of hours the emissions unit was in operation.

   f. The average hourly organic compound emission rate for all coatings and cleanup materials, i.e., (d)/(e), in pounds per hour (average).

   g. Documentation indicating whether each coating employed meets the definition of an "exempt specialty coating" per 40 CFR Part 63, Subpart GG.

   [Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

2. The permittee shall maintain monthly records of the OC emissions from the coatings and cleanup materials for this emissions unit. The OC emissions shall be summarized in tons per year at the end of each calendar year.

IV. Reporting Requirements

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

   a. An identification of each day during which the average hourly organic compound emissions from the coatings and cleanup 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 coatings and cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

2. The permittee shall submit deviation reports which identify all exceedances of the OC content limits in terms and conditions A.II.1 and A.II.2.

3. The permittee shall submit annual reports which specify the total organic compound emissions from emissions unit K032 for the previous calendar year. These reports shall be submitted by April 15 of each year. The reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

4. Unless specified, the deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the OC content limitation in term A.II.1 and A.II.2 shall be demonstrated by the record keeping requirements specified in term A.III.1.

2. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:

   Emission Limitation(s):
   8 lbs OC/hour
   40 lbs OC/day
   4.5 TPY

   Applicable Compliance Method:
   Compliance with the OC emission limitation in these terms and conditions shall be demonstrated by the record keeping requirements specified in term A.III.1 and A.III.2.

3. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the coatings.

4. Emission Limitation:
Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

5. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:

Emission Limitation(s):
0.01 lb PM/PM10/hr

Applicable Compliance Method:

Compliance with the hourly allowable PM and PM10 limitation may be determined in accordance with the following method:

To determine the actual worst case emission rate for PM/PM10, the following equation shall be used:

E = maximum coating solids usage rate (in pounds per hour) X (1-TE) X (1-CE)

where:

E = PM/PM10 rate (lbs/hr)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used.

CE = control efficiency of the water wash curtain.

If required, the permittee shall demonstrate compliance with the hourly allowable PM/PM10 limitation in accordance with Methods 1 through 5 in Appendix A of 40 CFR, Part 60.

6. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:

Emission Limitation(s):
0.03 TPY of PM/PM10

Applicable Compliance Method:

Compliance shall be determined by multiplying 0.01 lb/hr by 5400 hours per year and then dividing by 2000 pounds per ton. 5400 hours per year is the maximum application rate as recorded in the PTI application 14-05596, as received on July 19, 2004.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K032 - Ceramic Slurry Robotic Spray System (EA-451)	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (K032) 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: toluene

   TLV (ug/m3): 188,000

Emissions Unit ID: K032

Maximum Hourly Emission Rate (lbs/hr): 40

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4214

MAGLC (ug/m3): 4476

Physical changes to or in the method of operation of the emissions unit after it's 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;

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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, 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 it's 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.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
K033 - Ceramic Slurry Robotic Spray System (EA-452)	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-11(B)
		40 CFR 63 Subpart GG
	OAC rule 3745-21-07(G)(2)	
	OAC rule 3745-21-09(U)	
	OAC rule 3745-17-07(A)	

Applicable Emissions Limitations/Control Measures	
Organic compound (OC) emissions shall not exceed 4.5 tons per year (TPY), including cleanup materials.	63.741(f) since the emissions unit employs specialty coatings as outlined in this rule.
See terms and conditions A.I.2.a , A.II.1 and A.II.2 below.	
Particulate matter (PM) and particulate matter less than 10 microns in diameter (PM10) emissions shall not exceed 0.01 lb/hr and 0.03 ton per year.	
The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-21-07(G)(2).	
8 lbs OC/hr, 40 lbs OC/day, including cleanup materials	
Exempt, per OAC rule 3745-21-09(U)(2)(b).	
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).	
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). Exempt per 40 CFR	

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the mass emission limitations, visible emission limitations and OC content limitations.

II. Operational Restrictions

1. The OC content as applied, of each coating employed shall not exceed 8.2 pounds of OC per gallon of coating.

2. The OC content as applied, of each cleanup material employed shall not exceed 6.6 pounds of OC per gallon of cleanup material.

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 coating and cleanup material employed.

   b. The number of gallons of each coating and cleanup material employed.

   c. The organic compound content of each coating and cleanup material, in pounds per gallon.

   d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day.

   e. The total number of hours the emissions unit was in operation.

   f. The average hourly organic compound emission rate for all coatings and cleanup materials, i.e., (d)/(e), in pounds per hour (average).

   g. Documentation indicating whether each coating employed meets the definition of an "exempt specialty coating" per 40 CFR Part 63, Subpart GG.

   [Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

2. The permittee shall maintain monthly records of the OC emissions from the coatings and cleanup materials for this emissions unit. The OC emissions shall be summarized in tons per year at the end of each calendar year.

IV. Reporting Requirements

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

   a. An identification of each day during which the average hourly organic compound emissions from the coatings and cleanup 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 coatings and cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

2. The permittee shall submit deviation reports which identify all exceedances of the OC content limits in terms and conditions A.II.1 and A.II.2.

3. The permittee shall submit annual reports which specify the total organic compound emissions from emissions unit K033 for the previous calendar year. These reports shall be submitted by April 15 of each year. The reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

4. Unless specified, the deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the OC content limitation in term A.II.1 and A.II.2 shall be demonstrated by the record keeping requirements specified in term A.III.1.

2. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:

   Emission Limitation(s):
   8 lbs OC/hour
   40 lbs OC/day

4.5 TPY

Applicable Compliance Method:
Compliance with the OC emission limitation in these terms and conditions shall be demonstrated by the record keeping requirements specified in term A.III.1 and A.III.2.

3. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the coatings.

4. Emission Limitation:
Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

5. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:

Emission Limitation(s):
0.01 lb PM/PM10/hr

Applicable Compliance Method:

Compliance with the hourly allowable PM and PM10 limitation may be determined in accordance with the following method:

To determine the actual worst case emission rate for PM/PM10, the following equation shall be used:

E = maximum coating solids usage rate (in pounds per hour) X (1-TE) X (1-CE)

where:

E = PM/PM10 rate (lbs/hr)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used.

CE = control efficiency of the water wash curtain.

If required, the permittee shall demonstrate compliance with the hourly allowable PM/PM10 limitation in accordance with Methods 1 through 5 in Appendix A of 40 CFR, Part 60.

6. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the

following methods:

Emission Limitation(s):
0.03 TPY of PM/PM10

Applicable Compliance Method:

Compliance shall be determined by multiplying 0.01 lb/hr by 5400 hours per year and then dividing by 2000 pounds per ton. 5400 hours per year is the maximum application rate as recorded in the PTI application 14-05596, as received on July 19, 2004.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K033 - Ceramic Slurry Robotic Spray System (EA-452)	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (K033) 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: toluene

   TLV (ug/m3): 188,000

Emissions Unit ID: K033

Maximum Hourly Emission Rate (lbs/hr): 40

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4214

MAGLC (ug/m3): 4476

Physical changes to or in the method of operation of the emissions unit after it's 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;

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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, 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 it's 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.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
K034 - Ceramic Slurry Robotic Spray System (EA-453)	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-11(B)
		40 CFR 63 Subpart GG
	OAC rule 3745-21-07(G)(2)	
	OAC rule 3745-21-09(U)	
	OAC rule 3745-17-07(A)	

Applicable Emissions Limitations/Control Measures	
Organic compound (OC) emissions shall not exceed 4.5 tons per year (TPY), including cleanup materials. See terms and conditions A.I.2.a , A.II.1 and A.II.2 below. Particulate matter (PM) and particulate matter less than 10 microns in diameter (PM10) shall not exceed 0.01 lb/hr and 0.03 ton per year. The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-21-07(G)(2). OC emissions shall not exceed 8 lbs/hr and 40 lbs OC/day, including cleanup materials. Exempt, per OAC rule 3745-21-09(U)(2)(b). The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). Exempt per 40 CFR 63.741(f) since the emissions unit employs specialty coatings as outlined in this rule.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the mass emission limitations, visible emission limitations and OC content limitations.

II. Operational Restrictions

1. The OC content as applied, of each coating employed shall not exceed 8.2 pounds of OC per gallon of coating.

2. The OC content as applied, of each cleanup material employed shall not exceed 6.6 pounds of OC per gallon of cleanup material.

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 coating and cleanup material employed.

   b. The number of gallons of each coating and cleanup material employed.

   c. The organic compound content of each coating and cleanup material, in pounds per gallon.

   d. The total organic compound emission rate for all coatings and cleanup materials, in pounds per day.

   e. The total number of hours the emissions unit was in operation.

   f. The average hourly organic compound emission rate for all coatings and cleanup materials, i.e., (d)/(e), in pounds per hour (average).

   g. Documentation indicating whether each coating employed meets the definition of an "exempt specialty coating" per 40 CFR Part 63, Subpart GG.

   [Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

2. The permittee shall maintain monthly records of the OC emissions from the coatings and cleanup materials for this emissions unit. The OC emissions shall be summarized in tons per year at the

end of each calendar year.

IV. Reporting Requirements

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

   a. An identification of each day during which the average hourly organic compound emissions from the coatings and cleanup 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 coatings and cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

2. The permittee shall submit deviation reports which identify all exceedances of the OC content limits in terms and conditions A.II.1 and A.II.2.

3. The permittee shall submit annual reports which specify the total organic compound emissions from emissions unit K034 for the previous calendar year. These reports shall be submitted by April 15 of each year. The reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

4. Unless specified, the deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the OC content limitation in term A.II.1 and A.II.2 shall be demonstrated by the record keeping requirements specified in term A.III.1.

2. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:

   Emission Limitation(s):
   8 lbs OC/hour
   40 lbs OC/day
   4.5 TPY

Applicable Compliance Method:
Compliance with the OC emission limitation in these terms and conditions shall be demonstrated by the record keeping requirements specified in term A.III.1 and A.III.2.

3. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the coatings.

4. Emission Limitation:
Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

5. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:

Emission Limitation(s):
0.01 lb PM/PM10/hr

Applicable Compliance Method:

Compliance with the hourly allowable PM and PM10 limitation may be determined in accordance with the following method:

To determine the actual worst case emission rate for PM/PM10, the following equation shall be used:

E = maximum coating solids usage rate (in pounds per hour) X (1-TE) X (1-CE)

where:

E = PM/PM10 rate (lbs/hr)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used.

CE = control efficiency of the water wash curtain.

If required, the permittee shall demonstrate compliance with the hourly allowable PM/PM10 limitation in accordance with Methods 1 through 5 in Appendix A of 40 CFR, Part 60.

6. Compliance with the emission limitations specified in Section A.I.1 shall be determined by the following methods:

Emission Limitation(s):
0.03 TPY of PM/PM10

Applicable Compliance Method:
Compliance shall be determined by multiplying 0.01 lb/hr by 5400 hours per year and then dividing by 2000 pounds per ton. 5400 hours per year is the maximum application rate as recorded in the PTI application 14-05596, as received on July 19, 2004.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K034 - Ceramic Slurry Robotic Spray System (EA-453)	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (K034) 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: toluene

   TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 40

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4214

MAGLC (ug/m3): 4476

Physical changes to or in the method of operation of the emissions unit after it's 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;

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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, 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 it's 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.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None