

**Synthetic Minor Determination and/or**  **Netting Determination**  
**Permit To Install 08-04727**

**A. Source Description**

Greenville Technology, Inc. (GTI) is a manufacturer of plastic automobile parts and accessories. PTI 08-04727 is for installation of a new emissions unit R002, a programmable robotic spray coating line. It will utilize a water wash system, and a permanent total enclosure that will achieve 100% capture of OC emissions. An existing DURR concentrator wheel and regenerative thermal oxidizer system is currently shared by emission units K001, K007 and R001 to abate OC emissions. Emissions from the new line R002 will be directed to the concentrator wheel and regenerative thermal oxidizer system control OC emissions. A minimum of 90% overall control will be required.

K007 was included in this PTI as a modification to update T&Cs to be consistent with and reflective those emission units that will now be commonly controlled by the DURR concentrator/oxidizer system. Emissions unit ID number K007 is changed to R003 to be consistent with Ohio EPA naming convention, and is referred to as R003 in the following.

**B. Facility Emissions and Attainment Status**

GTI is a Title V facility classified as major for OC and HAP emissions, and SM for PSD through federally enforceable permitting actions. The facility is located in Darke County which is in attainment for all pollutants. GTI has other significant OC emissions units K001, R001 and R003 whose emissions are controlled by a fume concentrator and regenerative thermal oxidizer. There is only one other significant source of OC emissions that currently exists at the facility, K008. K008 incorporates the use of waterborne coatings and emissions are uncontrolled. This PTI is for new source R002 replacing K001. With the shutdown of K001 and installation of R002, no net increase of emissions occur. The SM limitation in PTI 08-3960 (for K001, K002, K005 and K007) and in final PTI 08-04719 (for K001, K007 and R001) will be retained and now apply to the combined emissions from R001, R002 and R003, resulting in no increase of emissions for the facility.

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Plastic Parts and Products 40 CFR Part 63, Subpart PPPP was promulgated April 19, 2004. The facility is an "existing" major source per the definitions of the MACT with a compliance date of three years after April 19, 2004 (i.e., April 19, 2007). Without this SM PTI, the permittee would be subject to the MACT requirements. The requirements of this SM will limit the facility's HAPS emissions allowing it to avoid the MACT requirements. The SM limitations to avoid the MACT will be included in the facility's Title V renewal in June 2006.

**C. Source Emissions**

The controlled PTE for the new source R002 is 152 TPY OC. GTI voluntarily requested R002 have the same 102.83 TPY OC limitation as K001, the unit it is replacing, and requested the same federally enforceable limitations in earlier PTIs be maintained in this PTI. Emissions unit R002 will be constructed and located adjacent to emissions unit K001. K001 will be permanently shutdown and dismantled after start up and operation of R002. The new emissions unit R002 will emit less OC emissions compared to K001 by using less coating and cleanup material than the old equipment it is replacing. The individual emissions limitation for R002 is 102.83 TPY, including cleanup.

**D. Conclusion**

This is a synthetic minor PTI containing federally enforceable requirements to ensure the HAP emissions for the facility are maintained below MACT thresholds. It will require use of permanent total enclosure for the capture of emissions and a fume concentrator and thermal oxidizer system for removal/destruction of emissions, limiting the OC emissions to 102.83 TPY (both individually for R002, and for R001, R002 and R003 combined) and facility HAP emissions to 9.9 TPY for a single HAP compound and 24.9 TPY for combined HAP compounds. Monthly monitoring, record keeping and quarterly deviation reporting will be required to monitor compliance. Therefore, through federally enforceable terms and conditions and record keeping requirements, GTI will not trigger MACT permitting requirements.



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL  
DARKE COUNTY**

**CERTIFIED MAIL**

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center

**Application No: 08-04727**

**Fac ID: 0819070190**

**DATE: 12/20/2005**

Greenville Technology Inc  
Les Siegler  
5755 St Rte 571 East  
Greenville, OH 453319691

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

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$200** 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, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

RAPCA

Miami Valley Reg Planning Commission

IN

**DARKE COUNTY**

PUBLIC NOTICE  
ISSUANCE OF DRAFT PERMIT TO INSTALL **08-04727** FOR AN AIR CONTAMINANT SOURCE FOR  
**Greenville Technology Inc**

On 12/20/2005 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Greenville Technology Inc**, located at **5755 S Rte 571 East, Greenville, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 08-04727:

**New coating line.**

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.

John Paul, Regional Air Pollution Control Agency, 117 South Main street, Dayton, OH 45422-12084  
[(937)225-4435]



**Permit To Install  
Terms and Conditions**

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

**DRAFT PERMIT TO INSTALL 08-04727**

Application Number: 08-04727  
Facility ID: 0819070190  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: Greenville Technology Inc  
Person to Contact: Les Siegler  
Address: 5755 St Rte 571 East  
Greenville, OH 453319691

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**5755 S Rte 571 East  
Greenville, Ohio**

Description of proposed emissions unit(s):  
**New coating line.**

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 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

**Greenville Technology Inc**  
**PTI Application: 08-04727**

**Facility ID: 0819070190**

**Issued: To be entered upon final issuance**

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

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

**2. Scheduled Maintenance/Malfunction Reporting**

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

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

**3. Risk Management Plans**

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

**Greenville Technology Inc**

**PTI Application: 08-04727**

**Issued: To be entered upon final issuance**

**Facility ID: 0819070190**

permittee shall comply with the requirement to register such a plan.

#### **4. Title IV Provisions**

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

#### **5. Severability Clause**

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

#### **6. General Requirements**

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

**Greenville Technology Inc**

**PTI Application: 08-04727**

**Issued: To be entered upon final issuance**

**Facility ID: 0819070190**

**7. Fees**

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

**Issued: To be entered upon final issuance****8. Federal and State Enforceability**

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

**9. Compliance Requirements**

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

**Greenville Technology Inc**  
**PTI Application: 08-04727**  
**Issued: To be entered upon final issuance**

**Facility ID: 0819070190**

- ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

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

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

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

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

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

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

#### **13. Permit-To-Install**

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

**Greenville Technology Inc**

**PTI Application: 08-04727**

**Issued: To be entered upon final issuance  
this permit.**

**Facility ID: 0819070190**

**Greenville Technology Inc**  
**PTI Application: 08-04727**

**Facility ID: 0819070190**

**Issued: To be entered upon final issuance**

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

**1. Compliance Requirements**

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

**2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

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

**3. Permit Transfers**

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

**4. Authorization To Install or Modify**

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of

**Greenville Technology Inc**  
**PTI Application: 08-04727**

**Facility ID: 0819070190**

**Issued: To be entered upon final issuance**

installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

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

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

**6. Public Disclosure**

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

**7. Applicability**

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

**8. Construction Compliance Certification**

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

Greenville Technology Inc

PTI Application: 08-04727

Issued: To be entered upon final issuance

Facility ID: 0819070190

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

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

Greenville Technology Inc  
PTI Application: 08-04727  
Issued: To be entered upon final issuance

Facility ID: 0819070190

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

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

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

| <u>Pollutant</u> | <u>Tons Per Year</u> |
|------------------|----------------------|
| OC               | 102.83               |
| Single HAP       | 9.9                  |
| Combined HAPs    | 24.9                 |

**Greenville Technology Inc**

**Facility ID: 0819070190**

**PTI Application: 08-04727**

**Issued: To be entered upon final issuance**

**Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

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

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Plastic Parts and Products 40 CFR Part 63, Subpart PPPP was promulgated April 19, 2004. Greenville Technology, Inc. is an "existing" major source per the definitions of the MACT with a compliance date of three years after April 19, 2004 (i.e., April 19, 2007). This PTI will be issued as a synthetic minor containing federally enforceable requirements to ensure the HAP emissions for the facility are maintained below MACT thresholds allowing the facility to avoid the MACT requirements.

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

None

Greer  
PTI A

Emissions Unit ID: R002

Issued: To be entered upon final issuance

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property,<br/>and/or Equipment</u>  | <u>Applicable Rules/Requirements</u>                      |  |
|--|---|--|
| R002 - robotic plastic parts coating line including drying ovens, with a permanent total enclosure, fume concentrator, and regenerative thermal oxidizer | OAC rule 3745-31-05(A)(3)                                 | OAC rule 3745-21-07(G)(1) and<br>OAC rule 3745-21-07(G)(2) |
|  |   | OAC rule 3745-23-06(B) and<br>OAC rule 3745-21-08(B)       |
|  | OAC rule 3745-31-05(C)<br>(Synthetic Minor to Avoid PSD)  |  |
|  | OAC rule 3745-35-07(B)<br>(Synthetic Minor to avoid MACT) |  |

Greer

PTI A

Emissions Unit ID: R002

**Issued: To be entered upon final issuance**

Applicable Emissions  
Limitations/Control  
Measures

The control efficiency requirements specified by these rules are less stringent than the efficiency requirements established pursuant to OAC rule 3745-31-05(A)(3).

The organic compound (OC) emissions shall not exceed 29.17 lbs/hr, excluding cleanup, and 102.83 tons per year, including cleanup, for this emissions unit.

See Section A.I.2.e.

The requirements of this rule also include compliance with the requirements of OAC rules, 3745-35-07(B), 3745-21-07(G)(1) and 3745-21-07(G)(2).

See Sections A.I.2.a. through c. below.

The OC emissions shall not exceed 102.83 tons/yr, including cleanup, as a rolling, 12-month summation (for emissions units R001, R002 and R003, combined).

The emissions of hazardous air pollutants (HAP) shall not exceed 9.9 tons/yr for a single HAP and 24.9 tons/yr for any combination of HAPs, based on rolling, 12-month summations.

Emissions Unit ID: R002

## 2. Additional Terms and Conditions

- 2.a** The 29.17 lbs/hr OC emission limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop additional monitoring, record keeping and reporting requirements to ensure compliance with this limitation.
- 2.b** The OC emissions from this emissions unit shall be controlled through the application of a permanent total enclosure with a 100% capture efficiency, and a fume concentrator and a regenerative thermal oxidizer system with a minimum 90% removal/destruction efficiency, to achieve a minimum 90% overall control efficiency.
- 2.c** Emissions units R001, R002 and R003 will share the DURR fume concentrator wheel and regenerative thermal oxidizer system to abate OC emissions.
- 2.d** The emissions of HAPs, as identified in Section 112(b) of Title III of the Clean Air Act, from the facility shall not exceed 9.9 tons/yr for a single HAP and 24.9 tons/yr for any combination of HAPs, based on rolling, 12-month summations.
- 2.e** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

## II. Operational Restrictions

1. A permanent total enclosure shall be constructed to enclose the coating application stations, all sources of emissions, and all areas from the application station to the oven. If the oven is operated under negative pressure, it does not need to be enclosed as long as there is no leakage between the coating application and the oven. Air flow monitor(s) or differential pressure gauge(s) shall be installed to continuously measure and record the average facial velocity or pressure differential across the enclosure in accordance with 40 CFR Part 51, Appendix M, Method 204. The monitoring and recording devices shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating

**Issued: To be entered upon final issuance**  
manuals.

2. The permanent total enclosure shall be maintained under negative pressure whenever the emissions unit is in operation, and shall be designed, installed, maintained, and operated in accordance with 40 CFR Part 51, Appendix M, Method 204, whenever the emissions unit is in operation. The permanent total enclosure shall meet all of the following criteria :
  - a. any natural draft opening shall be at least four equivalent opening diameters, or 4 times the diameter of the opening, from each OC emitting point;
  - b. the total area of all natural draft openings shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling;
  - c. the direction of air flow through all natural draft openings shall be into the enclosure, with an average facial velocity through all natural draft openings being no less than 3,600 m/hr (200 fpm) corresponding to a pressure drop of 0.013 mm Hg (0.007 in.H<sub>2</sub>O);
  - d. all access doors and windows to the enclosure that do not meet the requirements of a natural draft opening and whose surface areas are not included in the 5 percent surface area determination in (b) and are not included in the calculation in paragraph (c), shall be completely closed to any air movement during process operations; and
  - e. all OC emissions shall be captured and contained for discharge through the control device.

By satisfying the above criteria for a permanent total enclosure, the OC capture efficiency shall be assumed to be 100%.

3. The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.013 mm Hg (0.007 inch of water), as a 3-hour average, whenever the emissions unit is in operation.
4. The thermal oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
5. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that

Emissions Unit ID: R002

demonstrated the emissions unit was in compliance. (The average combustion temperature established during the most recent emission testing that demonstrated compliance, conducted on 06/15/2000, was 1600 degrees Fahrenheit.)

6. The average temperature of the desorption air stream to the fume concentrator wheel, for any 3-hour block of time when the emissions unit is in operation, shall not be less than the average temperature during the most recent emissions test that demonstrated the emissions unit was in compliance. (The average desorption air temperature established during the most recent emission testing that demonstrated compliance, conducted on 06/15/2000, was 230 degrees Fahrenheit.)
7. The number of revolutions per hour (RPH) of the fume concentrator shall be continuously maintained, when the emissions unit is in operation, at a value within +/-1 RPH (where 10 Hertz equals 1 RPH) of the value established during the most recent emission test that demonstrated the emissions unit was in compliance. (The RPH of the fume concentrator established during the most recent emission testing that demonstrated compliance, conducted on 06/15/2000, was 2.01RPH .)

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

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature at the followings locations when the emission unit is in operations:
  - a. the temperature of the exhaust gases in the combustion zone of the regenerative thermal oxidizer; and
  - b. the temperature of the desorption air stream prior to the fume concentrator wheel.

Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the average temperature from the monitoring locations listed in a and b above for each 3-hour block of time.

2. The permittee shall collect and record the following information each day for the coating line and control equipment:
  - a. a log or record of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation;

**Issued: To be entered upon final issuance**

- b. all 3-hour blocks of time during which the average combustion temperature within the regenerative thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature established during the most recent emissions testing that demonstrated the emissions unit was in compliance; and
  - c. all 3-hour blocks of time during which the average temperature of the desorption air stream prior to the fume concentrator wheel, when the emissions unit was in operation, was less than the average temperature established during the most recent emissions testing that demonstrated the emissions unit was in compliance.
3. The permittee shall perform daily checks, when this emissions unit is in operation, to verify the fume concentrator wheel RPH by way of manually recording the HZ setting (where 10 HZ equals 1 RPH) is at a value within +/-1 RPH of the value established during the most recent emission test that demonstrated the emissions unit was in compliance. This verification shall be noted in an operations log.
4. The permittee shall perform a manual check of the rotational speed of the fume concentrator wheel at least once per calendar quarter. This check, and the determined RPH shall be noted in an operations log. (This quarterly check is performed to document the RPH and to verify the accuracy of the HZ readings conducted pursuant to Section A.III.3 above.)
5. The permittee shall install, operate, and maintain monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure when the emissions unit is in operation. The monitoring and recording devices shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. The permittee shall record and maintain the following information on a daily basis:
  - a. the average facial velocity of the air flow through or the pressure differential across the enclosure; and
  - b. all 3-hour blocks of time during which the permanent total enclosure was not maintained at or above the average facial velocity of 3,600 meters per hour (200 feet per minute) or the minimum pressure differential of 0.007 inch of water, as a 3-hour average.
6. The permittee shall measure, document/calculate, and maintain a permanent record of

Emissions Unit ID: R002

the following information for the permanent total enclosure, which may be the same record documented during the compliance test(s):

- a. the measured surface area of each natural draft opening;
  - b. the distance measured from each natural draft opening to each OC emitting point;
  - c. the total calculated surface area of all natural draft openings and the surface area of the enclosure's four walls, floor, and ceiling;
  - d. the calculation or demonstration that the distance from each OC emitting point to each natural draft opening is at least 4 times the diameter of the opening; and
  - e. the calculation demonstrating that the sum of the surface areas of all of the natural draft openings to the enclosure is not more than 5 percent of the sum of the surface areas of the enclosure's four walls, floor, and ceiling.
7. The permittee shall collect and record the following information each month for this emissions unit for the purpose of determining the monthly and annual OC emissions:
- a. the name and company identification of each coating and cleanup material employed;
  - b. the number of gallons of each coating employed;
  - c. the OC content of each coating employed, in pounds per gallon;
  - d. the total uncontrolled OC usage rate for all the coatings employed [i.e., summation of (b x c) for all coatings, divided by 2000 lbs/ton], in tons;
  - e. the number of gallons of each cleanup material employed;
  - f. the number of gallons of each cleanup material recovered;
  - g. the OC content of each cleanup material employed, in pounds per gallon;
  - h. the total uncontrolled, after recovery, OC usage rate for all the cleanup materials employed {i.e., the summation of [(e - f) x g] for all cleanup materials, divided by 2000 lbs/ton}, in tons;
  - i. the total uncontrolled OC emission rate for all the coatings and cleanup materials employed (i.e., d + h), in tons; and
  - j. the total calculated controlled OC emission rate for all the coatings and cleanup materials employed, in tons, [i.e., i multiplied by a factor of (1 - the overall control

**Issued: To be entered upon final issuance  
efficiency)].**

8. The permittee shall collect and record the following information each month for emissions units R001, R002, and R003, combined:
  - a. the total calculated controlled OC emission rate for all the coatings and cleanup materials for (i.e., summation of A.III.7.j for emissions units R001, R002 and R003, combined) in tons; and
  - b. the rolling, 12-month summation of the total controlled OC emissions from all the coatings and cleanup materials, in tons.
  
9. The permittee shall collect and record the following information each month for the entire facility for the purpose of determining the HAP<sup>\*</sup> emissions:
  - a. the name and company identification of each coating material employed;
  - b. the number of gallons of each coating material employed;
  - c. the individual HAP content for each HAP of each coating material employed, in pounds of individual HAP per gallon, as applied;
  - d. the total combined HAPs content of each coating material employed, in pounds of combined HAPs per gallon [i.e., the sum of individual HAP contents from (c)], as applied;
  - e. the number of gallons of each cleanup material employed;
  - f. the individual HAP content for each HAP of each cleanup material employed, in pounds of individual HAP per gallon, as applied;
  - g. the total combined HAPs content of each cleanup material employed, in pounds of combined HAPs per gallon [i.e., the sum of individual HAP contents from (f)], as applied;
  - h. the after control total individual HAP emissions for each HAP from all the coatings and cleanup materials employed {i.e., for each HAP, [the summation of (b x c) for all coatings + the summation of (e x f) for all cleanup materials] x [1 - the overall control efficiency]}, divided by 2000 lbs/ton, in tons;
  - i. the after control total combined HAPs emissions from all the coatings and

Emissions Unit ID: R002

cleanup materials employed {i.e., [the summation of (b x d) for all coatings + the summation of (e x g) for all cleanup materials] x [1 - the overall control efficiency]}, divided by 2000 lbs/ton, in tons;

- j. the rolling, 12-month summation of total individual HAP emissions for each HAP from all the coatings and cleanup materials employed, in tons; and
- k. the rolling, 12-month summation of total combined HAPs emissions from all the coatings and cleanup materials, in tons.

The after control HAPs emission rates shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance.

\*A listing of the Hazardous Air Pollutants can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency.

Material Safety Data Sheets typically include a listing of the solvents contained in the coating or cleanup materials. This information does not have to be kept on a emission unit-by-emission unit basis.

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

1. The permittee shall submit quarterly temperature deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, that identify the following information for this emissions unit:
  - a. all 3-hour blocks of time during which the average combustion temperature within the regenerative thermal oxidizer, when the emissions unit was in operation, did not comply with the temperature limitation specified in this permit;
  - b. all 3-hour blocks of time during which the average temperature of the desorption air stream prior to the fume concentrator wheel, when the emissions unit was in operation, did not comply with the temperature limitation specified in this permit.
  - c. each day during which the RPH (as determined by the HZ monitoring) of the fume concentrator, when the emissions unit was in operation, did not comply with the requirement established in this permit;
  - d. each quarter during which the manual check of the actual rotational speed of the fume concentrator (RPH), when the emissions unit was in operation, did not indicate compliance with the value established in Section A.II.7 of this permit and/or did not correspond to 1 RPH for every 10 HZ (see Section A.III.4) and the corrective actions taken to reestablish the proper rotational speed (RPH) for the fume concentrator;

**Issued: To be entered upon final issuance**

- e. all exceedances of the rolling, 12-month individual HAP and combined HAPs emission limitations of 9.9 and 24.9 tons, respectively (for emissions units R001, R002, and R003, combined); and
  - f. all exceedances of the rolling, 12-month OC emission limitation of 102.83 tons (for emissions units R001, R002, and R003, combined).
2. The permittee shall submit quarterly deviation (excursion) reports that identify the following information for the permanent total enclosure when the emissions unit was in operation:
    - a. any period of time in which a natural draft opening to the enclosure was located at a distance of less than four equivalent opening diameters, or less than 4 times the diameter of the opening, from any OC emitting point;
    - b. any period of time in which the total area of all natural draft openings exceeded 5 percent of the surface area of the enclosure's four walls, floor, and ceiling;
    - c. any period of time in which the average facial velocity of the air flow into the enclosure was less than 3,600 meters per hour (200 feet per minute) or identify all 3-hour blocks of time during which the enclosure was not maintained at the minimum pressure differential of 0.013 mm Hg (0.007 inch of water), as a 3-hour average;
    - d. any period of time in which an access door or window to the enclosure, that does not meet the requirements of a natural draft opening and whose surface area was not included in the 5 percent surface area determination, was not completely closed to air movement; and
    - e. any period of time in which any access doors or windows were opened during process operations.

The report shall include the date and number of hours that the emissions unit was operating under each non-compliant scenario.

3. The permittee shall submit quarterly summary reports that include a log or record of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation. These reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter.

Emissions Unit ID: R002

4. The permittee shall submit annual reports that summarize the actual annual total OC emissions from this emissions unit, the actual annual individual HAP emissions from the facility, and the actual annual combined HAPs emissions from the facility. These reports shall be submitted by January 31 of each year and shall cover for the previous calendar year.

## **V. Testing Requirements**

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

- a. Emission Limitation-

The OC emissions from this emissions unit shall not exceed 29.17 pound per hour OC, excluding cleanup.

Applicable Compliance Method-

The hourly allowable OC emission limitation was established as follows:

- i. multiply the maximum, as applied, clearcoat coatings usage rate (22.8 gallons/hour) by the maximum OC content of the coatings (4.69 lbs/gallon), and then multiply by [1 - the minimum required overall control efficiency (0.90)];
- ii. multiply the maximum, as applied, basecoat coatings usage rate (22.8 gallons/hour) by the maximum OC content of the coatings (5.73 lbs/gallon), and then multiply by [1 - the minimum required overall control efficiency (0.90)];
- iii. multiply the maximum, as applied, primer coatings usage rate (9 gallons/hour) by the maximum OC content of the coatings (6.01 lbs/gallon), and then multiply by [1 - the minimum required overall control efficiency (0.90)]; and
- iv. sum i + ii + iii above.

The permittee shall demonstrate compliance with the hourly allowable OC emission limitation above based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

**Issued: To be entered upon final issuance**

- b. Emission Limitation-  
The OC emissions from this emissions unit shall not exceed 102.83 tons per year, including cleanup.

## Applicable Compliance Method-

Compliance shall be determined by the record keeping requirements specified in Section A.III.7 of this permit, and shall be the summation of the 12 monthly OC emission rates for the calendar year.

- c. Emission Limitation-  
The OC emissions shall not exceed 102.83 tons/year, including cleanup, as a rolling, 12-month summation for emissions units R001, R002 and R003, combined.

Compliance shall be determined by the record keeping requirements specified in Sections A.III.7 and A.III.8 of this permit.

- d. Emission Limitation-  
HAP emissions shall not exceed 9.9 tons/yr for a single HAP and 24.9 tons/yr for any combination of HAPs, based on rolling, 12-month summations.

## Applicable Compliance Method-

Compliance shall be determined by the record keeping requirements specified in Section A.III.9 of this permit.

2. The permittee shall conduct, or have conducted, emissions and compliance demonstration testing on this emissions unit within six months prior to the Title V permit expiration date of June 6, 2006, in accordance with the following requirements:
- a. Emissions testing shall be conducted to demonstrate compliance with the allowable mass emission rate and minimum overall control efficiency requirements for organic compounds. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 18 of 40 CFR Part 60, Appendix A and Method 25 or 25A of 40 CFR Part 60, Appendix A, as appropriate, before and after the fume concentrator and regenerative thermal oxidizer, to demonstrate compliance with the destruction efficiency for volatile organic compounds. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- b. A compliance demonstration for the permanent total enclosure shall be

Emissions Unit ID: R002

conducted to demonstrate compliance with the capture efficiency requirement. The following test method(s) shall be employed to demonstrate compliance: Method 204 of 40 CFR Part 60, Appendix A to demonstrate the permanent total enclosure can achieve 100% capture efficiency.

3. During the compliance demonstration for the permanent total enclosure, monitoring devices shall be installed to measure the average facial velocity of the air flow through, or the average pressure differential across, the natural draft openings in accordance with 40 CFR Part 51, Appendix M, Method 204. The continuous inward flow of air shall be verified at least once every 10 minutes for a minimum of 1 hour during the compliance demonstration by checking the direction of air flow through the use of streamers, smoke tubes, or tracer gases at each natural draft opening. All closed access doors and windows that are not considered natural draft openings shall also be checked once during the compliance demonstration for leakage around their perimeter using smoke tubes or tracer gases.

The permittee shall also measure and record the following information for the permanent total enclosure and each natural draft opening during the compliance demonstration:

- a. the measured surface area of each natural draft opening;
  - b. the distance measured from each natural draft opening to each OC emitting point in the process;
  - c. the distance measured from each exhaust duct or hood in the enclosure to each natural draft opening; and
  - d. the total surface area of each natural draft opening and the surface area of the enclosure's four walls, floor, and ceiling.
4. In accordance with 40 CFR Part 51, Appendix M, Method 204, compliance with the requirements for a permanent total enclosure shall be demonstrated if the following determinations are documented during testing:
    - a. the average facial velocity of the air flow into the enclosure is maintained at a minimum of 3,600 m/hr (200 feet per minute) or at a minimum pressure differential of 0.013 mm Hg (0.007 in. of water);
    - b. each natural draft opening is at a distance of at least four equivalent opening diameters, or 4 times the diameter of the opening, from each OC emitting point in the process;
    - c. the sum of the surface areas of all of the natural draft openings in the total enclosure are not more than 5 percent of the sum of the surface areas of the enclosure's four walls, floor, and ceiling; calculated by dividing the total area of

**Issued: To be entered upon final issuance**

- all natural draft openings by the total inside surface area of the enclosure;
- d. there is no leakage detected at any of the closed access doors and windows, and it is certified that they always remain closed during process operations; and
- e. all OC emissions captured by the permanent total enclosure are entirely vented for discharge through the control device.

Emissions Unit ID: R002

5. During any emission testing for this emissions unit, the permittee shall record the following:
  - a. the combustion temperature within the regenerative thermal oxidizer, as a 3-hour average, in degrees Fahrenheit;
  - b. the temperature of the desorption air stream to the fume concentrator, as a 3-hour average, in degrees Fahrenheit; and
  - c. the number of revolutions per hour of the fume concentrator in RPH and Hertz (where 10 Hertz equals 1 RPH).
6. The emissions and compliance demonstration testing tests shall be conducted while emissions units R001, R002, and R003 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the appropriate Ohio EPA District Office or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or Local Air Agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

7. Formulation data shall be used to determine the HAP and organic compound contents of the coating and cleanup materials. If formulation data is not available and/or if required by the regulating agency, Method 24 or 24A of 40 CFR Part 60, Appendix A shall be conducted for the organic content of the solvent materials applied. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

33

**Greer**

**PTI A**

**Issued: To be entered upon final issuance**

Emissions Unit ID: R002

**Greer**

**PTI A**

**Issued: To be entered upon final issuance**

Emissions Unit ID: R002

**VI. Miscellaneous Requirements**

1. Emissions unit K001 will be permanently shut down upon start up of emissions unit R002.
2. The terms and conditions of this PTI supercedes those of PTI 08-3960 and PTI 08-04719.

Greer  
PTI A

Emissions Unit ID: R002

Issued: To be entered upon final issuance

**B. State Only Enforceable Section**

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

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

| <u>Operations, Property, and/or Equipment</u>  | <u>Applicable Rules/Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|--------------------------------------|--|
| R002 - robotic plastic parts coating line including drying ovens, with a permanent total enclosure, fume concentrator, and regenerative thermal oxidizer | 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 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling

**Greer  
PTI A**

Emissions Unit ID: R002

**Issued: To be entered upon final issuance**  
for the "worst case" pollutant(s):

Pollutant: Toluene

TLV ( $\mu\text{g}/\text{m}^3$ ): 188,750

Maximum Hourly Emission Rate (lbs/hr): 10.40

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 26.45

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 4494

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 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.
- 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

Emissions Unit ID: R002

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 still satisfy the "Air Toxic Policy:"

- a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.).
- b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy".
- c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

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

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

| <u>Operations, Property, and/or Equipment</u>   | <u>Applicable Rules/Requirements</u>                       |  |
|---|--|--|
| R003 - plastic parts coating line No. 5 including oven, with a permanent total enclosure, fume concentrator, and regenerative thermal oxidizer<br>*Modification | OAC rule 3745-31-05(A)(3)                                  | OAC rule 3745-23-06(B) and<br>OAC rule 3745-21-08(B) |
|   | OAC rule 3745-31-05(C)<br>(Synthetic Minor to avoid PSD)   |  |
|   | OAC rule 3745-35-07(B)<br>(Synthetic Minor to avoid MACT)  |  |
|   | OAC rule 3745-21-07(G)(1) and<br>OAC rule 3745-21-07(G)(2) |  |

Applicable Emissions  
Limitations/Control  
Measures

The organic compound (OC) emissions shall not exceed 15.56 lbs/hr, excluding cleanup, and 75.23 tons per year, including cleanup, for this emissions unit.

The requirements of this rule also include compliance with the requirements of OAC rules, 3745-35-07(B), 3745-21-07(G)(1) and 3745-21-07(G)(2).

See Sections A.1.2.a. through c. below.

The OC emissions shall not exceed 102.83 tons/yr, including cleanup, as a rolling, 12-month summation (for emissions units R001, R002 and R003, combined).

The emissions of hazardous air pollutants (HAP) shall not exceed 9.9 tons/yr for a single HAP and 24.9 tons/yr for any combination of HAPs, based on rolling, 12-month summations.

The control efficiency requirements specified by these rules are less stringent than the efficiency requirements

established pursuant to OAC rule 3745-31-05(A)(3).

See Section A.1.2.e.

Emissions Unit ID: R003

## 2. Additional Terms and Conditions

- 2.a** The 15.56 lbs/hr OC emission limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop additional monitoring, record keeping and reporting requirements to ensure compliance with this limitation.
- 2.b** The OC emissions from this emissions unit shall be controlled through the application of a permanent total enclosure with a 100% capture efficiency, and a fume concentrator and a regenerative thermal oxidizer system with a minimum 90% removal/destruction efficiency, to achieve a minimum 90% overall control efficiency.
- 2.c** Emissions units R001, R002 and R003 will share the DURR fume concentrator wheel and regenerative thermal oxidizer system to abate OC emissions.
- 2.d** The emissions of HAPs, as identified in Section 112(b) of Title III of the Clean Air Act, from the facility shall not exceed 9.9 tons/yr for a single HAP and 24.9 tons/yr for any combination of HAPs, based on rolling, 12-month summations.
- 2.e** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

## II. Operational Restrictions

1. A permanent total enclosure shall be constructed to enclose the coating application stations, all sources of emissions, and all areas from the application station to the oven. If the oven is operated under negative pressure, it does not need to be enclosed as long as there is no leakage between the coating application and the oven. Air flow monitor(s) or differential pressure gauge(s) shall be installed to continuously measure and record the average facial velocity or pressure differential across the enclosure in accordance with 40 CFR Part 51, Appendix M, Method 204. The monitoring and recording devices shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

**Issued: To be entered upon final issuance**

2. The permanent total enclosure shall be maintained under negative pressure whenever the emissions unit is in operation, and shall be designed, installed, maintained, and operated in accordance with 40 CFR Part 51, Appendix M, Method 204, whenever the emissions unit is in operation. The permanent total enclosure shall meet all of the following criteria :
  - a. any natural draft opening shall be at least four equivalent opening diameters, or 4 times the diameter of the opening, from each OC emitting point;
  - b. the total area of all natural draft openings shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling;
  - c. the direction of air flow through all natural draft openings shall be into the enclosure, with an average facial velocity through all natural draft openings being no less than 3,600 m/hr (200 fpm) corresponding to a pressure drop of 0.013 mm Hg (0.007 in.H<sub>2</sub>O);
  - d. all access doors and windows to the enclosure that do not meet the requirements of a natural draft opening and whose surface areas are not included in the 5 percent surface area determination in (b) and are not included in the calculation in paragraph (c), shall be completely closed to any air movement during process operations; and
  - e. all OC emissions shall be captured and contained for discharge through the control device.

By satisfying the above criteria for a permanent total enclosure, the OC capture efficiency shall be assumed to be 100%.

3. The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.013 mm Hg (0.007 inch of water), as a 3-hour average, whenever the emissions unit is in operation.
4. The thermal oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
5. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated the emissions unit was in compliance. (The average combustion

Emissions Unit ID: R003

temperature established during the most recent emission testing that demonstrated compliance, conducted on 06/15/2000, was 1600 degrees Fahrenheit.)

6. The average temperature of the desorption air stream to the fume concentrator wheel, for any 3-hour block of time when the emissions unit is in operation, shall not be less than the average temperature during the most recent emissions test that demonstrated the emissions unit was in compliance. (The average desorption air temperature established during the most recent emission testing that demonstrated compliance, conducted on 06/15/2000, was 230 degrees Fahrenheit.)
7. The number of revolutions per hour (RPH) of the fume concentrator shall be continuously maintained, when the emissions unit is in operation, at a value within +/-1 RPH (where 10 Hertz equals 1 RPH) of the value established during the most recent emission test that demonstrated the emissions unit was in compliance. (The RPH of the fume concentrator established during the most recent emission testing that demonstrated compliance, conducted on 06/15/2000, was 2.01RPH .)

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

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature at the followings locations when the emission unit is in operations:
  - a. the temperature of the exhaust gases in the combustion zone of the regenerative thermal oxidizer; and
  - b. the temperature of the desorption air stream prior to the fume concentrator wheel.

Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the average temperature from the monitoring locations listed in a and b above for each 3-hour block of time.

2. The permittee shall collect and record the following information each day for the coating line and control equipment:
  - a. a log or record of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation;
  - b. all 3-hour blocks of time during which the average combustion temperature

**Issued: To be entered upon final issuance**

- within the regenerative thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature established during the most recent emissions testing that demonstrated the emissions unit was in compliance; and
- c. all 3-hour blocks of time during which the average temperature of the desorption air stream prior to the fume concentrator wheel, when the emissions unit was in operation, was less than the average temperature established during the most recent emissions testing that demonstrated the emissions unit was in compliance.
3. The permittee shall perform daily checks, when this emissions unit is in operation, to verify the fume concentrator wheel RPH by way of manually recording the HZ setting (where 10 HZ equals 1 RPH) is at a value within +/-1 RPH of the value established during the most recent emission test that demonstrated the emissions unit was in compliance. This verification shall be noted in an operations log.
  4. The permittee shall perform a manual check of the rotational speed of the fume concentrator wheel at least once per calendar quarter. This check, and the determined RPH shall be noted in an operations log. (This quarterly check is performed to document the RPH and to verify the accuracy of the HZ readings conducted pursuant to Section A.III.3 above.)
  5. The permittee shall install, operate, and maintain monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure when the emissions unit is in operation. The monitoring and recording devices shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. The permittee shall record and maintain the following information on a daily basis:
    - a. the average facial velocity of the air flow through or the pressure differential across the enclosure; and
    - b. all 3-hour blocks of time during which the permanent total enclosure was not maintained at or above the average facial velocity of 3,600 meters per hour (200 feet per minute) or the minimum pressure differential of 0.007 inch of water, as a 3-hour average.
  6. The permittee shall measure, document/calculate, and maintain a permanent record of the following information for the permanent total enclosure, which may be the same

Emissions Unit ID: R003

record documented during the compliance test(s):

- a. the measured surface area of each natural draft opening;
  - b. the distance measured from each natural draft opening to each OC emitting point;
  - c. the total calculated surface area of all natural draft openings and the surface area of the enclosure's four walls, floor, and ceiling;
  - d. the calculation or demonstration that the distance from each OC emitting point to each natural draft opening is at least 4 times the diameter of the opening; and
  - e. the calculation demonstrating that the sum of the surface areas of all of the natural draft openings to the enclosure is not more than 5 percent of the sum of the surface areas of the enclosure's four walls, floor, and ceiling.
7. The permittee shall collect and record the following information each month for this emissions unit for the purpose of determining the monthly and annual OC emissions:
- a. the name and company identification of each coating and cleanup material employed;
  - b. the number of gallons of each coating employed;
  - c. the OC content of each coating employed, in pounds per gallon;
  - d. the total uncontrolled OC usage rate for all the coatings employed [i.e., summation of (b x c) for all coatings, divided by 2000 lbs/ton], in tons;
  - e. the number of gallons of each cleanup material employed;
  - f. the number of gallons of each cleanup material recovered;
  - g. the OC content of each cleanup material employed, in pounds per gallon;
  - h. the total uncontrolled, after recovery, OC usage rate for all the cleanup materials employed {i.e., the summation of [(e - f) x g] for all cleanup materials, divided by 2000 lbs/ton}, in tons;
  - i. the total uncontrolled OC emission rate for all the coatings and cleanup materials employed (i.e., d + h), in tons; and
  - j. the total calculated controlled OC emission rate for all the coatings and cleanup materials employed, in tons, [i.e., i multiplied by a factor of (1 - the overall control efficiency)].

Emissions Unit ID: R003

8. The permittee shall collect and record the following information each month for emissions units R001, R002, and R003, combined:
  - a. the total calculated controlled OC emission rate for all the coatings and cleanup materials for (i.e., summation of A.III.7.j for emissions units R001, R002 and R003, combined) in tons; and
  - b. the rolling, 12-month summation of the total controlled OC emissions from all the coatings and cleanup materials, in tons.
  
9. The permittee shall collect and record the following information each month for the entire facility for the purpose of determining the HAP<sup>s</sup> emissions:
  - a. the name and company identification of each coating material employed;
  - b. the number of gallons of each coating material employed;
  - c. the individual HAP content for each HAP of each coating material employed, in pounds of individual HAP per gallon, as applied;
  - d. the total combined HAPs content of each coating material employed, in pounds of combined HAPs per gallon [i.e., the sum of individual HAP contents from (c)], as applied;
  - e. the number of gallons of each cleanup material employed;
  - f. the individual HAP content for each HAP of each cleanup material employed, in pounds of individual HAP per gallon, as applied;
  - g. the total combined HAPs content of each cleanup material employed, in pounds of combined HAPs per gallon [i.e., the sum of individual HAP contents from (f)], as applied;
  - h. the after control total individual HAP emissions for each HAP from all the coatings and cleanup materials employed {i.e., for each HAP, [the summation of (b x c) for all coatings + the summation of (e x f) for all cleanup materials] x [1 - the overall control efficiency]}, divided by 2000 lbs/ton, in tons;
  - i. the after control total combined HAPs emissions from all the coatings and cleanup materials employed {i.e., [the summation of (b x d) for all coatings + the summation of (e x g) for all cleanup materials] x [1 - the overall control efficiency]}, divided by 2000 lbs/ton, in tons;
  - j. the rolling, 12-month summation of total individual HAP emissions for each HAP from all the coatings and cleanup materials employed, in tons; and

Emissions Unit ID: R003

- k. the rolling, 12-month summation of total combined HAPs emissions from all the coatings and cleanup materials, in tons.

The after control HAPs emission rates shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance.

\*A listing of the Hazardous Air Pollutants can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency.

Material Safety Data Sheets typically include a listing of the solvents contained in the coating or cleanup materials. This information does not have to be kept on a emission unit-by-emission unit basis.

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

1. The permittee shall submit quarterly temperature deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, that identify the following information for this emissions unit:
  - a. all 3-hour blocks of time during which the average combustion temperature within the regenerative thermal oxidizer, when the emissions unit was in operation, did not comply with the temperature limitation specified in this permit;
  - b. all 3-hour blocks of time during which the average temperature of the desorption air stream prior to the fume concentrator wheel, when the emissions unit was in operation, did not comply with the temperature limitation specified in this permit.
  - c. each day during which the RPH (as determined by the HZ monitoring) of the fume concentrator, when the emissions unit was in operation, did not comply with the requirement established in this permit;
  - d. each quarter during which the manual check of the actual rotational speed of the fume concentrator (RPH), when the emissions unit was in operation, did not indicate compliance with the value established in Section A.II.7 of this permit and/or did not correspond to 1 RPH for every 10 HZ (see Section A.III.4) and the corrective actions taken to reestablish the proper rotational speed (RPH) for the fume concentrator;
  - e. all exceedances of the rolling, 12-month individual HAP and combined HAPs emission limitations of 9.9 and 24.9 tons, respectively (for emissions units R001, R002, and R003, combined); and
  - f. all exceedances of the rolling, 12-month OC emission limitation of 102.83 tons (for emissions units R001, R002, and R003, combined).

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following information for the permanent total enclosure when the emissions unit was in operation:
  - a. any period of time in which a natural draft opening to the enclosure was located at a distance of less than four equivalent opening diameters, or less than 4 times the diameter of the opening, from any OC emitting point;
  - b. any period of time in which the total area of all natural draft openings exceeded 5 percent of the surface area of the enclosure's four walls, floor, and ceiling;
  - c. any period of time in which the average facial velocity of the air flow into the enclosure was less than 3,600 meters per hour (200 feet per minute) or identify all 3-hour blocks of time during which the enclosure was not maintained at the minimum pressure differential of 0.013 mm Hg (0.007 inch of water), as a 3-hour average;
  - d. any period of time in which an access door or window to the enclosure, that does not meet the requirements of a natural draft opening and whose surface area was not included in the 5 percent surface area determination, was not completely closed to air movement; and
  - e. any period of time in which any access doors or windows were opened during process operations.

The report shall include the date and number of hours that the emissions unit was operating under each non-compliant scenario.

3. The permittee shall submit quarterly summary reports that include a log or record of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit was in operation. These reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter.
4. The permittee shall submit annual reports that summarize the actual annual total OC emissions from this emissions unit, the actual annual individual HAP emissions from the facility, and the actual annual combined HAPs emissions from the facility. These reports shall be submitted by January 31 of each year and shall cover for the previous calendar year.

## **V. Testing Requirements**

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

**Greer  
PTI A**

Emissions Unit ID: R003

**Issued: To be entered upon final issuance**

- a. Emission Limitation-  
The OC emissions from this emissions unit shall not exceed 15.56 pound per hour OC, excluding cleanup.

Applicable Compliance Method-

The hourly allowable OC emission limitation was established as follows:

- i. multiply the maximum, as applied, clearcoat coatings usage rate (gallons/hour) by the maximum OC content of the coatings (lbs/gallon), and then multiply by [1 - the minimum required overall control efficiency (0.90)];
- ii. multiply the maximum, as applied, basecoat coatings usage rate (gallons/hour) by the maximum OC content of the coatings (lbs/gallon), and then multiply by [1 - the minimum required overall control efficiency (0.90)];
- iii. multiply the maximum, as applied, primer coatings usage rate (gallons/hour) by the maximum OC content of the coatings (lbs/gallon), and then multiply by [1 - the minimum required overall control efficiency (0.90)]; and
- iv. sum i + ii + iii above.

The permittee shall demonstrate compliance with the hourly allowable OC emission limitation above based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

- b. Emission Limitation-  
The OC emissions from this emissions unit shall not exceed 75.23 tons per year, including cleanup.

**Issued: To be entered upon final issuance**

## Applicable Compliance Method-

Compliance shall be determined by the record keeping requirements specified in Section A.III.7 of this permit, and shall be the summation of the 12 monthly OC emission rates for the calendar year.

## c. Emission Limitation-

The OC emissions shall not exceed 102.83 tons/year, including cleanup, as a rolling, 12-month summation for emissions units R001, R002 and R003, combined.

Compliance shall be determined by the record keeping requirements specified in Sections A.III.7 and A.III.8 of this permit.

## d. Emission Limitation-

HAP emissions shall not exceed 9.9 tons/yr for a single HAP and 24.9 tons/yr for any combination of HAPs, based on rolling, 12-month summations.

## Applicable Compliance Method-

Compliance shall be determined by the record keeping requirements specified in Section A.III.9 of this permit.

2. The permittee shall conduct, or have conducted, emissions and compliance demonstration testing on this emissions unit within six months prior to the Title V permit expiration date of June 6, 2006, in accordance with the following requirements:
  - a. Emissions testing shall be conducted to demonstrate compliance with the allowable mass emission rate and minimum overall control efficiency requirements for organic compounds. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 18 of 40 CFR Part 60, Appendix A and Method 25 or 25A of 40 CFR Part 60, Appendix A, as appropriate, before and after the fume concentrator and regenerative thermal oxidizer, to demonstrate compliance with the destruction efficiency for volatile organic compounds. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
  - b. A compliance demonstration for the permanent total enclosure shall be conducted to demonstrate compliance with the capture efficiency requirement. The following test method(s) shall be employed to demonstrate compliance: Method 204 of 40 CFR Part 60, Appendix A to demonstrate the permanent total enclosure can achieve 100% capture efficiency.

3. During the compliance demonstration for the permanent total enclosure, monitoring devices shall be installed to measure the average facial velocity of the air flow through, or the average pressure differential across, the natural draft openings in accordance with 40 CFR Part 51, Appendix M, Method 204. The continuous inward flow of air shall be verified at least once every 10 minutes for a minimum of 1 hour during the compliance demonstration by checking the direction of air flow through the use of streamers, smoke tubes, or tracer gases at each natural draft opening. All closed access doors and windows that are not considered natural draft openings shall also be checked once during the compliance demonstration for leakage around their perimeter using smoke tubes or tracer gases.

The permittee shall also measure and record the following information for the permanent total enclosure and each natural draft opening during the compliance demonstration:

- a. the measured surface area of each natural draft opening;
  - b. the distance measured from each natural draft opening to each OC emitting point in the process;
  - c. the distance measured from each exhaust duct or hood in the enclosure to each natural draft opening; and
  - d. the total surface area of each natural draft opening and the surface area of the enclosure's four walls, floor, and ceiling.
4. In accordance with 40 CFR Part 51, Appendix M, Method 204, compliance with the requirements for a permanent total enclosure shall be demonstrated if the following determinations are documented during testing:
    - a. the average facial velocity of the air flow into the enclosure is maintained at a minimum of 3,600 m/hr (200 feet per minute) or at a minimum pressure differential of 0.013 mm Hg (0.007 in. of water);
    - b. each natural draft opening is at a distance of at least four equivalent opening diameters, or 4 times the diameter of the opening, from each OC emitting point in the process;
    - c. the sum of the surface areas of all of the natural draft openings in the total enclosure are not more than 5 percent of the sum of the surface areas of the enclosure's four walls, floor, and ceiling; calculated by dividing the total area of all natural draft openings by the total inside surface area of the enclosure;
    - d. there is no leakage detected at any of the closed access doors and windows, and it is certified that they always remain closed during process operations; and

Emissions Unit ID: R003

- e. all OC emissions captured by the permanent total enclosure are entirely vented for discharge through the control device.
5. During any emissions testing for this emissions unit, the permittee shall record the following:
    - a. the combustion temperature within the regenerative thermal oxidizer, as a 3-hour average, in degrees Fahrenheit;
    - b. the temperature of the desorption air stream to the fume concentrator, as a 3-hour average, in degrees Fahrenheit; and
    - c. the number of revolutions per hour of the fume concentrator in RPH and Hertz (where 10 Hertz equals 1 RPH).
  6. The emissions and compliance demonstration testing tests shall be conducted while emissions units R001, R002, and R003 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the appropriate Ohio EPA District Office or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or Local Air Agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

7. Formulation data shall be used to determine the HAP and organic compound contents of the coating and cleanup materials. If formulation data is not available and/or if

**Greer****PTI A**

Emissions Unit ID: R003

**Issued: To be entered upon final issuance**

required by the regulating agency, Method 24 or 24A of 40 CFR Part 60, Appendix A shall be conducted for the organic content of the solvent materials applied. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

**VI. Miscellaneous Requirements**

1. This is a modification to PTI 08-3960 issued on November 24, 1999 for emissions unit K007 to be consistent with and incorporate the limitations reflective of those emissions units that will now be commonly controlled by the DURR concentrator/oxidizer system, and limiting the combined emissions from those units.

**Greer**

**PTI A**

Emissions Unit ID: R003

**Issued: To be entered upon final issuance**

2. The emissions unit ID number for K007 was changed to R003 to be consistent with Ohio EPA naming convention.
3. The terms and conditions of this PTI supercedes those of PTI 08-3960 and PTI 08-04719.

Greer

PTI A

Emissions Unit ID: R003

Issued: To be entered upon final issuance

**B. State Only Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

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

| <u>Operations, Property,<br/>and/or Equipment</u>  | <u>Applicable Rules/Requirements</u> | <u>Applicable Emissions<br/>Limitations/Control Measures</u> |
|--|--------------------------------------|--|
| R003 - plastic parts coating line No. 5 including oven, with a permanent total enclosure, fume concentrator, and regenerative thermal oxidizer | 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 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling

Emissions Unit ID: R003

for the "worst case" pollutant(s):

Pollutant: cyclohexane

TLV (ug/m<sup>3</sup>): 1,010,000

Maximum Hourly Emission Rate (lbs/hr): 4.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 31.49

MAGLC (ug/m<sup>3</sup>): 10,100

Pollutant: ethyl acetate

TLV (ug/m<sup>3</sup>): 1,4440,000

Maximum Hourly Emission Rate (lbs/hr): 4.25

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 27.87

MAGLC (ug/m<sup>3</sup>): 14,400

Pollutant: isobutyl acetate

TLV (ug/m<sup>3</sup>): 713,000

Maximum Hourly Emission Rate (lbs/hr): 20.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 136.3

MAGLC (ug/m<sup>3</sup>): 7,130

Pollutant: methyl ethyl ketone

TLV (ug/m<sup>3</sup>): 590,000

Maximum Hourly Emission Rate (lbs/hr): 9.81

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 64.01

MAGLC (ug/m<sup>3</sup>): 5,900

**Greer  
PTI A**

Emissions Unit ID: R003

**Issued: To be entered upon final issuance**

Pollutant: methyl propyl ketone

TLV ( $\mu\text{g}/\text{m}^3$ ): 705,000

Maximum Hourly Emission Rate (lbs/hr): 8.55

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 55.75

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 7,050

Pollutant: n-butyl acetate

TLV ( $\mu\text{g}/\text{m}^3$ ): 713,000

Maximum Hourly Emission Rate (lbs/hr): 7.85

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 51.10

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 7,130

Pollutant: Toluene

TLV ( $\mu\text{g}/\text{m}^3$ ): 188,000

Maximum Hourly Emission Rate (lbs/hr): 8.01

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 52.13

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 1,880

Pollutant: xylene

TLV ( $\mu\text{g}/\text{m}^3$ ): 434,000

Maximum Hourly Emission Rate (lbs/hr): 2.31

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 14.97

**Greer****PTI A**

Emissions Unit ID: R003

**Issued: To be entered upon final issuance**MAGLC (ug/m<sup>3</sup>): 4,340

Pollutant: methyl n-amyl acetate

TLV (ug/m<sup>3</sup>): 233,000

Maximum Hourly Emission Rate (lbs/hr): 3.63

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 23.74MAGLC (ug/m<sup>3</sup>): 2,330

Pollutant: ethyl benzene

TLV (ug/m<sup>3</sup>): 434,000

Maximum Hourly Emission Rate (lbs/hr): 4.70

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 30.46MAGLC (ug/m<sup>3</sup>): 4,340

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 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

**Issued: To be entered upon final issuance**

result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled.

- 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 still satisfy the "Air Toxic Policy:"

- a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.).
- b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy".
- c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

**Greenville Technology Inc**  
**PTI Application: 08 04727**  
**Issue**

**Facility ID: 0819070190**

Emissions Unit ID: R003

None