State of Ohio Environmental Protection Agency

Street Address:
122 S. Front Street

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

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
DARKE COUNTY
Application No: 08-3960

DATE: November 24, 1999

Greenville Technology, Inc.
Gayla Mitchell-Metzcar
5755 State Route 571 East, PO Box 974
Greenville, OH 45331

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

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

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

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

Very truly yours,

Thomas G. Rigo

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

cc: USEPA
REGIONAL AIR POLLUTION CONTROL AGENCY

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install Terms and Conditions

Issue Date: November 24, 1999
Effective Date: November 24, 1999

FINAL PERMIT TO INSTALL 08-3960

Application Number:	08-3960
APS Premise Number:	0819070190
Permit Fee:	**$800**
Name of Facility:	Greenville Technology, Inc.
Person to Contact:	Gayla Mitchell-Metzcar
Address:	5755 State Route 571 East, PO Box 974 Greenville, OH 45331

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

Description of proposed emissions unit(s):
4 COATING LINES FOR PLASTIC AUTOMOTIVE PARTS WITH RTO.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

_____
Director

Part I - GENERAL TERMS AND CONDITIONS

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

1. Monitoring and Related Recordkeeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. The operating conditions existing at the time of sampling or measurement.

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

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous

calendar quarters. See B.11 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

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

3. Risk Management Plans

If applicable, the permittee shall 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"); and, pursuant to 40 CFR 68.215(a), the permittee shall submit either of the following:

a. a compliance plan for meeting the requirements of 40 CFR Part 68 by the date specified in 40 CFR 68.10(a) and OAC 3745-104-05(A); or

b. as part of the compliance certification submitted under 40 CFR 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 CFR Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements.

Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

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

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

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

8. Federal and State Enforceability

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

9. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress

reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

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

10. Permit To Operate Application

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35 , the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

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

1. Compliance Requirements

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

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

3. Permit Transfers

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

4. Air Pollution Nuisance

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

5. Termination of Permit To Install

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

6. Construction of New Sources(s)

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

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

7. Public Disclosure

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

8. Applicability

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

9. Best Available Technology

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

10. Construction Compliance Certification

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

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

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

C. Permit To Install Summary of Allowable Emissions

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

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

Pollutant	Tons Per Year
Organic Compounds	102.83

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

None.

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

None.

Emissions Unit ID: **K001**

Greenville Technology, Inc. Facility ID: **0819070190**
PTI Application: **08-3960**
November 24, 1999

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Plastic Parts Coating Line #1, including oven, with fume concentrator followed by thermal incineration (Modification, see Section A.VI.1.)	OAC rule 3745-31-05 (D)	8.57 TPM OC, including cleanup, for all 4 coating lines K001, K002, K005, and K007 combined; and, See Section A.2.a. for emission control measures.
	OAC rule 3745-21-07(G)(1)	The reduction efficiency limit based on this rule is less stringent than the limit established pursuant to 3745-31-05 (D) above.
	OAC rule 3745-21-07(G)(2)	The reduction efficiency limit based on this rule is less stringent than the limit established pursuant to 3745-31-05 (D) above.

2. Additional Terms and Conditions

2.a The organic compound (OC) emissions from this emissions unit, shall be controlled through the application of a permanent total enclosure for 100 percent capture and a fume concentrator and regenerative thermal oxidizer (RTO) system, operating at a minimum of 90% overall OC removal/destruction efficiency.

II. Operational Restrictions

1. The coating lines identified as K001, K002, K005, and K007 shall each be equipped with a permanent total enclosure (PTE) which shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204. The PTE shall meet the following criteria:

a. any "Natural Draft Opening" (NDO) shall be at least 4 equivalent diameters from each OC emission point;

b. the total area of all NDOs shall not exceed 5 percent of the surface area of the enclosure's four walls, floor and ceiling;

c. the average facial velocity (FV) of air through all NDOs shall be at least 3,600 m/hr (200 fpm) which corresponds to a pressure differential of 0.007 inches of water. The direction of air through all NDOs shall be into the enclosure;

d. all access doors and windows whose area are not included in paragraph (b) and are not included in the calculation in paragraph (c) shall be closed during routine operation; and,

e. all OC emissions must be captured and contained for discharge through the OC control device.

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

2. Definitions for PTE and NDO:

Permanent Total Enclosure (PTE) - a permanently installed enclosure that completely surrounds a source of emissions such that all OC emissions are captured and contained for discharge through a control device.

Natural Draft Opening (NDO) - any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct to which a fan is installed.

3. The average combustion temperature within the thermal incinerator, 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 emission test that demonstrated the emissions unit was in compliance.

4. The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inches of water, as a 3-hour average, whenever the emissions unit is in operation.

5. The maximum monthly coating and cleanup organic compound usage rates for emissions units K001, K002, K005, and K007 combined shall not exceed:

   a. Coatings: 78.43 TPM OC (usage rate before control)
   b. Cleanup: 9.09 TPM OC (usage rate before recovery and control)

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameters. 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 following information each day:

   a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance; and,

   b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

2. The permittee shall install, maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer’s recommendations, instructions and operating manuals.

   The permittee shall maintain records of all 3-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inches of water, as a 3-hour average.

3. The permittee shall collect and record the following information each month for each coating line K001, K002, K005, and K007:

   a. the company identification of each coating and cleanup material employed;

   b. the number of gallons of each coating employed;

c. the organic compound content of each coating employed, in pounds per gallon;

d. the total uncontrolled organic compound usage rate for all coating materials, in pounds, i.e., the sum of (b) x (c);

e. the number of gallons of cleanup material employed;

f. the organic compound content of the cleanup material employed, in pounds per gallon;

g. the total uncontrolled, before recovery, organic compound usage rates for all cleanup materials, in pounds, i.e., the sum of (e) x (f);

h. the number of gallons of cleanup material recovered;

i. the uncontrolled, after recovery, organic compound usage rate for all cleanup materials employed, in pounds, i.e., the sum of (e - h) x (f);

j. the total uncontrolled organic compound emission rate for all coatings and cleanup materials, in pounds (d + **i** ~~h~~); and,

k.. the total calculated controlled organic compound emission rate for all coatings and cleanup materials, in pounds. The controlled organic compound emission rate 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, i.e., (i) multiplied by a factor of 1 minus the overall control efficiency.

IV. Reporting Requirements

1. The permittee shall submit temperature deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

2. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all 3-hour blocks of time during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inches of water, as a 3-hour average.

3. The permittee shall submit deviation (excursion) reports in accordance with the general terms and conditions Section A.1. which include the following information:

   a. an identification of any month during which the monthly total controlled organic compound emission rate exceeded the allowable emission limits stated above, and

the actual monthly organic compound emission rate for each such month; and,

b. an identification of any month during which the monthly coating and cleanup usage rates exceeded the allowable usage limits stated above, and the actual monthly usage rates for each such month.

4. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

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-

   8.57 TPM organic compound emissions, including cleanup, for all 4 coating lines K001, K002, K005, and K007 combined.

   Applicable Compliance Method-

   Compliance shall be based upon the record keeping requirements specified in Section A.III.3, summing the calculated controlled monthly organic compound emission rates for all 4 coating lines K001, K002, K005, and K007, as recorded in Section A.III.3.k.

   b. Emission Limitation-

   78.43 TPM organic compound usage from all applied coating materials

   Applicable Compliance Method-

   Compliance shall be based upon the record keeping requirements specified in Section A.III.3., summing the calculated total uncontrolled monthly organic compound usage rates from all applied coating materials for all 4 coating lines K001, K002, K005, and K007 as recorded in Section A.III.3.d.

   c. Emission Limitation-

   9.09 tons TPM organic compound usage from all applied cleanup materials

   Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.3., summing the calculated uncontrolled monthly organic compound usage rates from all applied cleanup materials for all 4 coating lines K001, K002, K005, and K007 as recorded in Section A.III.3.i.

d. Control Measure-

90% overall removal/destruction efficiency of the fume concentrator and regenerative thermal oxidizer (RTO) system

Applicable Compliance Method-

Compliance shall be based on stack testing per OAC rule 3745-21-10(C).

VI. Miscellaneous Requirements

1. For K001, this is a modification to PTI 08-3767, as issued on 3/11/98. For K002, this is a modification to PTI 08-2254, as issued on 1/21/93. For K005, this is a modification to PTI 08-3130, as issued on 11/2/94. For K007, this is a modification to PTI 08-3693, as issued on 8/27/97.

   This modification represents the installation of a permanent total enclosure and a fume concentrator followed by an RTO to achieve a destruction efficiency of 90 percent for all four coating lines. In addition, the annual OC emission rate limit is based on shared coating usage across all 4 lines. The result is that the annual OC emissions as permitted in the previous PTI's are being reduced from 120.26 TPY to 102.83 TPY for a decrease of 17.43 TPY OC for these emissions units.

Emissions Unit ID: **K001**

Greenville Technology, Inc. Facility ID: **0819070190**
PTI Application: **08-3960**
November 24, 1999

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Plastic Parts Coating Line #1, including oven, with fume concentrator followed by thermal incineration (Modification, see Section A.VI.1.)	OAC rule 3745-31-05 (A)(3)	29.13 lbs/hr OC, excluding cleanup; 102.83 TPY OC, including cleanup, for K001 only; Compliance with the Air Toxic Policy; and, See Section A.2.a. for emission control measures.

2. Additional Terms and Conditions

2.a The 29.13 lbs/hr limitation in this permit was established to reflect the potential to emit for the emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with this limitation.

II. Operational Restrictions

1. See Sections A.II.1., A.II.2., A.II.3., and A.II.4.

III. Monitoring and/or Recordkeeping Requirements

1. See Section A.III.3.

2. The permittee shall collect and record the following information for each change where air toxic modeling was required pursuant to the Air Toxic Policy:

   a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the Air Toxic Policy; and,

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

1. The permittee shall also submit annual reports to the Director (the appropriate Ohio EPA District Office or local air agency) which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

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

a. Emission Limitation-

29.13 lbs/hr OC, excluding cleanup, for K001 only

Applicable Compliance Method-

Compliance shall be based upon either the worst case scenario by multiplying the respective maximum hourly coating usages (primer: 5 gallons; basecoat: 25 gallons; and clearcoat: 15 gallons) times the respective maximum organic compound contents and summing the products or the alternative scenario by multiplying the maximum hourly clearcoat usage (40 gallons) times its respective maximum organic content. The results shall then be multiplied by a factor of 1 minus the minimum overall control efficiency of 90 percent.

b. Emission Limitation-

102.83 TPY OC, including cleanup, for K001 only

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.3., and shall be the sum of the 12 monthly organic compound emission rates for the calendar year.

2. See Section A.V.1.b.

VI. Miscellaneous Requirements

Air Toxic Policy Clarifying Language

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

   Pollutant: cyclohexane

   TLV (ug/m3): 1,010,000

   Maximum Hourly Emission Rate (lbs/hr): 4.85

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 31.49

   MAGLC (ug/m3): 10,100

   Pollutant: ethyl acetate

   TLV (ug/m3): 1,440,000

   Maximum Hourly Emission Rate (lbs/hr): 4.25

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27.87

   MAGLC (ug/m3): 14,400

   Pollutant: isobutyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 20.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 136.3

MAGLC (ug/m3): 7,130

Pollutant: methyl ethyl ketone

TLV (ug/m3): 590,000

Maximum Hourly Emission Rate (lbs/hr): 9.81

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 64.01

MAGLC (ug/m3): 5,900

Pollutant: methyl propyl ketone

TLV (ug/m3): 705,000

Maximum Hourly Emission Rate (lbs/hr): 8.55

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 55.75

MAGLC (ug/m3): 7,050

Pollutant: n-butyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 7.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 51.10

MAGLC (ug/m3): 7,130

Pollutant: toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 8.01

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 52.13

MAGLC (ug/m3): 1,880

Pollutant: xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 2.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 14.97

MAGLC (ug/m3): 4,340

Pollutant: methyl n-amyl ketone

TLV (ug/m3): 233,000

Maximum Hourly Emission Rate (lbs/hr): 3.63

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23.74

MAGLC (ug/m3): 2,330

Pollutant: ethyl benzene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 4.70

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.46

MAGLC (ug/m3): 4,340

Physical changes or changes in the method of operation of the emissions unit that result in changes to the factors affecting the air toxic analysis could result in noncompliance with this permit to install. In order to avoid this noncompliance situation, prior to initiating any changes, permittees are required to conduct an evaluation to determine that the "Air Toxic Policy" is still satisfied. Changes that can affect the "Air Toxic Policy" include, but are not limited to, the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.)

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;

b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

c. <u>prior to the change</u>, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

Emissions Unit ID: **K001**

Greenville Technology, Inc. Facility ID: **0819070190**
PTI Application: **08-3960**
November 24, 1999

Emissions Unit ID:**K002**

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Plastic Parts Coating Line #2, including oven, with fume concentrator followed by thermal incineration (Modification, see Section A.VI.1.)	OAC rule 3745-31-05 (D)	8.57 TPM OC, including cleanup, for all 4 coating lines K001, K002, K005, and K007 combined; and, See Section A.2.a. for emission control measures.
	OAC rule 3745-21-07(G)(1)	The reduction efficiency limit based on this rule is less stringent than the limit established pursuant to 3745-31-05 (D) above.
	OAC rule 3745-21-07(G)(2)	The reduction efficiency limit based on this rule is less stringent than the limit established pursuant to 3745-31-05 (D) above.

2. Additional Terms and Conditions

2.a The organic compound (OC) emissions from this emissions unit, shall be controlled through the application of a permanent total enclosure for 100 percent capture and a fume concentrator and regenerative thermal oxidizer (RTO) system operating at a minimum 90% overall OC removal/destruction efficiency.

II. Operational Restrictions

1. The coating lines identified as K001, K002, K005, and K007 shall each be equipped with a permanent total enclosure (PTE) which shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204. The PTE shall meet the following criteria:

a. any "Natural Draft Opening" (NDO) shall be at least 4 equivalent diameters from each OC emission point;

b. the total area of all NDOs shall not exceed 5 percent of the surface area of the enclosure's four walls, floor and ceiling;

c. the average facial velocity (FV) of air through all NDOs shall be at least 3,600 m/hr (200 fpm) which corresponds to a pressure differential of 0.007 inches of water. The direction of air through all NDOs shall be into the enclosure;

d. all access doors and windows whose area are not included in paragraph (b) and are not included in the calculation in paragraph (c) shall be closed during routine operation; and,

e. all OC emissions must be captured and contained for discharge through the OC control device.

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

2. Definitions for PTE and NDO:

Permanent Total Enclosure (PTE) - a permanently installed enclosure that completely surrounds a source of emissions such that all OC emissions are captured and contained for discharge through a control device.

Natural Draft Opening (NDO) - any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct to which a fan is installed.

3. The average combustion temperature within the thermal incinerator, 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 emission test that demonstrated the emissions unit was in compliance.

4. The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inches of water, as a 3-hour average, whenever the emissions unit is in operation.

5. The maximum monthly coating and cleanup organic compound usage rates for emissions unit K001, K002, K005, and K007 combined shall not exceed:

   a. Coatings: 78.43 TPM OC(usage rate before control)
   b. Cleanup: 9.09 TPM OC (usage rate before recovery and control)

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate, and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameters. 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 following information each day:

   a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance; and,

   b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

2. The permittee shall install, maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer’s recommendations, instructions and operating manuals.

   The permittee shall maintain records of all 3-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inches of water, as a 3-hour average.

3. The permittee shall collect and record the following information each month for each coating line K001, K002, K005, and K007:

   a. the company identification of each coating and cleanup material employed;

   b. the number of gallons of each coating employed;

   c. the organic compound content of each coating employed, in pounds per gallon;

   d. the total uncontrolled organic compound usage rate for all coating materials, in pounds, i.e., the sum of (b) x (c);

   e. the number of gallons of cleanup material employed;

   f. the organic compound content of the cleanup material employed, in pounds per gallon;

g. the total uncontrolled, before recovery, organic compound usage rates for all cleanup materials, in pounds, i.e., the sum of (e) x (f);

h. the number of gallons of cleanup material recovered;

i. the uncontrolled, after recovery, organic compound usage rate for all cleanup materials employed, in pounds, i.e., the sum of (e - h) x (f);

j. the total uncontrolled organic compound emission rate for all coatings and cleanup materials, in pounds (d + **i** ~~h~~); and,

k. the total calculated controlled organic compound emission rate for all coatings and cleanup materials, in pounds. The controlled organic compound emission rate 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, i.e., (i) multiplied by a factor of 1 minus the overall control efficiency.

IV. Reporting Requirements

1. The permittee shall submit temperature deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

2. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all 3-hour blocks of time during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inches of water, as a 3-hour average.

3. The permittee shall submit deviation (excursion) reports in accordance with the general terms and conditions Section A.1. which include the following information:

   a. an identification of any month during which the monthly total controlled organic compound emission rate exceeded the allowable emission limits stated above, and the actual monthly organic compound emission rate for each such month; and,

   b. an identification of any month during which the monthly coating and cleanup usage rates

exceeded the allowable usage limits stated above, and the actual monthly usage rates for each such month.

4. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

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-

      8.57 TPM organic compound emissions, including cleanup, for all 4 coating lines K001, K002, K005, and K007 combined.

      Applicable Compliance Method-

      Compliance shall be based upon the record keeping requirements specified in Section A.III.3, summing the calculated controlled monthly organic compound emission rates from all 4 coating lines K001, K002, K005, and K007, as recorded in section A.III.3.k.

   b. Emission Limitation-

      78.43 TPM organic compound usage from all applied coating materials

      Applicable Compliance Method-

      Compliance shall be based upon the record keeping requirements specified in Section A.III.3., summing the calculated total uncontrolled monthly organic compound usage rates from all applied coating materials for all 4 coating lines K001, K002, K005, and K007 as recorded in Section A.III.3.d.

   c. Emission Limitation-

      9.09 TPM organic compound usage from all applied cleanup materials

      Applicable Compliance Method-

      Compliance shall be based upon the record keeping requirements specified in Section A.III.3., summing the calculated uncontrolled monthly organic compound usage rates from all applied cleanup materials for all 4 coating lines K001, K002, K005, and K007 as recorded in Section A.III.3.i.

d. Control Measure-

90% overall removal/destruction efficiency of the fume concentrator and regenerative thermal oxidizer (RTO) system

Applicable Compliance Method-

Compliance shall be based on stack testing per OAC rule 3745-21-10(C).

VI. Miscellaneous Requirements

1. For K001, this is a modification to PTI 08-3767, as issued on 3/11/98. For K002, this is a modification to PTI 08-2254, as issued on 1/21/93. For K005, this is a modification to PTI 08-3130, as issued on 11/2/94. For K007, this is a modification to PTI 08-3693, as issued on 8/27/97.

   This modification represents the installation of a permanent total enclosure and a fume concentrator followed by an RTO to achieve a destruction efficiency of 90 percent for all four coating lines. In addition, the annual OC emission rate limit is based on shared coating usage across all 4 lines. The result is that the annual OC emissions as permitted in the previous PTI's are being reduced from 120.26 TPY to 102.83 TPY for a decrease of 17.43 TPY OC for these emissions units.

November 24, 1999

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Plastic Parts Coating Line #2, including oven, with fume concentrator followed by thermal incineration (Modification, see Section A.VI.1.)	OAC rule 3745-31-05(A)(3)	12.37 lbs/hr OC, excluding cleanup; 56.57 TPY OC, including cleanup, for K002 only; Compliance with the Air Toxic Policy; and, See Section A.2.a. for emission control measures.

2. Additional Terms and Conditions

2.a The 12.37 lbs/hr limitation in this permit was established to reflect the potential to emit for the emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with this limitation.

II. Operational Restrictions

1. See Sections A.II.1., A.II.2., A.II.3., and A.II.4.

III. Monitoring and/or Recordkeeping Requirements

1. See Section A.III.3.

2. The permittee shall collect and record the following information for each change where air toxic

modeling was required pursuant to the Air Toxic Policy:

a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the Air Toxic Policy; and,

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

1. The permittee shall also submit annual reports to the Director (the appropriate Ohio EPA District Office or local air agency) which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

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

   a. Emission Limitation-

      12.37 lbs/hr OC, excluding cleanup, for K002 only

      Applicable Compliance Method-

      Compliance shall be based upon either the worst case scenario by multiplying the respective maximum hourly coating usages (primer: 3 gallons and basecoat: 15 gallons) times the respective maximum organic compound contents and summing the products or the alternative scenario by multiplying the maximum hourly clearcoat usage (15 gallons) times its respective maximum organic content. The results shall then be multiplied by a factor of 1 minus the minimum overall control efficiency of 90 percent.

   b. Emission Limitation-

      56.57 TPY OC, including cleanup, for K002 only

      Applicable Compliance Method-

      Compliance shall be based upon the record keeping requirements specified in Section A.III.3., and shall be the sum of the 12 monthly organic compound emission rates for the calendar year.

2. See Section A.V.1.b.

VI. Miscellaneous Requirements

Air Toxic Policy Clarifying Language

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

   Pollutant: cyclohexane

   TLV (ug/m3): 1,010,000

   Maximum Hourly Emission Rate (lbs/hr): 4.85

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 31.49

   MAGLC (ug/m3): 10,100

   Pollutant: ethyl acetate

   TLV (ug/m3): 1,440,000

   Maximum Hourly Emission Rate (lbs/hr): 4.25

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27.87

   MAGLC (ug/m3): 14,400

   Pollutant: isobutyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 20.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 136.3

MAGLC (ug/m3): 7,130

Pollutant: methyl ethyl ketone

TLV (ug/m3): 590,000

Maximum Hourly Emission Rate (lbs/hr): 9.81

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 64.01

MAGLC (ug/m3): 5,900

Pollutant: methyl propyl ketone

TLV (ug/m3): 705,000

Maximum Hourly Emission Rate (lbs/hr): 8.55

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 55.75

MAGLC (ug/m3): 7,050

Pollutant: n-butyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 7.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 51.10

MAGLC (ug/m3): 7,130

Pollutant: toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 8.01

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 52.13

MAGLC (ug/m3): 1,880

Pollutant: xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 2.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 14.97

MAGLC (ug/m3): 4,340

Pollutant: methyl n-amyl ketone

TLV (ug/m3): 233,000

Maximum Hourly Emission Rate (lbs/hr): 3.63

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23.74

MAGLC (ug/m3): 2,330

Pollutant: ethyl benzene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 4.70

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.46

MAGLC (ug/m3): 4,340

Physical changes or changes in the method of operation of the emissions unit that result in changes to the factors affecting the air toxic analysis could result in noncompliance with this permit to install. In order to avoid this noncompliance situation, prior to initiating any changes, permittees are required to conduct an evaluation to determine that the "Air Toxic Policy" is still satisfied. Changes that can affect the "Air Toxic Policy" include, but are not limited to, the

following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.)

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;

b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

c. <u>prior to the change</u>, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Plastic Parts Coating Line #3, including oven, with fume concentrator followed by thermal incineration (Modification, see Section A.VI.1.)	OAC rule 3745-31-05(D)	8.57 TPM OC, including cleanup, for all 4 coating lines K001, K002, K005, and K007 combined; and, See Section A.2.a. for emission control measures.
	OAC rule 3745-21-07(G)(1)	The reduction efficiency limit based on this rule is less stringent than the limit established pursuant to 3745-31-05 (D) above.
	OAC rule 3745-21-07(G)(2)	The reduction efficiency limit based on this rule is less stringent than the limit established pursuant to 3745-31-05 (D) above.

2. Additional Terms and Conditions

2.a The organic compound (OC) emissions from this emissions unit, shall be controlled through the application of a permanent total enclosure for 100 percent capture and a fume concentrator and regenerative thermal oxidizer (RTO) system operating at a minimum 90% overall OC removal/destruction efficiency.

Emissions Unit ID: **K005**

Greenville Technology, Inc. Facility ID: **0819070190**
PTI Application: **08-3960**
November 24, 1999

II. Operational Restrictions

1. The coating lines identified as K001, K002, K005, and K007 shall each be equipped with a permanent total enclosure (PTE) which shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204. The PTE shall meet the following criteria:

   a. any "Natural Draft Opening" (NDO) shall be at least 4 equivalent diameters from each OC emission point;

   b. the total area of all NDOs shall not exceed 5 percent of the surface area of the enclosure's four walls, floor and ceiling;

   c. the average facial velocity (FV) of air through all NDOs shall be at least 3,600 m/hr (200 fpm) which corresponds to a pressure differential of 0.007 inches of water. The direction of air through all NDOs shall be into the enclosure;

   d. all access doors and windows whose area are not included in paragraph (b) and are not included in the calculation in paragraph (c) shall be closed during routine operation; and,

   e. all OC emissions must be captured and contained for discharge through the OC control device.

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

2. Definitions for PTE and NDO:

   Permanent Total Enclosure (PTE) - a permanently installed enclosure that completely surrounds a source of emissions such that all OC emissions are captured and contained for discharge through a control device.

   Natural Draft Opening (NDO) - any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct to which a fan is installed.

3. The average combustion temperature within the thermal incinerator, 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 emission test that demonstrated the emissions unit was in compliance.

4. The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than the 0.007 inches of water, as a 3-hour average, whenever the emissions unit is in operation.

5. The maximum monthly coating and cleanup organic compound usage rates for emissions unit K001, K002, K005, and K007 combined shall not exceed:

   a. Coatings: 78.43 TPM OC (usage rate before control)
   b. Cleanup: 9.09 TPM OC (usage rate before recovery and control)

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate, and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameters. 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 following information each day:

   a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance; and,

   b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

2. The permittee shall install, maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer’s recommendations, instructions and operating manuals.

   The permittee shall maintain records of all 3-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inches of water, as a 3-hour average.

3. The permittee shall collect and record the following information each month for each coating line K001, K002, K005, and K007:

   a. the company identification of each coating and cleanup material employed;

   b. the number of gallons of each coating employed;

   c. the organic compound content of each coating employed, in pounds per gallon;

d. the total uncontrolled organic compound usage rate for all coating materials, in pounds, i.e., the sum of (b) x (c);

e. the number of gallons of cleanup material employed;

f. the organic compound content of the cleanup material employed, in pounds per gallon;

g. the total uncontrolled, before recovery, organic compound usage rates for all cleanup materials, in pounds, i.e., the sum of (e) x (f);

h. the number of gallons of cleanup material recovered;

i. the uncontrolled, after recovery, organic compound usage rate for all cleanup materials employed, in pounds, i.e., the sum of (e - h) x (f);

j. the total uncontrolled organic compound emission rate for all coatings and cleanup materials, in pounds (d + **i** ~~h~~); and,

k.. the total calculated controlled organic compound emission rate for all coatings and cleanup materials, in pounds. The controlled organic compound emission rate 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, i.e., (i) multiplied by a factor of 1 minus the overall control efficiency.

IV. Reporting Requirements

1. The permittee shall submit temperature deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

2. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all 3-hour blocks of time during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inches of water, as a 3-hour average.

3. The permittee shall submit deviation (excursion) reports in accordance with the general terms and conditions Section A.1. which include the following information:

a. an identification of any month during which the monthly total controlled organic compound emission rate exceeded the allowable emission limits stated above, and the actual monthly organic compound emission rate for each such month; and,

b. an identification of any month during which the monthly coating and cleanup usage rates exceeded the allowable usage limits stated above, and the actual monthly usage rates for each such month.

4. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

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-

8.57 TPM organic compound emissions, including cleanup, for all 4 coating lines K001, K002, K005, and K007 combined.

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.3, summing the calculated controlled monthly organic compound emission rates from all 4 coating lines K001, K002, K005, and K007, as recorded in section A.III.3.k..

b. Emission Limitation-

78.43 TPM organic compound usage from all applied coating materials

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.3., summing the calculated total uncontrolled monthly organic compound usage rates from all applied coating materials for all 4 coating lines K001, K002, K005, and K007 as recorded in Section A.III.3.d.

c. Emission Limitation-

9.09 TPM organic compound usage from all applied cleanup materials

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.3., summing the calculated uncontrolled monthly organic compound usage rates from all applied cleanup materials for all 4 coating lines K001, K002, K005, and K007 as recorded in Section A.III.3.i.

d. Control Measure-

90% overall removal/destruction efficiency of the fume concentrator and regenerative thermal oxidizer (RTO) system

Applicable Compliance Method-

Compliance shall be based on stack testing per OAC rule 3745-21-10(C).

VI. Miscellaneous Requirements

1. For K001, this is a modification to PTI 08-3767, as issued on 3/11/98. For K002, this is a modification to PTI 08-2254, as issued on 1/21/93. For K005, this is a modification to PTI 08-3130, as issued on 11/2/94. For K007, this is a modification to PTI 08-3693, as issued on 8/27/97.

   This modification represents the installation of a permanent total enclosure and a fume concentrator followed by an RTO to achieve a destruction efficiency of 90 percent for all four coating lines. In addition, the annual OC emission rate limit is based on shared coating usage across all 4 lines. The result is that the annual OC emissions as permitted in the previous PTI's is being reduced from 120.26 TPY to 102.83 TPY for a decrease of 17.43 TPY OC for these emissions units.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Plastic Parts Coating Line #3, including oven, with fume concentrator followed by thermal incineration (Modification, see Section A.VI.1.)	OAC rule 3745-31-05(A)(3)	6.32 lbs/hr OC, excluding cleanup; 28.92 TPY OC, including cleanup, for K005 only; Compliance with the Air Toxic Policy; and, See Section A.2.a. for emission control measures.

2. Additional Terms and Conditions

2.a The 6.32 lbs/hr limitation in this permit was established to reflect the potential to emit for the emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with this limitation.

II. Operational Restrictions

1. See Sections A.II.1., A.II.2., A.II.3., and A.II.4.

III. Monitoring and/or Recordkeeping Requirements

1. See Section A.III.3.

2. The permittee shall collect and record the following information for each change where air toxic

modeling was required pursuant to the Air Toxic Policy:

a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the Air Toxic Policy; and,

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

1. The permittee shall also submit annual reports to the Director (the appropriate Ohio EPA District Office or local air agency) which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

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

a. Emission Limitation-

6.32 lbs/hr OC, excluding cleanup

Applicable Compliance Method-

Compliance shall be based upon either the worst case scenario by multiplying the respective maximum hourly coating usages (primer: 2 gallons; basecoat: 4 gallons; and clearcoat: 4 gallons) times the respective maximum organic compound contents and summing the products or the alternative scenario by multiplying the maximum hourly clearcoat usage (8 gallons) times its respective maximum organic content. The results shall then be multiplied by a factor of 1 minus the minimum overall control efficiency of 90 percent.

b. Emission Limitation-

28.92 TPY OC, including cleanup, for K005 only

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.3., and shall be the sum of the 12 monthly organic compound emission rates for the calendar year.

2. See Section A.V.1.b.

VI. Miscellaneous Requirements

Air Toxic Policy Clarifying Language

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

Pollutant: cyclohexane

TLV (ug/m3): 1,010,000

Maximum Hourly Emission Rate (lbs/hr): 4.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 31.49

MAGLC (ug/m3): 10,100

Pollutant: ethyl acetate

TLV (ug/m3): 1,440,000

Maximum Hourly Emission Rate (lbs/hr): 4.25

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27.87

MAGLC (ug/m3): 14,400

Pollutant: isobutyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 20.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 136.3

MAGLC (ug/m3): 7,130

Pollutant: methyl ethyl ketone

TLV (ug/m3): 590,000

Maximum Hourly Emission Rate (lbs/hr): 9.81

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 64.01

MAGLC (ug/m3): 5,900

Pollutant: methyl propyl ketone

TLV (ug/m3): 705,000

Maximum Hourly Emission Rate (lbs/hr): 8.55

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 55.75

MAGLC (ug/m3): 7,050

Pollutant: n-butyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 7.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 51.10

MAGLC (ug/m3): 7,130

Pollutant: toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 8.01

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 52.13

MAGLC (ug/m3): 1,880

Pollutant: xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 2.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 14.97

MAGLC (ug/m3): 4,340

Pollutant: methyl n-amyl ketone

TLV (ug/m3): 233,000

Maximum Hourly Emission Rate (lbs/hr): 3.63

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23.74

MAGLC (ug/m3): 2,330

Pollutant: ethyl benzene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 4.70

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.46

MAGLC (ug/m3): 4,340

Physical changes or changes in the method of operation of the emissions unit that result in changes to the factors affecting the air toxic analysis could result in noncompliance with this permit to install. In order to avoid this noncompliance situation, prior to initiating any changes, permittees are required to conduct an evaluation to determine that the "Air Toxic Policy" is still satisfied. Changes that can affect the "Air Toxic Policy" include, but are not limited to, the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.)

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;

b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

c. <u>prior to the change</u>, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an

increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

November 24, 1999

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Plastic Parts Coating Line #5, including oven, with fume concentrator followed by thermal incineration (Modification, see Section A.VI.1.)	OAC rule 3745-31-05 (D)	8.57 TPM OC, including cleanup, for all 4 coating lines K001, K002, K005, and K007 combined; and, See Section A.2.a. for emission control measures.
	OAC rule 3745-21-07(G)(1)	The reduction efficiency limit based on this rule is less stringent than the limit established pursuant to 3745-31-05 (D) above.
	OAC rule 3745-21-07(G)(2)	The reduction efficiency limit based on this rule is less stringent than the limit established pursuant to 3745-31-05 (D) above.

2. Additional Terms and Conditions

2.a The organic compound (OC) emissions from this emissions unit, shall be controlled through the application of a permanent total enclosure for 100 percent capture and a fume concentrator and regenerative thermal oxidizer (RTO) system operating at a minimum 90% overall OC removal/destruction efficiency.

II. Operational Restrictions

Emissions Unit ID: **K007**

1. The coating lines identified as K001, K002, K005, and K007 shall each be equipped with a permanent total enclosure (PTE) which shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204. The PTE shall meet the following criteria:

a. any "Natural Draft Opening" (NDO) shall be at least 4 equivalent diameters from each OC emission point;

b. the total area of all NDOs shall not exceed 5 percent of the surface area of the enclosure's four walls, floor and ceiling;

c. the average facial velocity (FV) of air through all NDOs shall be at least 3,600 m/hr (200 fpm) which corresponds to a pressure differential of 0.007 inches of water. The direction of air through all NDOs shall be into the enclosure;

d. all access doors and windows whose area are not included in paragraph (b) and are not included in the calculation in paragraph (c) shall be closed during routine operation; and,

e. all OC emissions must be captured and contained for discharge through the OC control device.

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

2. Definitions for PTE and NDO:

Permanent Total Enclosure (PTE) - a permanently installed enclosure that completely surrounds a source of emissions such that all OC emissions are captured and contained for discharge through a control device.

Natural Draft Opening (NDO) - any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct to which a fan is installed.

3. The average combustion temperature within the thermal incinerator, 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 emission test that demonstrated the emissions unit was in compliance.

4. The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than the 0.007 inches of water, as a 3-hour average, whenever the emissions unit is in operation.

5. The maximum monthly coating and cleanup organic compound usage rates for emissions unit K001, K002, K005, and K007 combined shall not exceed:

a. Coatings: 78.43 TPM OC (usage rate before control)
b. Cleanup: 9.09 TPM OC (usage rate before recovery and control)

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate, and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameters. 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 following information each day:

   a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance; and,

   b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

2. The permittee shall install, maintain and operate monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer’s recommendations, instructions and operating manuals.

   The permittee shall maintain records of all 3-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inches of water, as a 3-hour average.

3. The permittee shall collect and record the following information each month for each coating line K001, K002, K005, and K007:

   a. the company identification of each coating and cleanup material employed;

   b. the number of gallons of each coating employed;

   c. the organic compound content of each coating employed, in pounds per gallon;

   d. the total uncontrolled organic compound usage rate for all coating materials, in pounds, i.e., the sum of (b) x (c);

e. the number of gallons of cleanup material employed;

f. the organic compound content of the cleanup material employed, in pounds per gallon;

g. the total uncontrolled, before recovery, organic compound usage rates for all cleanup materials, in pounds, i.e., the sum of (e) x (f);

h. the number of gallons of cleanup material recovered;

i. the uncontrolled, after recovery, organic compound usage rate for all cleanup materials employed, in pounds, i.e., the sum of (e - h) x (f);

j. the total uncontrolled organic compound emission rate for all coatings and cleanup materials, in pounds (d + **i** ~~h~~); and,

k. the total calculated controlled organic compound emission rate for all coatings and cleanup materials, in pounds. The controlled organic compound emission rate 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, i.e., (i) multiplied by a factor of 1 minus the overall control efficiency.

IV. Reporting Requirements

1. The permittee shall submit temperature deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

2. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all 3-hour blocks of time during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inches of water, as a 3-hour average.

3. The permittee shall submit deviation (excursion) reports in accordance with the general terms and conditions Section A.1. which include the following information:

   a. an identification of any month during which the monthly total controlled organic compound emission rate exceeded the allowable emission limits stated above, and the actual monthly organic compound emission rate for each such month; and,

   b. an identification of any month during which the monthly coating and cleanup usage rates exceeded the allowable usage limits stated above, and the actual

monthly usage rates for each such month.

4. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

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-

      8.57 TPM organic compound emissions, including cleanup, for all 4 coating lines K001, K002, K005, and K007 combined

      Applicable Compliance Method-

      Compliance shall be based upon the record keeping requirements specified in Section A.III.3, summing the calculated controlled monthly organic compound emission rates from all 4 coating lines K001, K002, K005, and K007, as recorded in section A.III.3.k.

   b. Emission Limitation-

      78.43 TPM organic compound usage from all applied coating materials

      Applicable Compliance Method-

      Compliance shall be based upon the record keeping requirements specified in Section A.III.3., summing the calculated total uncontrolled monthly organic compound usage rates from all applied coating materials for all 4 coating lines K001, K002, K005, and K007 as recorded in Section A.III.3.d.

   c. Emission Limitation-

      9.09 TPM organic compound usage from all applied cleanup materials

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.3., summing the calculated uncontrolled monthly organic compound usage rates from all applied cleanup materials for all 4 coating lines K001, K002, K005, and K007 as recorded in Section A.III.3.i.

d. Control Measure-

90% overall removal/destruction efficiency of the fume concentrator and regenerative thermal oxidizer (RTO) system

Applicable Compliance Method-

Compliance shall be based on stack testing per OAC rule 3745-21-10(C).

VI. Miscellaneous Requirements

1. For K001, this is a modification to PTI 08-3767, as issued on 3/11/98. For K002, this is a modification to PTI 08-2254, as issued on 1/21/93. For K005, this is a modification to PTI 08-3130, as issued on 11/2/94. For K007, this is a modification to PTI 08-3693, as issued on 8/27/97.

   This modification represents the installation of a permanent total enclosure and a fume concentrator followed by an RTO to achieve a destruction efficiency of 90 percent for all four coating lines. In addition, the annual OC emission rate limit is based on shared coating usage across all 4 lines. The result is that the annual OC emissions as permitted in the previous PTI's are being reduced from 120.26 TPY to 102.83 TPY for a decrease of 17.43 TPY OC for these emissions units.

November 24, 1999

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Plastic Parts Coating Line #5, including oven, with fume concentrator followed by thermal incineration (Modification, see Section A.VI.1)	OAC rule 3745-31-05 (A)(3)	16.56 lbs/hr OC, excluding cleanup; 75.23 TPY OC, including cleanup, for K007 only; and, Compliance with the Air Toxic Policy; and , See Section A.2.a. for emission control measures.

2. Additional Terms and Conditions

2.a The 16.56 lbs/hr limitation in this permit was established to reflect the potential to emit for the emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with this limitation.

II. Operational Restrictions

1. See Sections A.II.1., A.II.2., A.II.3., and A.II.4.

III. Monitoring and/or Recordkeeping Requirements

1. See Section A.III.3.

2. The permittee shall collect and record the following information for each change where air toxic

modeling was required pursuant to the Air Toxic Policy:

a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the Air Toxic Policy; and,

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

1. The permittee shall also submit annual reports to the Director (the appropriate Ohio EPA District Office or local air agency) which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

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

a. Emission Limitation-

16.56 lbs/hr OC, excluding cleanup

Applicable Compliance Method-

Compliance shall be based upon either the worst case scenario by multiplying the respective maximum hourly coating usages (primer: 8 gallons; basecoat: 10 gallons; and clearcoat: 8 gallons) times the respective maximum organic compound contents and summing the products or the alternative scenario by multiplying the maximum hourly clearcoat usage (18 gallons) times its respective maximum organic content. The results shall then be multiplied by a factor of 1 minus the minimum overall control efficiency of 90 percent.

b. Emission Limitation-

75.23 TPY OC, including cleanup, for K007 only

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.3., and shall be the sum of the 12 monthly organic compound emission rates for the calendar year.

2. See Section A.V.1.b.

VI. Miscellaneous Requirements

Air Toxic Policy Clarifying Language

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

Pollutant: cyclohexane

TLV (ug/m3): 1,010,000

Maximum Hourly Emission Rate (lbs/hr): 4.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 31.49

MAGLC (ug/m3): 10,100

Pollutant: ethyl acetate

TLV (ug/m3): 1,440,000

Maximum Hourly Emission Rate (lbs/hr): 4.25

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27.87

MAGLC (ug/m3): 14,400

Pollutant: isobutyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 20.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 136.3

MAGLC (ug/m3): 7,130

Pollutant: methyl ethyl ketone

TLV (ug/m3): 590,000

Maximum Hourly Emission Rate (lbs/hr): 9.81

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 64.01

MAGLC (ug/m3): 5,900

Pollutant: methyl propyl ketone

TLV (ug/m3): 705,000

Maximum Hourly Emission Rate (lbs/hr): 8.55

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 55.75

MAGLC (ug/m3): 7,050

Pollutant: n-butyl acetate

TLV (ug/m3): 713,000

Maximum Hourly Emission Rate (lbs/hr): 7.85

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 51.10

MAGLC (ug/m3): 7,130

Pollutant: toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 8.01

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 52.13

MAGLC (ug/m3): 1,880

Pollutant: xylene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 2.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 14.97

MAGLC (ug/m3): 4,340

Pollutant: methyl n-amyl ketone

TLV (ug/m3): 233,000

Maximum Hourly Emission Rate (lbs/hr): 3.63

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 23.74

MAGLC (ug/m3): 2,330

Pollutant: ethyl benzene

TLV (ug/m3): 434,000

Maximum Hourly Emission Rate (lbs/hr): 4.70

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.46

MAGLC (ug/m3): 4,340

Physical changes or changes in the method of operation of the emissions unit that result in changes to the factors affecting the air toxic analysis could result in noncompliance with this permit to install. In order to avoid this noncompliance situation, prior to initiating any changes, permittees are required to conduct an evaluation to determine that the "Air Toxic Policy" is still satisfied. Changes that can affect the "Air Toxic Policy" include, but are not limited to, the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and,

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.)

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;

b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

c. <u>prior to the change</u>, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.