

Synthetic Minor Determination and/or Netting Determination

Permit To Install: 08-04927

A. Source Description Florida Production Engineering (FPE) is a plastic parts coating facility that serves the automotive industry and is located in New Madison, Ohio (Darke County). There are currently four organic compound (OC) emissions units (K001, K003, K004 and P001) in operation at FPE, OC emissions from two of the emissions units (K001 and K003) are controlled with a thermal oxidizer. FPE has applied to modify emissions unit K001 to reduce annual OC emissions limitations and reconfigure emissions unit K003 by removing the mask washers which will also reduce emissions.

B. Facility Emissions and Attainment Status FPE is located in Darke County, which is attainment for all criteria pollutants. FPE has already implemented synthetic minor restrictions on OC emissions to avoid compliance with Title V permitting and MACT requirements in PTI 08-04088. After this modification FPE will emit OC emissions from four emissions units. These emissions units include:

K001 - Quad Cells used to coat plastic wheel covers exhausted to a thermal oxidizer.

K004 - Quality Control Spray Booth for color matching coatings with no air emissions controls

P001 - Solvents Parts Wiping/ cleaning operations associated with emissions unit K001 that are uncontrolled.

P002 - Injection Molding Machines that use small quantities of solvent based mold release and cleaning solvents.

The uncontrolled potential OC emissions from FPE are over 2,000 tons per year. All of the OC emissions from FPE could also include VOC and hazardous air pollutants (HAP). The air emissions are generated primarily from the coating operations in emissions unit K001 and K003. Emissions Unit K001 must now comply with the requirements of OAC rule 3745-21-07(M)(1) and (2). Emissions Unit K003 must now comply with the requirements of OAC rule 3745-21-07(M)(3)(d)(viii). However, the emissions limitations established according to BAT are more stringent than the requirements of those rules.

C. Source Emissions The potential and allowable OC emissions from FPE are summarized in Tables 1 and 2.

Table 1. Potential Air Emissions

Emissions Unit	<u>K001</u>	<u>K003</u>	<u>P001</u>	<u>P002</u>	<u>Facility Total</u>
Uncontrolled hourly VOC emissions (lb/hour)	457	38.4	0.83	0.021	496
Uncontrolled Daily VOC Emissions	10956	922	19.8	0.493	11,898
Uncontrolled Annual Emissions	1999	168	3.61	0.090	2,171
Potential Annual Emissions (tons/year)*	100	24	3.61	0.090	128
* Includes 95% overall control for K001 and 85.5% overall control for K003					

Clean up emissions are included in the calculations for K001, K003, and P002. The emissions from P001 are all from clean up. For permitting purposes it is assumed that all OC emissions are also potentially VOC emissions. Similarly it is also assumed that all OC emissions could be hazardous air pollutants (HAPs). The 128 tons per year potential emissions from FPE are above the major source thresholds for Title V and MACT permitting requirements. FPE has elected to implement federally enforceable restrictions to avoid these major source permitting requirements.

Table 2. Emissions Limitations

Emissions Unit	OC Emissions (TPY)	Individual HAP(TPY)	Combined HAP (TPY)
K001	35.0	< 9.9	<24.9
K003	20.0	<9.9	<24.9
P001	3.61	<3.61	<3.61
P002	0.09	<0.09	<0.09
Total	58.6	< 9.9	<24.9

D. Conclusion FPE will be issued a synthetic minor PTI to limit OC emissions to 58.6 tons per year, individual HAP to less than 9.9 tons per year and combined HAP to less than 24.9 tons per year on a rolling 12-month basis. The rolling 12-month limits will be based on the use of a thermal oxidizer and OC material usage restrictions. The synthetic minor HAP restrictions will also preclude compliance with the Plastic Parts and

Products Coating NESHAP (40 CFR 63, Subpart PPPP).



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

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

Mailing Address:
Lazarus Gov.
Center

Application No: 08-04927

Fac ID: 0819100218

DATE: 5/29/2008

Florida Production Engineering
Jeremy Elliott
1855 State Rte 121 N
New Madison, OH 45346

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43216-1049.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$400** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

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

CC: USEPA

RAPCA

MIAMI VALLEY REG PLANNING COMM

IN

DARKE COUNTY

PUBLIC NOTICE
ISSUANCE OF DRAFT PERMIT TO INSTALL **08-04927** FOR AN AIR CONTAMINANT SOURCE
FOR **Florida Production Engineering**

On 5/29/2008 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Florida Production Engineering**, located at **1855 State Rte 121 N, New Madison, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 08-04927:

Chapter 31 modification replacing PTI 08-02646 issued 6/1/93 and PTI 08-04088 issued 3/9/06 to establish new Synthetic Minor restrictions.

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

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



**Permit To Install
Terms and Conditions**

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

DRAFT PERMIT TO INSTALL 08-04927

Application Number: 08-04927
Facility ID: 0819100218
Permit Fee: **To be entered upon final issuance**
Name of Facility: Florida Production Engineering
Person to Contact: Jeremy Elliott
Address: 1855 State Rte 121 N
New Madison, OH 45346

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1855 State Rte 121 N
New Madison, Ohio**

Description of proposed emissions unit(s):
Chapter 31 modification replacing PTI 08-02646 issued 6/1/93 and PTI 08-04088 issued 3/9/06 to establish new Synthetic Minor restrictions.

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

Chris Korleski
Director

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections,

Florida Production Engineering
PTI Application: 08-04927

Facility ID: 0819100218

Issued: To be entered upon final issuance

conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

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

9. Construction of New Sources(s)

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

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

10. Public Disclosure

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

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available

Florida Production Engineering

Facility ID: 0819100218

PTI Application: 08-04927

Issued: To be entered upon final issuance

Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

Florida Production Engineering

Facility ID: 0819100218

PTI Application: 08-04927

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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

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

15. Fees

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

B. Permit to Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
Organic Compounds	55.0
Individual HAP	9.9
Combined HAP	24.9

Emissions Unit ID: **K001**

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (K001) - Quad Paint Line with 4 paint cells and 6 spray stations per cell with thermal oxidizer (Modification)

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The organic compound (OC) emissions from this emissions unit shall not exceed 22.8 pounds per hour and 35.0 tons per year (TPY), including cleanup. See A.2.a, A.2.b, A.2.c, B.1, B.2, and B.3.
OAC rule 3745-31-05(C) OAC rule 3745-35-07(B) (Synthetic minor to avoid Title V and MACT)	The combined OC emissions from emissions units K001, K003, and P001, shall not exceed 58.6 TPY based upon a rolling 12-month summation. The OC emissions capture and control system on this emissions unit shall achieve an overall control efficiency 95% by weight. The individual hazardous air pollutant (HAP) emissions from emissions units K001, K003, and P001 shall not exceed 9.9 TPY and combined HAP emissions shall not exceed 24.9 TPY based upon a rolling, 12-month summation. See A.2.d.
OAC rules 3745-21-07	The emissions limitations established pursuant to this rule are less stringent than the limitations established according to OAC rule 3745-31-05(A)(3). See A.2.e.
OAC rule 3745-17-11(C)	See A.2.f.
OAC rule 3745-114 and ORC 3704.03(F)(4)(c)	See C.10, C.11, C.12 and C.13 and D.4

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2. Additional Terms and Conditions

2.a The 22.8 pounds OC/hour limitation was established for PTI purposes to reflect the potential to emit for the emission unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

2.b A permanent total enclosure shall be constructed to totally enclose the application stations, coating reservoirs, and all areas from the application station to the oven and the control device. If it can be demonstrated that there is no leakage between the coating application, the oven, and the control device and that the oven and control device are operated under negative pressure, they do not need to be enclosed.

The permanent total enclosure serving this emissions unit shall be maintained under negative pressure as required by this permit whenever the emissions unit is in operation and shall capture all of the OC emissions from this emissions unit. Negative pressure shall be visually monitored using streamers, plastic flow indicating strips, string, or other visually noticeable flow indicating device that shows the direction of air flow through each natural draft opening to be into the enclosure.

2.c The OC emissions capture and control system on this emissions unit shall achieve an overall control efficiency 95% by weight, or the total OC concentration at the outlet shall be less than 15 parts per million by volume, as propane, on a dry basis, which ever is less stringent. The common CTO is shared with emissions units K001 and K003.

2.d The allowable OC, individual HAP, and combined HAP emission rates, as a 12-month rolling limit includes emissions unit P001 permitted under PTI 08-02646.

2.e This emissions unit is subject to OAC rules 3745-21-07(M)(1) and (M)(2) effective February 18, 2008. However, the OC emissions limitations of OAC rule 3745-21-07(G) when applying photochemically reactive coatings are still federally enforceable and will not cease to be effective until U.S. EPA approves the revisions as part of the State Implementation Plan (SIP) for ozone. The emissions limitations established according to OAC rule 3745-31-05(A)(3) are more stringent than the emissions limitations established previously by OAC rule 3745-21-07(G)(2) or subsequently by OAC rules 3745-21-07(M)(1) and (M)(2).

Emissions Unit ID: K001

- 2.f** The permittee shall operate a dry particulate filter system for the coating operations in accordance with the manufacturer's recommendations, instructions, and/or operating manual, with any modifications deemed necessary by the permittee. The dry filtration system shall be employed during all periods of coating application to control particulate emissions.

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B. Operational Restrictions

1. The total OC input from coatings, thinners, and clean up material usage for this emissions unit shall not exceed 1,400,000 pounds based upon a rolling 12-month summation. The permittee has existing coating, thinner, and clean up material usage records and therefore does not need to be limited in the first year on a monthly basis.
2. The permanent total enclosure shall be maintained under negative pressure whenever the emissions unit is in operation. Negative pressure shall be visually monitored using streamers, plastic flow indicating strips, string, or other visually noticeable flow indicating device that shows the direction of air flow through each natural draft opening to be into the enclosure.
3. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time 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 when the emissions unit is in operation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit.
 - a. The company identification for each coating, thinner and cleanup material employed.
 - b. The volume, in gallons, of each coating, thinner and cleanup material employed.
 - c. The OC content of each coating, thinner and cleanup material, in pounds per gallon as applied.
 - d. The total OC input rate for all coatings, thinners and cleanup materials, in pounds per month (b x c).
 - e. The controlled OC emission rate for all coatings, thinners and cleanup materials, in pounds per month. The controlled OC emission rate shall be calculated using the capture efficiency (CAP) and the destruction and removal efficiency (DRE) based on the results of the most recent performance test that demonstrated the emissions unit was in compliance (d x (1- (CAP x DRE))).
2. The permittee shall collect and record the following information each month for

Emissions Unit ID: **K001**

emissions units K001, K003, and P001 combined:

- a. The company identification for each coating, thinner and cleanup material employed.
 - b. The volume, in gallons, of each coating, thinner and cleanup material employed.
 - c. The OC content of each coating, thinner and cleanup material, in pounds per gallon, as applied.
 - d. The total uncontrolled OC emission rate for all coatings, thinners and cleanup materials, in pounds per month (b x c).
 - e. The controlled OC emissions rate for all coatings, thinners and cleanup materials where the uncontrolled emissions are captured and vented to the thermal oxidizer, in pounds per month (calculated according to the procedures identified in C.1.e).
 - f. The actual individual OC emissions rate for all coatings, thinners and cleanup materials, in tons $((d - e)/2,000 \text{ lbs/ton})$
 - g. The rolling twelve month total individual OC emissions from all coatings, thinners and cleanup materials employed, in TPY (the sum of the actual emissions (f) for the previous 12 months).
3. The permittee shall collect and record the following information each month for all materials containing any HAP in emissions units K001, K003, and P001 combined:
- a. The company identification for each coating, thinner and cleanup material employed that contains any HAP.
 - b. The identification of each individual HAP contained in each material applied that contains HAP.
 - c. The individual HAP content of each coating, thinner and cleanup material, in pounds per gallon, as applied.
 - d. The volume, in gallons, of each coating, thinner and cleanup material employed that contains any HAP.
 - e. The total uncontrolled individual HAP emission rate for all coatings, thinners and

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- cleanup materials, in pounds per month (c x d).
- f. The controlled individual HAP emissions rate for all coatings, thinners and cleanup materials where the uncontrolled emissions are captured and vented to the thermal oxidizer, in pounds per month (calculated according to the procedures identified in C.1.e)
 - g. The actual individual HAP emissions rate for all coatings, thinners and cleanup materials, in tons $((e - f)/2,000 \text{ lbs/ton})$.
 - h. The rolling twelve month total individual HAP emissions from all coatings, thinners and cleanup materials employed, in TPY (the sum of the actual emissions (g) for the previous 12 months).
4. The permittee shall collect and record the following information each month for all materials containing any HAP in emissions units K001, K003, and P001 combined:
- a. The company identification for each coating, thinner and cleanup material employed that contains any HAP.
 - b. The combined HAP content of each coating, thinner and cleanup material, in pounds per gallon, as applied.
 - c. The volume, in gallons, of each coating, thinner and cleanup material employed that contains any HAP.
 - d. The total uncontrolled combined HAP emission rate for all coatings, thinners and cleanup materials, in pounds per month (c x d).
 - e. The calculated, controlled combined HAP emissions rate for all coatings, thinners and cleanup materials where the uncontrolled emissions are captured and vented to the thermal oxidizer, in pounds per month (calculated according to the procedures identified in C.1.e).
 - f. The actual combined HAP emissions rate for all coatings, thinners and cleanup materials, in tons $((e - f)/2,000 \text{ lbs/ton})$
 - g. The rolling twelve month total individual HAP emissions from all coatings, thinners and cleanup materials employed, in TPY (the sum of the actual emissions (g) for the previous 12 months).

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5. The permittee shall install, operate, and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and calculate the average combustion temperature within the thermal oxidizer, each of the eight, 3-hour blocks of time during each day of operation, and shall record and maintain the following information each day:
 - a. all 3-hour blocks of time, when the emissions unit was in operation, during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance; and
 - b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring equipment, and the associated emissions unit.

These records shall be maintained at the facility for a period of three years.

6. The permittee shall perform daily inspections of the permanent total enclosure to ensure that the following conditions are being maintained when the emissions unit is in operation:
 - a. all access doors and windows that are not natural draft openings are closed; and
 - b. the direction of air at each natural draft opening is inward, as shown by streamers, smoke tubes, tracer gases, and/or other air flow monitoring devices.

Records shall be maintained of the results of each daily inspection and shall include any corrective actions taken by the permittee.

7. The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry filtration system with any modifications deemed necessary by the permittee during the time period in which the dry filtration system is utilized. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon

Emissions Unit ID: **K001**

request.

8. The permittee shall conduct periodic inspections of the dry filtration system to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee. The periodic inspections of the dry filtration system shall be performed at a frequency that is based upon the recommendation of the manufacturer, and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency. In addition to these periodic inspections, the permittee shall conduct a comprehensive inspection of the dry filtration system, not less than once each calendar year, while the emissions unit is shut down; and shall perform any needed maintenance and repair for the control device to ensure that it is operated in accordance with the manufacturer's recommendations.

The permittee shall document each inspection of the dry filtration system by maintaining a record that includes the date of the inspection, a description of each problem identified and the date it was corrected, a description of the maintenance and repairs performed, and the name of the person who performed the inspection. These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

9. In the event that the dry filtration system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee, the dry filtration system shall be expeditiously repaired or otherwise returned to operation in accordance with such requirements. The permittee shall maintain a record of those periods when the dry filtration system is not operating in accordance with such requirements. These records shall be maintained at the facility for not less than five years from the date of completion and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
10. The permit to install for emissions units K001 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level

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concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "**X**" hours per day and "**Y**" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$\text{TLV}/10 \times 8/\text{X} \times 5/\text{Y} = 4 \text{ TLV}/\text{XY} = \text{MAGLC}$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: toluene (ethylbenzene, glycol ethers, methanol, methyl isobutyl ketone, methyl ethyl ketone, stoddard solvent, xylene)
 TLV (mg/m³): 188.4

Emissions Unit ID: **K001**

Maximum Hourly Emission Rate (lbs/hr): 11.4

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2,166

MAGLC (ug/m3): 4,486

The permittee, has demonstrated that emissions of toluene, from emissions unit K001 is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

11. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

Emissions Unit ID: **K001**

12. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
 - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
13. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:
 - a. all exceedances of the rolling, 12-month coating, thinner and clean up material usage limitation;
 - b. all exceedances of the rolling 12-month OC emissions limitation from emissions units K001, K003 and P001;

Emissions Unit ID: **K001**

- c. all exceedances of the rolling, 12-month individual HAP emission limitation for each HAP for all the coatings, thinners, additives, and cleanup materials employed;
- d. all exceedances of the rolling, 12-month total combined HAPs emission limitation for all the coatings, thinners, additives, and cleanup materials employed;
- e. all periods of time during which the air flow indicating strips or other flow indicating device, at any natural draft opening, showed no air flow or air flow in a direction leaving the enclosure; and
- f. the date and length of time the dry filtration system was not in service during coating application.

These reports shall include a description of the deviation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted as required in the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the thermal oxidizer during the operation of the emissions unit(s):
 - a. each period of time when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;
 - b. an identification of each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
 - c. an identification of each incident of deviation described in "a" where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - d. an identification of each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s).

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

3. The permittee shall submit annual reports to the Director (the appropriate Ohio EPA

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District Office or local air agency) for this emissions unit that specify:

- a. The weight, in pounds, of all coating, thinner and clean up material used.
- b. The total OC emissions, in tons, from all coatings, thinner and clean up material used.

These reports shall be submitted by April 15 of each year and shall cover the previous calendar year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

4. The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

E. Testing Requirements

1. Compliance with the emissions limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:
The OC emissions from this emissions unit shall not exceed 22.8 lbs/hour.

Applicable Compliance Method:

Compliance shall be based upon the maximum hourly coating usage (91.3 gallons/hour) multiplied by 5.0 lbs OC/gallon coating (456.5 lbs OC/hour) and 95% overall control efficiency for the permanent total enclosure and thermal oxidizer.

- b. Emission Limitation:
The OC emissions from this emissions unit shall not exceed 35.0 TPY.

Applicable Compliance Method:

Compliance shall be based upon record keeping as specified in C.1 and shall be the sum of the monthly OC emissions rates for the 12 months of each calendar year.

- c. Emission Limitation:

Emissions Unit ID: K001

The combined OC emissions from emissions units K001, K003, and P001, shall not exceed 58.6 TPY based upon a rolling 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon record keeping as specified in C.2. and shall be sum of the monthly OC emissions rates for the previous 12 months.

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- d. Emission Limitation:
The individual HAP emissions from emissions units K001, K003, and P001 shall not exceed 9.9 TPY.

Applicable Compliance Method:

Compliance shall be based upon record keeping as specified in C.3. and shall be sum of the monthly individual HAP emissions rates for the previous 12 months.

- e. Emission Limitation:
The combined HAP emissions from emissions units K001, K003, and P001 shall not exceed 24.9 TPY based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon record keeping as specified in C.4. and shall be sum of the monthly combined HAP emissions rates for the previous 12 months.

- f. Emission Limitation:
The total OC input from coatings, thinners, and clean up material usage for this emissions unit shall not exceed 1,400,000 pounds based upon a rolling 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon record keeping as specified in C.1 and shall be the sum of the monthly OC usage rates for the previous 12 months.

- 2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 12 months after issuance of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the 95% overall control efficiency or less than 15 parts per million by volume, as propane, on a dry basis, limitation for OC emissions.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

U.S. EPA Reference Method 25A of 40 CFR Part 60, Appendix A.

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Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be

Emissions Unit ID: **K003**

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

F. Miscellaneous Requirements

1. This PTI is a modification PTI 08-2646 for emissions unit K001 and represents a reduction in allowable OC emissions from 40 TPY to 35 TPY. This PTI also includes federally enforceable restrictions of the potential to emit for emissions unit K001 that were previously only included in PTI 08-04088 as facility restrictions.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (K003) - Cell 13 coating line with 5 paint spray booths and thermal oxidizer (Modification)

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>The organic compound (OC) emissions from this emissions unit shall not exceed 5.6 pounds per hour and 20.0 tons per year (TPY), including cleanup.</p> <p>See A.2.a, A.2.b, A.2.c, B.1, and B.2.</p>
OAC rule 3745-31-05(C) OAC rule 3745-35-07(B) (Synthetic minor to avoid Title V and MACT)	<p>The combined OC emissions from emissions units K001, K003, and P001, shall not exceed 58.6 TPY based upon a rolling 12-month summation.</p> <p>The individual hazardous air pollutant (HAP) emissions from emissions units K001, K003, and P001 shall not exceed 9.9 TPY and combined HAP emissions shall not exceed 24.9 TPY based upon a rolling, 12-month summation.</p> <p>See A.2.d.</p>

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OAC rule 3745-21-07	The emissions limitations established pursuant to this rule are less stringent than the limitations established according to OAC rule 3745-31-05(A)(3). See A.2.e.
OAC rule 3745-17-11(C)	See A.2.e.
OAC rule 3745-114 and ORC 3704.03(F)(4)(c)	See C.10, C.11, C.12 and C.13 and D.4.

2. Additional Terms and Conditions

- 2.a** The 5.6 pounds OC/hour limitation was established for PTI purposes to reflect the potential to emit for the emission unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.b** Based on a site specific engineering judgement the overall OC capture efficiency for this emissions is assumed to be greater than 90% by weight. Enclosing the coating operation, with air flow inward through all natural draft openings (NDOs) of the enclosure will be accepted as a demonstration of negative pressure and 90% capture by weight.
- 2.c** The OC emissions capture and control system on this emissions unit shall achieve an overall control efficiency 85.5% by weight or the total OC concentration at the outlet shall be less than 15 parts per million by volume, as propane, on a dry basis, which ever is less stringent. The common CTO is shared with emissions units K001 and K003.
- 2.d.** The allowable OC, individual HAP, and combined HAP emission rates, as a 12-month rolling limit includes emissions unit P001 permitted under PTI 08-02646.
- 2.e** This emissions unit is subject to OAC rule 3745-21-07(M)(3)(d)(viii) effective February 18, 2008. However, the OC emissions limitations of OAC rule 3745-21-07(G) when applying photochemically reactive coatings are still federally enforceable and will not cease to be effective when U.S. EPA approves the revisions as part of the State Implementation Plan (SIP) for ozone. The emissions limitations established according to OAC rule 3745-31-05(A)(3) are more stringent than the emissions limitations established previously by OAC rule 3745-21-07(G)(2) or subsequently by OAC rule 3745-21-07(M)(3)(d)(viii).
- 2.f** The permittee shall operate the dry particulate filter system for the coating

Emissions Unit ID: **K003**

operations in accordance with the manufacturer's recommendations, instructions, and/or operating manual, with any modifications deemed necessary by the permittee. The dry filtration system shall be employed during all periods of coating application to control particulate emissions.

B. Operational Restrictions

1. The total OC input from coatings, thinners, and clean up material usage for this emissions unit shall not exceed 276,000 pounds based upon a rolling 12-month summation. The permittee has existing coating, thinner, and clean up material usage records and therefore does not need to be limited in the first year on a monthly basis.
2. All of the coating booths and ovens shall be enclosed and vented to a thermal oxidizer for the control of OC emissions. The enclosure serving this emissions unit shall be maintained under negative pressure whenever this emissions unit is in operation.
3. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time 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 when the emissions unit is in operation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit.
 - a. The company identification for each coating, thinner and cleanup material employed.
 - b. The volume, in gallons, of each coating, thinner and cleanup material employed.
 - c. The OC content of each coating, thinner and cleanup material, in pounds per gallon as applied.
 - d. The total OC input rate for all coatings, thinners and cleanup materials, in pounds per month (b x c).
 - e. The controlled OC emission rate for all coatings, thinners and cleanup materials, in pounds per month. The controlled OC emission rate shall be calculated using the assumed 90% capture efficiency and the destruction and removal efficiency

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(DRE) based on the results of the most recent performance test that demonstrated the emissions unit was in compliance ($d \times (1 - (0.9 \times \text{DRE}))$).

2. The permittee shall collect and record the following information each month for emissions units K001, K003, and P001 combined:
 - a. The company identification for each coating, thinner and cleanup material employed.
 - b. The volume, in gallons, of each coating, thinner and cleanup material employed.
 - c. The OC content of each coating, thinner and cleanup material, in pounds per gallon, as applied.
 - d. The total uncontrolled OC emission rate for all coatings, thinners and cleanup materials, in pounds per month ($b \times c$).
 - e. The controlled OC emission rate for all coatings, thinners and cleanup materials, in pounds per month (calculated according to the procedures identified in C.1.e).
 - f. The actual individual OC emissions rate for all coatings, thinners and cleanup materials, in tons ($(d - e)/2,000 \text{ lbs/ton}$)
 - g. The rolling twelve month total individual OC emissions from all coatings, thinners and cleanup materials employed, in TPY (the sum of the actual emissions (f) for the previous 12 months).

3. The permittee shall collect and record the following information each month for all materials containing any HAP in emissions units K001, K003, and P001 combined:
 - a. The company identification for each coating, thinner and cleanup material employed that contains any HAP.
 - b. The identification of each individual HAP contained in each material applied that contains HAP.
 - c. The individual HAP content of each coating, thinner and cleanup material, in pounds per gallon, as applied.
 - d. The volume, in gallons, of each coating, thinner and cleanup material employed that contains any HAP.

Emissions Unit ID: **K003**

- e. The total uncontrolled individual HAP emission rate for all coatings, thinners and cleanup materials, in pounds per month (c x d).
 - f. The controlled individual HAP emissions rate for all coatings, thinners and cleanup materials where the uncontrolled emissions are captured and vented to the thermal oxidizer, in pounds per month (calculated according to the procedures identified in C.1.e).
 - g. The actual individual HAP emissions rate for all coatings, thinners and cleanup materials, in tons ((e - f)/2,000 lbs/ton).
 - h. The rolling twelve month total individual HAP emissions from all coatings, thinners and cleanup materials employed, in TPY (the sum of the actual emissions (g) for the previous 12 months).
4. The permittee shall collect and record the following information each month for all materials containing any HAP in emissions units K001, K003, and P001 combined:
- a. The company identification for each coating, thinner and cleanup material employed that contains any HAP.
 - b. The combined HAP content of each coating, thinner and cleanup material, in pounds per gallon, as applied.
 - c. The volume, in gallons, of each coating, thinner and cleanup material employed that contains any HAP.
 - d. The total uncontrolled combined HAP emission rate for all coatings, thinners and cleanup materials, in pounds per month (c x d).
 - f. The calculated, controlled combined HAP emissions rate for all coatings, thinners and cleanup materials where the uncontrolled emissions are captured and vented to the thermal oxidizer, in pounds per month (calculated according to the procedures identified in C.1.e).
 - g. The actual combined HAP emissions rate for all coatings, thinners and cleanup materials, in tons ((e - f)/2,000 lbs/ton)
 - h. The rolling twelve month total individual HAP emissions from all coatings, thinners and cleanup materials employed, in TPY (the sum of the actual

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emissions (g) for the previous 12 months).

5. The permittee shall install, operate, and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and calculate the average combustion temperature within the thermal oxidizer, each of the eight, 3-hour blocks of time during each day of operation, and shall record and maintain the following information each day:
 - a. all 3-hour blocks of time, when the emissions unit was in operation, during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance; and
 - b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring equipment, and the associated emissions unit.

These records shall be maintained at the facility for a period of three years.

6. The permittee shall perform daily inspections of the capture system and maintain a log of the results of each daily inspection that includes the downtime for the capture system when the when the emissions unit is in operation and any corrective actions taken by the permittee. The inspection shall include but not be limited to verification of inward flow into the enclosure as visually determined using streamers, plastic flow indicating strips, or other visually noticeable flow indicating device.
7. The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry filtration system with any modifications deemed necessary by the permittee during the time period in which the dry filtration system is utilized. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
8. The permittee shall conduct periodic inspections of the dry filtration system to

Emissions Unit ID: **K003**

determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee. The periodic inspections of the dry filtration system shall be performed at a frequency that is based upon the recommendation of the manufacturer, and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency. In addition to these periodic inspections, the permittee shall conduct a comprehensive inspection of the dry filtration system, not less than once each calendar year, while the emissions unit is shut down; and shall perform any needed maintenance and repair for the control device to ensure that it is operated in accordance with the manufacturer's recommendations.

The permittee shall document each inspection of the dry filtration system by maintaining a record that includes the date of the inspection, a description of each problem identified and the date it was corrected, a description of the maintenance and repairs performed, and the name of the person who performed the inspection. These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

9. In the event that the dry filtration system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee, the dry filtration system shall be expeditiously repaired or otherwise returned to operation in accordance with such requirements. The permittee shall maintain a record of those periods when the dry filtration system is not operating in accordance with such requirements. These records shall be maintained at the facility for not less than five years from the date of completion and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
10. The permit to install for emissions units K003 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic

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Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: glycol ethers (propylene glycol methyl ether)
 TLV (mg/m³): 843.7
 Maximum Hourly Emission Rate (lbs/hr): 5.6
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1,058
 MAGLC (ug/m³): 20,009

Emissions Unit ID: **K003**

The permittee, has demonstrated that emissions of glycol ethers, from emissions unit K003 is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

11. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
 - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

12. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

Emissions Unit ID: **K003**

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
13. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:
 - a. all exceedances of the rolling, 12-month coating, thinner and clean up material usage limitation.
 - b. all exceedances of the rolling 12-month OC emissions limitation from emissions units K001, K003 and P001.
 - c. all exceedances of the rolling, 12-month individual HAP emission limitation for each HAP for all the coatings, thinners, additives, and cleanup materials employed; and

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- d. all exceedances of the rolling, 12-month total combined HAPs emission limitation for all the coatings, thinners, additives, and cleanup materials employed.
- e. the date and length of time the OC capture system was not in operation.
- f. the date and length of time the dry filtration system was not in service during coating application.

These reports shall include a description of the deviation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted as required in the General Terms and Conditions of this permit.

- 2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the thermal oxidizer during the operation of the emissions unit(s):
 - a. each period of time when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;
 - b. an identification of each incident of deviation described in "a" (above) where a prompt investigation was not conducted;
 - c. an identification of each incident of deviation described in "a" where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - d. an identification of each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s).

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

- 3. The permittee shall submit annual reports to the Director (the appropriate Ohio EPA District Office or local air agency) for this emissions unit that specify:
 - a. The weight, in pounds, of all coating, thinner and clean up material used.
 - b. The total OC emissions, in tons, from all coatings, thinner and clean up material used.

Emissions Unit ID: **K003**

These reports shall be submitted by April 15 of each year and shall cover the previous calendar year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

4. The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

E. Testing Requirements

1. Compliance with the emissions limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

The OC emissions from this emissions unit shall not exceed 5.6 lbs/hour.

Applicable Compliance Method:

Compliance shall be based upon the maximum hourly coating usage (24 gallons/hour) multiplied by 1.6 lbs OC/gallon coating (38.4 lbs OC/hour) and 85.5% overall control efficiency (90% capture and 95% destruction efficiency) for the OC capture system and thermal oxidizer.

- b. Emission Limitation:

The OC emissions from this emissions unit shall not exceed 20.0 TPY.

Applicable Compliance Method:

Compliance shall be based upon record keeping as specified in C.1 and shall be the sum of the monthly OC emissions rates for the 12 months of each calendar year.

- c. Emission Limitation:

The combined OC emissions from emissions units K001, K003, and P001, shall not exceed 58.6 TPY based upon a rolling 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon record keeping as specified in C.2. and shall

Emissions Unit ID: **K003**

be sum of the monthly OC emissions rates for the previous 12 months.

- d. Emission Limitation:
The individual HAP emissions from emissions units K001, K003, and P001 shall not exceed 9.9 TPY.

Applicable Compliance Method:

Compliance shall be based upon record keeping as specified in C.3. and shall be sum of the monthly individual HAP emissions rates for the previous 12 months.

- e. Emission Limitation:
The combined HAP emissions from emissions units K001, K003, and P001 shall not exceed 24.9 TPY based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon record keeping as specified in C.4. and shall be sum of the monthly combined HAP emissions rates for the previous 12 months.

- f. Emission Limitation:
The total OC input from coatings, thinners, and clean up material usage for this emissions unit shall not exceed 276,000 pounds based upon a rolling 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon record keeping as specified in C.1 and shall be the sum of the monthly OC usage rates for the previous 12 months.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- The emission testing shall be conducted within 12 months after issuance of this permit.
 - The emission testing shall be conducted to demonstrate compliance with the 85.5% overall control efficiency or less than 15 parts per million by volume, as propane, on a dry basis, limitation for OC emissions.
 - The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

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U.S. EPA Reference Method 25A of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The destruct and removal efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

F. Miscellaneous Requirements

Emissions Unit ID: **K003**

1. This PTI is a modification PTI 08-04088 for emissions unit K003 and represents a reduction in allowable OC emissions from 25.29 TPY to 20 TPY. The emissions reduction was achieved by removing the mask washers from this emissions and increasing the capture efficiency of the remaining spray booths to 90%. This PTI also includes federally enforceable restrictions of the potential to emit for emissions unit K003 that were previously included in PTI 08-04088 as facility restrictions.

Emissions Unit ID: K003

SIC CODE 3079 SCC CODE 4-02-002-10 EMISSIONS UNIT ID K001
 EMISSIONS UNIT DESCRIPTION Quad Paint Line with 4 paint cells and 6 spray stations per cell with thermal oxidizer
 DATE INSTALLED 06/1993

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds		22.8 lbs/hour	30.0	22.8 lbs/hour	30.0
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

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

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

Permanent Total Enclosure and a thermal oxidizer.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

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

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? XX YES _____ NO _____

IDENTIFY THE AIR CONTAMINANTS: toluene

Florida Production Engineering
PTI Application: 08-04927
Issued: To be entered upon final issuance

Facility ID: 0819100218

Emissions Unit ID: **K003**

SIC CODE 3079 SCC CODE 4-02-002-10 EMISSIONS UNIT ID K003
 EMISSIONS UNIT DESCRIPTION Cell 13 coating line with 5 paint spray booths and thermal oxidizer
 DATE INSTALLED 01/2000

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds		5.8 lbs/hour	20.0	5.8 lbs/hour	20.0
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

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

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

90% capture and 95% destruction and removal efficiency for OC

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

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

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? XX YES NO

IDENTIFY THE AIR CONTAMINANTS: glycol ethers