



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION
MONTGOMERY COUNTY**

CERTIFIED MAIL

Street Address:

50 West Town Street, Suite 700

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

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

Application No: 08-04406

Fac ID: 0857040018

DATE: 7/5/2007

Delphi Automotive Systems LLC-Needmore
Deborah Avery
PO Box 1042 1515 Cincinnati St. M/C D-112C
Dayton, OH 45401

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

Sincerely,

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

CC: USEPA

RAPCA



**Permit To Install
Terms and Conditions**

**Issue Date: 7/5/2007
Effective Date: 7/5/2007**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 08-04406

Application Number: 08-04406
Facility ID: 0857040018
Permit Fee: **\$250**
Name of Facility: Delphi Automotive Systems LLC-Needmore
Person to Contact: Deborah Avery
Address: PO Box 1042 1515 Cincinnati St. M/C D-112C
Dayton, OH 45401

Location of proposed air contaminant source(s) [emissions unit(s)]:
**3100 Needmore Rd
Dayton, Ohio**

Description of proposed emissions unit(s):
administrative modification to remove hourly VOC limit on P105.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

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

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to

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the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

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

2. Scheduled Maintenance/Malfunction Reporting

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

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

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

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

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7. Fees

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

8. Federal and State Enforceability

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

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

- iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit-To-Operate Application

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

11. Best Available Technology

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

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12. Air Pollution Nuisance

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

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13. Permit-To-Install

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

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

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

3. Permit Transfers

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

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of

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

5. Construction of New Sources(s)

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

6. Public Disclosure

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

7. Applicability

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

8. Construction Compliance Certification

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

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

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

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

C. Permit-To-Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
Organic Compounds	16.3
Single HAP	9.9
Combined HAP	24.9

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Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

1. The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 tons per rolling, 12-month period for any single HAP and 24.9 tons per rolling, 12-month period for any combination of HAPs. [Authority: OAC rule 3745-31-05(C)]
2. The permittee shall collect and record the following information each month for the entire facility:
 - a. The total quantity of No. 2 fuel oil burned, in gallons.
 - b. The total individual HAP emission rate for each HAP for burning No. 2 fuel oil calculated using emission factors from AP-42, Section 1.3 (September 1998), in tons per month.
 - c. The total combined HAP emission rate for burning No. 2 fuel oil (the sum of all the individual HAP emission rates from Section A.2.b above), in tons per month.
 - d. The total quantity of natural gas burned, in mmcf.
 - e. The total individual HAP emission rate for each HAP for burning natural gas calculated using emission factors from AP-42, Section 1.4 (July 1998), in tons per month.
 - f. The total combined HAP emission rate for burning natural gas (the sum of all the individual HAP emission rates from Section A.2.e above), in tons per month.
 - g. The name and identification number of each coating employed, as applied.
 - h. The individual HAP* content for each HAP of each coating employed in pounds of individual HAP per gallon of coating, as applied.
 - i. The total combined HAP content of each coating employed in pounds of combined HAPs per gallon of coating, as applied (sum all the individual HAP contents from h).

- j. The number of gallons of each coating employed.
 - k. The name and identification number of each cleanup material employed.
 - l. The individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material employed.
 - m. The total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material employed (sum all the individual HAP contents from l).
 - n. The number of gallons of each cleanup material employed.
 - o. The total individual HAP emissions for each HAP from all coatings and cleanup materials employed, in tons per month (for each HAP, the sum of h times j for each coating and the sum of l times n for each cleanup material).
 - p. The total combined HAP emissions from all coatings and cleanup materials employed, in tons per month (for each HAP, the sum of i times j for each coating and the sum of m times n for each cleanup material).
 - q. The total individual HAP emissions for each HAP from No. 2 fuel oil combustion, natural gas combustion, and all coatings and cleanup materials employed, in tons per rolling 12-month period (for each HAP, the sum of b, e and o).
 - r. The total combined HAP emissions from No. 2 fuel oil combustion, natural gas combustion, and all coatings and cleanup materials employed, in tons per rolling 12-month period (the sum of c, f and p).
- * A listing of the Hazardous Air Pollutants (HAPs) can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA District Office or local air agency contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line by line basis.
3. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
- a. An identification of each month during which the rolling, 12-month individual HAP emission rate exceeded 9.9 tons, and the actual rolling, 12-month emission rate for each individual HAP for each such month (for the entire facility).
 - b. An identification of each month during which the rolling, 12-month total combined HAP emission rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emission rate for each such month (for the entire

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facility).

These quarterly deviation (excursion) reports shall be submitted to the Director (RAPCA) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

4. The permittee shall submit annual reports which specify the individual HAP and total combined HAP emissions, in tons, from all emissions units at the facility. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.
5. Compliance with the emission limitations in Section A.2 above shall be determined in accordance with the following methods:
 - a. Emission Limitation-
9.9 tons for each individual HAP per rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section A.2 above.
 - b. Emission Limitation-
24.9 tons for all HAPs combined per rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section A.2 above.

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

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P104 - Epsilon Brake Shoe Bonding Prep Process - Adhesive Extrusion, controlled with a regenerative thermal oxidizer. (*Modification)	OAC rule 3745-31-05(A)(3)	0.36 lb/hr, organic compounds (OC), excluding cleanup
		8.55 lbs/day OC, excluding cleanup
		1.66 TPY OC, including cleanup
		See 2.and section A.II.1.
	OAC rule 3745-21-07(G)(2)	The emission limitation and control efficiency requirement specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The combined organic compound (OC) emissions from emissions units P104 and P116 shall be controlled through the application of a common regenerative thermal oxidizer (RTO) system, operating at a minimum of 95% overall OC control efficiency.
- 2.b The 0.36 lb/hr OC limitation was established to reflect potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/ or reporting requirements to ensure compliance with this limit.
- 2.c A permanent total enclosure (PTE) shall be constructed to totally enclose the application stations, coating reservoirs, and all areas from the application station

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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 shall be maintained under negative pressure whenever the emissions unit is in operation, and shall be designed and maintained to have an average facial velocity of air through each natural draft opening of at least 200 feet per minute (3,600 m/hr). Compliance with the average facial velocity shall be demonstrated during the compliance test, by either using an air flow monitor or a differential pressure gauge at each natural draft opening, and maintaining the required facial velocity or the corresponding negative pressure. The permanent total enclosure shall meet all of the following criteria if the capture efficiency of the enclosure and control device is to be assumed to be 100%:

- i. any natural draft opening shall be at least four equivalent opening diameters, or 4 times the diameter of the opening, from each OC emitting point;
 - ii. the total area of all natural draft openings shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling;
 - iii. the direction of air flow through all natural draft openings shall be into the enclosure, with an average facial velocity of no less than 200 feet per minute (3,600 m/hr) or a pressure drop of 0.013 mm Hg (0.007 in. water);
 - iv. all access doors and windows to the enclosure that do not meet the requirements of a natural draft opening and whose surface areas are not included in the 5 percent surface area determination in (ii), shall be completely closed to any air movement during process operations; and
 - v. all OC emissions shall be captured and contained for discharge through the control device.
- 2.d** The permanent total enclosure serving this emissions unit shall be maintained in such a manner as to meet the criteria established for a permanent total enclosure in 40 CFR, Part 51, Appendix M, Reference Method 204, and shall capture all of the OC emissions from this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. When the emissions unit is operating and venting to the thermal incinerator, 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 parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information for each day the emissions unit is operating and venting to the thermal incinerator:
 - 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 the emissions unit was in compliance.
 - b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall maintain daily records of the following information for this emissions unit:
 - a. The company identification of each material employed in this emissions unit.
 - b. The number of gallons of each adhesive material employed in this emissions unit.
 - c. The OC content of each adhesive material employed in this emissions unit, in pounds per gallon.
 - d. The OC emissions from all adhesive materials employed, in lbs/day [i.e. (b) x (c)].
 - e. The total controlled OC emission rate for all materials, in pounds or tons (i.e., calculated using the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance.)

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4. The permittee shall collect and record the following information for the purpose of determining annual OC emissions:
 - a. The name and identification of each cleanup material employed.
 - b. The OC content of each cleanup material, in pounds per gallon.
 - c. The number of gallons of each cleanup material employed.
 - d. The total OC emissions from all adhesive and cleanup materials employed, in pounds or tons [i.e. (b) x (c)].

5. The permittee shall measure, document/calculate, and maintain a permanent record of the following information for the permanent total enclosure, which may be the same record documented during the compliance test(s):
 - a. the measured diameter of each natural draft opening;
 - b. the distance measured from each natural draft opening to each OC emitting point;
 - c. the total calculated surface area of all natural draft openings and the surface area of the enclosure's four walls, floor, and ceiling;
 - d. the calculation or demonstration that the distance from each OC emitting point to each natural draft opening is at least 4 times the diameter of the opening; and
 - e. the calculation demonstrating that the sum of the surface areas of all of the natural draft openings to the enclosure is not more than 5 percent of the sum of the surface areas of the enclosure's four walls, floor, and ceiling.

6. The permittee shall install, operate, and maintain monitoring devices and a recorder that continuously monitor and record the differential pressure between the inside and outside of the permanent total enclosure when the emissions unit is in operation. The monitoring and recording devices shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day:

- a. all three-hour blocks of time during which the difference in pressure between the permanent total enclosure and the surrounding areas is not maintained at or above the minimum pressure differential of 0.007 inches of water, as a three-hour average; and
 - b. a log or record of downtime for the capture (collection) system when the emissions unit was in operation.
7. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer during operation of this emissions unit, including periods of startup and shutdown.

The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer on a daily basis.

Whenever the monitored value for the combustion temperature deviates from the value specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment to the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the combustion temperature reading immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable value for the average combustion temperature within the thermal oxidizer for all 3-hour blocks of time, when the emissions unit was in operation, is 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

This value is effective for the duration of this permit, unless revisions are requested by

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the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the value based upon information obtained during future OC emission tests that demonstrate compliance with the allowable OC emission rate for this emissions unit. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports in accordance with Part I Section A.1.c. of the General Terms and Conditions of this permit. The reports shall include the following information:
 - a. An identification of each day during which the organic compound emissions from the adhesive exceeded 8.55 lbs/day, and the actual organic compound emissions for each such day.
 - b. Identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.
 - c. An identification of all three-hour blocks of time, when the emissions unit was in operation, during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inches of water.
2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
 - a. each period of time when the combustion temperature within the thermal oxidizer was not equal to the acceptable value;
 - b. an identification of each incident of deviation described in (a) 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 combustion temperature into compliance with the acceptable value, was determined to be necessary and was not taken; and

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- 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.

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.

V. Testing Requirements

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

- a. Emission Limitation -

0.36 lb OC/hr, excluding cleanup

Applicable Compliance Method -

Compliance shall be determined by multiplying the maximum hourly coating usage of 1.59 gallons/hour times the maximum organic compound content of 4.47 lbs OC/gallon. The result is then multiplied by the minimum destruction efficiency of 95 percent (1.0 - 0.95).

- b. Emission Limitation -

8.55 lbs OC/day, excluding cleanup

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Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.3.

c. Emission Limitation -

1.66 TPY OC, including cleanup

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.3. and A.III.4. and shall be the sum of the OC emission rates for the calendar year, divided by 2000 lbs/ton.

2. Emission testing requirements

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 6 months of issuance of this permit.
- b. The emission testing shall be conducted to demonstrate compliance with the destruction efficiency limitation for organic compounds and the 100% capture efficiency requirement for the permanent total enclosure.
- c. 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.
- d. The destruction efficiency (ie., 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 OAC rule 3745-21-10. The test methods and procedures shall be based on a consideration of the potential presence of interfering gases.
- e. The emission testing shall be conducted to demonstrate compliance with the 100% capture efficiency requirement for the permanent total enclosure. The following test methods shall be employed:

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Method 204 from 40 CFR Part 51 Appendix M; and
Method 2 from 40 CFR Part 60, Appendix A.

- f. During the compliance demonstration for the permanent total enclosure, monitoring devices shall be installed to measure the average facial velocity of the air flow through each natural draft opening.
- g. Method 2 from 40 CFR Part 60, Appendix A shall be conducted to determine the volumetric flow rate of the exhaust stream(s) exiting the permanent total enclosure, corrected to standard conditions. If the building is being used as the permanent total enclosure, it may be necessary to measure the volumetric flow, corrected to standard conditions, of each gas stream entering the "enclosure" through a forced makeup air duct, using Method 2. The facial velocity (FV) shall be calculated using the following equation:

$$FV = (Q_o - Q_i) / A_n$$

where:

Q_o is the sum of the volumetric flow from all gas streams exiting the enclosure through an exhaust duct or hood;

Q_i is the sum of the volumetric flow from all gas streams into the enclosure through a forced makeup air duct, and is equal to zero if there is no forced makeup air into the enclosure; and

A_n is the total area of all natural draft openings in the enclosure.

- h. If the average facial velocity is measured at greater than 500 feet per minute (9,000 m/hr), the direction of air flow shall be assumed to be inward at all times during the compliance demonstration. If the average facial velocity is measured at less than 500 feet per minute, the continuous inward flow of air shall be verified at least once every 10 minutes for a minimum of 1 hour during the compliance demonstration, either by checking the flow or pressure meter(s) or through the use of streamers, smoke tubes, or tracer gases. All closed access doors and windows that are not considered natural draft openings shall also be checked once during the compliance demonstration for leakage around their perimeters using smoke tubes or tracer gases.
- i. The permittee shall also measure and record the following information for the

permanent total enclosure and each natural draft opening:

- i. the diameter of each natural draft opening;
 - ii. the distance measured from each natural draft opening to each OC emitting point in the process;
 - iii. the distance measured from each exhaust duct or hood in the enclosure to each natural draft opening;
 - iv. the total surface area of each natural draft opening and the surface area of the enclosure's four walls, floor, and ceiling; and
 - v. the ratio of the total surface area (sum) of all natural draft openings to the total surface area of the permanent total enclosure.
- j. Not later than 30 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).

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.

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.

VI. Miscellaneous Requirements

1. This permit supercedes the requirements of PTI 08-4208, issued January 16, 2001, and represents a reduction of OC emission by 0.12 TPY.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P104 - Epsilon Brake Shoe Bonding Prep Process - Adhesive Extrusion, controlled with a regenerative thermal oxidizer. (* Modification)	Compliance with Air Toxic Policy	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. The permit to install for this emissions unit (P104) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling

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for the "worst case" pollutant(s):

Pollutant: methyl ethyl ketone

TLV (mg/m³): 590

Maximum Hourly Emission Rate (lbs/hr): 4.75

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 36.11

MAGLC (ug/m³): 14,050

Pollutant: formaldehyde

TLV (mg/m³): 0.37

Maximum Hourly Emission Rate (lbs/hr): 0.16

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1.31

MAGLC (ug/m³): 6.5

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack

diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; 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

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P105 - Epsilon Brake Shoe Bonding Prep Process - Primer Coat Dip line (*Modification)	OAC rule 3745-31-05(A)(3)	2.02 lbs VOC/gallon primer, excluding water and exempt solvents, 12.98 TPY VOC
	OAC rule 3745-21-09(U)(1)(c)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. The permittee shall collect and record the following information monthly for the purpose of determining annual VOC emissions:
 - a. The name and identification of each primer employed.
 - b. The VOC content, in pounds per gallon primer, excluding water and exempt solvents, of each primer.

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- c. The number of gallons (excluding water and exempt solvents) of each primer employed.
- d. The total VOC emissions from all primers employed, in pounds or tons.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly 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.
2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each 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 in accordance with OAC rule 3745-78-02(A).

V. Testing Requirements

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

- a. Emission Limitation -

2.02 lbs VOC/gallon primer, excluding water and exempt solvents

Applicable Compliance Method -

The permittee shall demonstrate compliance based upon the record keeping specified in Section A.III.1. USEPA Method 24 shall be used to determine the VOC contents for coatings. If, pursuant to Section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

- b. Emissions Limitation-

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12.98 tons/yr of VOC

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in section A.III.1. and shall be the sum of the 12 monthly VOC emission rates for the calendar year.

Delph

PTI A

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VI. Miscellaneous Requirements

1. * ***This is an administrative modification to PTI 08-04406 and represents no increase of emissions. PTI 08-04406 issued July 11, 2002*** superceded the requirements of PTI 08-4208, issued January 16, 2001, and represented an increase of OC emissions by 12.90 TPY.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P105 - Epsilon Brake Shoe Bonding Prep Process - Primer Coat Dip line (*Modification)	Compliance with Air Toxics Policy	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. The permit to install for this emissions unit (P105) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

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Pollutant: phenol

TLV (mg/m³): 19.24

Maximum Hourly Emission Rate (lbs/hr): 0.055

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 0.83

MAGLC (ug/m³): 458

Pollutant: formaldehyde

TLV (mg/m³): 0.37

Maximum Hourly Emission Rate (lbs/hr): 0.0065

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 0.095

MAGLC (ug/m³): 6.5

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; 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.).

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If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

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3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; 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

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P116 - Epsilon Brake Shoe Bonding Prep Process - Adhesive Extrusion, controlled with a regenerative thermal oxidizer.	OAC rule 3745-31-05(A)(3)	0.36 lb/hr, organic compounds (OC), excluding cleanup 8.55 lbs/day OC, excluding cleanup 1.66 TPY OC, including cleanup See 2.a. and section A.II.1.
	OAC rule 3745-21-07(G)(2)	The emission limitation and control efficiency requirement specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The organic compound (OC) emissions from this emissions unit, shall be controlled through the application of a regenerative thermal oxidizer (RTO) system, operating at a minimum of 95% overall OC removal/destruction efficiency.
- 2.b The 0.36 lb/hr OC limitation was established to reflect potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/ or reporting requirements to ensure compliance with this limit.
- 2.c A permanent total enclosure (PTE) shall be constructed to totally enclose the application stations, coating reservoirs, and all areas from the application station

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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 shall be maintained under negative pressure whenever the emissions unit is in operation, and shall be designed and maintained to have an average facial velocity of air through each natural draft opening of at least 200 feet per minute (3,600 m/hr). Compliance with the average facial velocity shall be demonstrated during the compliance test, by either using an air flow monitor or a differential pressure gauge at each natural draft opening, and maintaining the required facial velocity or the corresponding negative pressure. The permanent total enclosure shall meet all of the following criteria if the capture efficiency of the enclosure and control device is to be assumed to be 100%:

- i. any natural draft opening shall be at least four equivalent opening diameters, or 4 times the diameter of the opening, from each OC emitting point;
 - ii. the total area of all natural draft openings shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling;
 - iii. the direction of air flow through all natural draft openings shall be into the enclosure, with an average facial velocity of no less than 200 feet per minute (3,600 m/hr) or a pressure drop of 0.013 mm Hg (0.007 in. water);
 - iv. all access doors and windows to the enclosure that do not meet the requirements of a natural draft opening and whose surface areas are not included in the 5 percent surface area determination in (ii), shall be completely closed to any air movement during process operations; and
 - v. all OC emissions shall be captured and contained for discharge through the control device.
- 2.d** The permanent total enclosure serving this emissions unit shall be maintained in such a manner as to meet the criteria established for a permanent total enclosure in 40 CFR, Part 51, Appendix M, Reference Method 204, and shall capture all of the OC emissions from this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. When the emissions unit is operating and venting to the thermal incinerator, 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 parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information for each day the emissions unit is operating and venting to the thermal incinerator:
 - 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 the emissions unit was in compliance.
 - b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall maintain daily records of the following information for this emissions unit:
 - a. The company identification of each material employed in this emissions unit.
 - b. The number of gallons of each adhesive material employed in this emissions unit.
 - c. The OC content of each adhesive material employed in this emissions unit, in pounds per gallon..
 - d. The OC emissions from all adhesive materials employed, in lbs/day [i.e. (b) x (c)].
 - e. The total controlled OC emission rate for all materials, in pounds or tons (i.e., calculated using the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance.)

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4. The permittee shall collect and record the following information for the purpose of determining annual OC emissions:
 - a. The name and identification of each cleanup material employed.
 - b. The OC content of each cleanup material, in pounds per gallon.
 - c. The number of gallons of each cleanup material employed.
 - d. The total OC emissions from all adhesive and cleanup materials employed, in pounds or tons [i.e. (b) x (c)].

5. The permittee shall measure, document/calculate, and maintain a permanent record of the following information for the permanent total enclosure, which may be the same record documented during the compliance test(s):
 - a. the measured diameter of each natural draft opening;
 - b. the distance measured from each natural draft opening to each OC emitting point;
 - c. the total calculated surface area of all natural draft openings and the surface area of the enclosure's four walls, floor, and ceiling;
 - d. the calculation or demonstration that the distance from each OC emitting point to each natural draft opening is at least 4 times the diameter of the opening; and
 - e. the calculation demonstrating that the sum of the surface areas of all of the natural draft openings to the enclosure is not more than 5 percent of the sum of the surface areas of the enclosure's four walls, floor, and ceiling.

6. The permittee shall install, operate, and maintain monitoring devices and a recorder that continuously monitor and record the differential pressure between the inside and outside of the permanent total enclosure when the emissions unit is in operation. The monitoring and recording devices shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day:

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- a. all three-hour blocks of time during which the difference in pressure between the permanent total enclosure and the surrounding areas is not maintained at or above the minimum pressure differential of 0.007 inches of water, as a three-hour average; and
 - b. a log or record of downtime for the capture (collection) system when the emissions unit was in operation.
7. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer on a daily basis.

Whenever the monitored value for the combustion temperature deviates from the value specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment to the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the combustion temperature reading immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable value for the average combustion temperature within the thermal oxidizer for all 3-hour blocks of time, when the emissions unit was in operation, is 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

This value is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or

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local air agency. The permittee may request revisions to the value based upon information obtained during future OC emission tests that demonstrate compliance with the allowable OC emission rate for this emissions unit. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports in accordance with Part I Section A.1.c. of the General Terms and Conditions of this permit. The reports shall include the following information:
 - a. An identification of each day during which the organic compound emissions from the adhesive exceeded 8.55 lbs/day, and the actual organic compound emissions for each such day.
 - b. Identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.
 - c. An identification of all three-hour blocks of time, when the emissions unit was in operation, during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inches of water.
2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
 - a. each period of time when the combustion temperature within the thermal oxidizer was not equal to the acceptable value;
 - b. an identification of each incident of deviation described in (a) 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 combustion temperature into compliance with the acceptable value, was determined to be necessary and was not taken; and
 - d. an identification of each incident of deviation described in (a) where proper

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records were not maintained for the investigation and/or the corrective action.

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.

V. Testing Requirements

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

- a. Emission Limitation -

0.36 lb OC/hr, excluding cleanup

Applicable Compliance Method -

Compliance shall be determined by multiplying the maximum hourly coating usage of 1.59 gallons/hour times the maximum organic compound content of 4.47 lbs OC/gallon. The result is then multiplied by the minimum destruction efficiency of 95 percent (1.0 - 0.95).

- b. Emission Limitation -

8.55 lbs OC/day, excluding cleanup

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Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.3.

c. Emission Limitation -

1.66 TPY OC, including cleanup

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.3. and A.III.4. and shall be the sum of the OC emission rates for the calendar year, divided by 2000 lbs/ton.

2. Emission testing requirements

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 ninety (90) days of startup of this operation.
- b. The emission testing shall be conducted to demonstrate compliance with the destruction efficiency limitation for organic compounds and the 100% capture efficiency requirement for the permanent total enclosure.
- c. 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.
- d. The destruction efficiency (ie., 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 OAC rule 3745-21-10. The test methods and procedures shall be based on a consideration of the potential presence of interfering gases.
- e. The emission testing shall be conducted to demonstrate compliance with the 100% capture efficiency requirement for the permanent total enclosure. The following test methods shall be employed:

Method 204 from 40 CFR Part 51 Appendix M; and
Method 2 from 40 CFR Part 60, Appendix A.

- f. During the compliance demonstration for the permanent total enclosure, monitoring devices shall be installed to measure the average facial velocity of the air flow through each natural draft opening.
- g. Method 2 from 40 CFR Part 60, Appendix A shall be conducted to determine the volumetric flow rate of the exhaust stream(s) exiting the permanent total enclosure, corrected to standard conditions. If the building is being used as the permanent total enclosure, it may be necessary to measure the volumetric flow, corrected to standard conditions, of each gas stream entering the "enclosure" through a forced makeup air duct, using Method 2. The facial velocity (FV) shall be calculated using the following equation:

$$FV = (Q_o - Q_i) / A_n$$

where:

Q_o is the sum of the volumetric flow from all gas streams exiting the enclosure through an exhaust duct or hood;

Q_i is the sum of the volumetric flow from all gas streams into the enclosure through a forced makeup air duct, and is equal to zero if there is no forced makeup air into the enclosure; and

A_n is the total area of all natural draft openings in the enclosure.

- h. If the average facial velocity is measured at greater than 500 feet per minute (9,000 m/hr), the direction of air flow shall be assumed to be inward at all times during the compliance demonstration. If the average facial velocity is measured at less than 500 feet per minute, the continuous inward flow of air shall be verified at least once every 10 minutes for a minimum of 1 hour during the compliance demonstration, either by checking the flow or pressure meter(s) or through the use of streamers, smoke tubes, or tracer gases. All closed access doors and windows that are not considered natural draft openings shall also be checked once during the compliance demonstration for leakage around their perimeters using smoke tubes or tracer gases.

- i. The permittee shall also measure and record the following information for the permanent total enclosure and each natural draft opening:
 - i. the diameter of each natural draft opening;
 - ii. the distance measured from each natural draft opening to each OC emitting point in the process;
 - iii. the distance measured from each exhaust duct or hood in the enclosure to each natural draft opening;
 - iv. the total surface area of each natural draft opening and the surface area of the enclosure's four walls, floor, and ceiling; and
 - v. the ratio of the total surface area (sum) of all natural draft openings to the total surface area of the permanent total enclosure.
- j. Not later than 30 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).

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.

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.

VI. Miscellaneous Requirements

None

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P116 - Epsilon Brake Shoe Bonding Prep Process - Adhesive Extrusion, controlled with a regenerative thermal oxidizer.	Compliance with Air Toxics Policy	

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. The permit to install for this emissions unit (P116) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: methyl ethyl ketone

TLV (mg/m³): 590

Maximum Hourly Emission Rate (lbs/hr): 4.75

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 36.11

MAGLC (ug/m³): 14,050

Pollutant: formaldehyde

TLV (mg/m³): 0.37

Maximum Hourly Emission Rate (lbs/hr): 0.16

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 1.31

MAGLC (ug/m³): 6.5

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; 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.).

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If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; 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

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None