☒ **Synthetic Minor Determination and/or** ☐ **Netting Determination**

Permit To Install: **08-04850**

A. Source Description

Emissions unit K003 consists of 2 roll coaters with dip tanks, a flexographic printing press, and drying oven used for the manufacture and production of sandpaper products. Emissions from the printer operations are uncontrolled and negligible. Emissions from coating operation and drying oven unit will be vented to the Anguil Environmental Systems regenerative thermal oxidizer. The capture efficiency will be 100% by use of a permanent total enclosure. A minimum of 95% destruction efficiency will be achieved by the regenerative thermal oxidizer. This PTI modification incorporates corrected coating usage data increasing the OC emissions from the emissions unit K003. There is only one other emissions unit currently at the facility, P001 (abrasive belt assembly; inline scuffing/gluing).

B. Facility Emissions and Attainment Status

Ali Industries is located Greene County which is currently non-attainment for ozone and PM2.5. The facility is currently not a major source of VOC emissions as defined by Title V or for MACT applicability (i.e., Subpart JJJJ). After implementing the use of new coating material reflected in this PTI, the facility will remain non major with respect to VOC. This synthetic minor PTI will require federally enforceable operating restrictions requiring use of permanent total enclosure and the oxidizer control system for K003, ensuring the HAP emissions are maintained below thresholds to prevent triggering Title V permitting requirements. The potential emissions from each emissions unit at the facility are listed in the Table 1.

C. Source Emissions

The PTE of total VOC for K003 is 18.9 lb/hr and 83.0 TPY before control. The total combined before control HAP PTE is greater than the 25 TPY threshold, and the individual PTE for both formaldehyde and phenol is greater than the 10 TPY threshold, that would trigger Title V permitting requirements. Ali Industries has requested federally enforceable operating restrictions requiring the use of permanent total enclosure and the oxidizer control system for K003 to ensure the HAP emissions are maintained below Title V thresholds to prevent triggering Title V permitting requirements. The after control PTE for K003 will be 0.95 lb/hr and 4.15 TPY. The prior annual emissions limitation for K003 contained in PTI 08-4712 was 1.12 TPY VOC. A net increase of 3.03 TPY VOC will result, which will be all HAPs when using the new coating.

D. Conclusion

This PTI will be issued as a synthetic minor containing federally enforceable requirements to ensure the HAP emissions for the facility are maintained below the Title V and MACT thresholds. It will require the use of a permanent total enclosure for the capture of emissions and the oxidizer system for destruction of emissions, limiting the emission rates of VOC to 4.15 TPY. These restrictions will insure the individual HAP emissions will be much less below 9.9 TPY and the combined HAP emissions will be much less than 24.9 TPY. Monthly monitoring, record keeping and quarterly deviation reporting will be required to monitor compliance. Therefore, through federally enforceable terms and conditions and record keeping requirements, Ali will not trigger major Title V permitting requirements for HAP emissions.

State of Ohio Environmental Protection Agency

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

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

Application No:
08-04850
Fac ID: 0829060557

DATE: 6/12/2007

Ali Industries, Inc
Chris Ali
611 Yellow Springs Road
Fairborn, OH 45324-7677

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 of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **$200** will be due. Please do not submit any payment now.

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

Sincerely,

Michael W. Ahern

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

CC: **USEPA** **RAPCA** **Miami Valley Regional Planning Commission** **KY** **IN**

DRAFT PERMIT TO INSTALL

08-04850

Application Number:	08-04850
Facility ID:	0829060557
Permit Fee:	**To be entered upon final issuance**
Name of Facility:	Ali Industries, Inc
Person to Contact:	Chris Ali
Address:	611 Yellow Springs Road Fairborn, OH 45324-7677

Location of proposed air contaminant source(s) [emissions unit(s)]:
747 East Xenia Drive
Fairborn, Ohio

Description of proposed emissions unit(s):
Chapter 13 modification replacing PTI 08-04712 issued 11/3/05 to reflect increase coating usage and emissions for K003.

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,

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

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

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

Pollutant	Tons Per Year
VOC	4.15
Single HAP	9.9
Combined HAPs	24.9

Emissions Unit ID: **K003**

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) - adhesive paper coating process with two roll coaters with dip tanks, a flexographic printer, and drying oven, with a permanent total enclosure and regenerative thermal oxidizer *Modification

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 0.95 pound per hour (lb/hr) and 4.15 tons per year (TPY). The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-21-09(F), 3745-21-09(B)(6) and 3745-21-09(Y). See Sections A.2.a. through e. below.
OAC rule 3745-31-05(C) (Synthetic Minor to avoid Title V)	The emissions of hazardous air pollutants (HAP) shall not exceed 9.9 TPY for a single HAP and 24.9 TPY for any combination of HAPs, based on a rolling 12-month summation.
OAC rule 3745-21-09(F)	In lieu of complying with the VOC content restriction specified by this rule, the permittee will employ a control system. See section A.2.b. below.
OAC rule 3745-21-09(B)(6)	The VOC capture and control efficiency requirements specified by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).
OAC 3745-21-09(Y)	The VOC content requirements specified by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3). See section A.2.e below.

2. Additional Terms and Conditions

2.a The 0.95 pound of VOC per hour limitation was established for PTI purposes to reflect the 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 limitation.

2.b The VOC emissions from this emissions unit shall be controlled through the application of a permanent total enclosure (PTE) to capture 100% of the emissions, and a regenerative thermal oxidizer system operating at a minimum of 95% destruction efficiency to achieve a minimum 95% overall (capture times destruction) VOC control efficiency (The most recent emissions testing that demonstrated compliance was conducted on January 11, 2007.).

2.c The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from the facility shall not exceed 9.9 TPY for a single HAP and 24.9 TPY for any combination of HAPs, based on a rolling 12-month summation.

2.d The permittee has the option to perform an additional demonstration to show that the PTE can not be compromised, under normal plant conditions, when the emissions unit is in operation (i.e., the air flow through the PTE to the control device was always maintained under negative pressure even when all additional egress points (non-natural draft openings) which could affect the PTE were opened) in lieu of installing, maintaining and operating monitoring device(s) and a recorder which simultaneously and continuously measures and records the average facial velocity or pressure differential across the PTE.

If the permittee elects not to perform the additional demonstration or the additional demonstration indicates that the PTE can be compromised, the permittee will be required to comply with the average facial velocity or differential pressure monitoring, record keeping, and reporting and testing requirements specified below (see Sections B.1, B.2.c, B.3, C.2, and D.1.c), to ensure the integrity of the PTE.

2.e The permittee operates a flexographic printer at the head of the paper coating line operation which is not part of the PTE. It is subject to OAC rule 3745-21-09 (Y) and the best available technology provisions of OAC rule 3745-31-05 (A)(3). The inks employed in this printer have a VOC content of 0.002 lb/lb ink, or 0.2 % by weight. The projected maximum annual VOC emissions associated with the flexographic printing have been determined to be 166 lbs per year (0.083 TPY). This satisfies the BAT requirement. Due to the trivial nature of this printing VOC record keeping and reporting requirements have been determined to not be necessary.

B. Operational Restrictions

Emissions Unit ID: **K003**

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

2. The permanent total enclosure shall be maintained under negative pressure whenever the emissions unit is in operation, and shall be designed, installed, maintained, and operated in accordance with 40 CFR Part 51, Appendix M, Method 204, whenever the emissions unit is in operation. The permanent total enclosure shall meet all of the following criteria :

a. Any natural draft opening shall be at least four equivalent opening diameters, or 4 times the diameter of the opening, from each VOC emitting point;

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

c. The direction of air flow through all natural draft openings shall be into the enclosure, with an average facial velocity through all natural draft openings being no less than 3,600 m/hr (200 fpm) corresponding to a pressure drop of 0.013 mm Hg (0.007 in.H2O);

d. All access doors and windows to the enclosure that do not meet the requirements of a natural draft opening and whose surface areas are not included in the 5 percent `surface area determination in (b) and are not included in the calculation in paragraph (c), shall be completely closed to any air movement during process operations; and

e. All VOC emissions shall be captured and contained for discharge through the control device.

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

3. The permanent total enclosure shall be maintained under negative pressure, at a

minimum pressure differential that is not less than 0.013 mm Hg (0.007 inch of water), as a 3-hour average, whenever the emissions unit is in operation.

4. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall be not less than 1500 degrees Fahrenheit, or not more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance (The most recent emissions testing that demonstrated compliance was conducted on January 11, 2007 with an average combustion chamber temperature of 1550 degrees Fahrenheit. The combustion chamber temperature reference is subject to revision if additional emissions tests are conducted that demonstrates the unit is in compliance.).

5. The thermal oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day for the coating line and control equipment:

a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit; and

b. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit is in operation, was less than 1500 degrees Fahrenheit, or 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.

2. The permittee shall record and maintain the following information on a daily basis:

a. The average facial velocity of the air flow through or the pressure differential

across the enclosure; and

b. All 3-hour blocks of time during which the permanent total enclosure was not maintained at or above the average facial velocity of 3,600 meters per hour (200 feet per minute) or the minimum pressure differential of 0.007 inch of water, as a 3-hour average.

3. 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 surface area of each natural draft opening;

b. The distance measured from each natural draft opening to each VOC 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 VOC 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.

4. The permittee shall collect and record the following information each month for this emission unit for the purpose of determining annual VOC emissions:

a. The name and company identification of each coating material employed;

b. The number of gallons of each coating material employed;

c. The VOC content of each coating material employed, in pounds per gallon;

d. The name and company identification of each cleanup material employed;

e. The number of gallons of each cleanup material employed;

f. The VOC content of each cleanup material employed, in pounds per gallon;

g. The total uncontrolled VOC usage rate (VOC input rate) for all coatings and cleanup employed [i.e., the summation of (b x c) + (e x f) for all materials], in tons; and

h. The total calculated controlled VOC emission rate for all coatings and cleanup materials, in tons [the controlled OC emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance i.e., (g) multiplied by a factor of (1 - the overall control efficiency)].

5. The permittee shall collect and record the following information each month for the entire facility for the purpose of determining the HAP* emissions:

a. The name and company identification of each coating material employed;

b. The individual HAP content for each HAP of each coating material employed, in pounds of individual HAP per gallon, as applied;

c. The total combined HAP content of each coating material employed, in pounds of combined HAP per gallon [i.e., the sum of individual HAP contents from (b)], as applied;

d. The number of gallons of each coating material employed;

e. The name and company identification of each cleanup material employed;

f. The individual HAP content for each HAP of each cleanup material employed, in pounds of individual HAP per gallon, as applied;

g. The total combined HAP content of each cleanup material employed, in pounds of combined HAP per gallon [i.e., the sum of individual HAP contents from (f)], as applied;

h. The number of gallons of each cleanup material employed;

i. The after control total individual HAP emissions for each HAP from all coating and cleanup materials employed [i.e., the summation of (b x d) + (f x h), multiplied by (1 - the overall control efficiency)], in tons;

j. The after control total combined HAP emissions from all coating and cleanup materials employed [i.e., the summation of © x d) + (g x h), multiplied by (1 - the

overall control efficiency)], in tons;

k. The rolling 12-month summation of the total individual HAP emissions for each HAP from all coating and cleanup materials [i.e., the rolling 12-month summation of (i)], in tons per year; and

l. The rolling 12-month summation of the total combined HAP emissions from all coating and cleanup materials [i.e., the rolling 12-month summation of (j)], in tons per year.

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

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

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

6. The permit to install for this emissions unit K003 was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Issued: To be entered upon final issuance

Pollutant: formaldehyde
TLV (mg/m3): 274.0
Maximum Hourly Emission Rate (lbs/hr): 0.32
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1.77
MAGLC (ug/m3): 6.52

Pollutant: phenol
TLV (mg/m3): 40,753
Maximum Hourly Emission Rate (lbs/hr): 0.63
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 348.5
MAGLC (ug/m3): 970.3

The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(b), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

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.).

D. Reporting Requirements

1. The permittee shall submit quarterly summary reports, in accordance with the General Terms and Conditions of this permit, that identify any of the following records when the emissions unit was in operation:

a. Any period of time in which a natural draft opening to the enclosure was located at a distance of less than four equivalent opening diameters, or less than 4 times the diameter of the opening, from any VOC emitting point;

b. Any period of time in which the total area of all natural draft openings exceeded 5 percent of the surface area of the enclosure's four walls, floor, and ceiling;

c. Any period of time in which the average facial velocity of the air flow into the enclosure was less than 3,600 meters per hour (200 feet per minute) or identify all 3-hour blocks of time during which the enclosure was not maintained at the minimum pressure differential of 0.013 mm Hg (0.007 inch of water), as a 3-hour average;

d. Any period of time in which an access door or window to the enclosure, that does not meet the requirements of a natural draft opening and whose surface area was not included in the 5 percent surface area determination, was not completely closed to air movement;

e. Any period of time in which any access doors or window was opened during process operations;

f. Any period of times in which less than 100% of the VOC emissions were captured for discharge through the control device or the control device was bypassed;

g. A summary which includes a log of the downtime for the capture (collection) system, control device, and monitoring equipment;

h. Identification of all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified in this permit; and

i. Identification of any exceedances of the HAPs emission limits.

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

These quarterly deviation reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter.

2. The permittee shall submit annual reports which specify the total tons per year of

volatile organic compound emissions from this emissions unit, the individual HAP emissions from the facility, and the combined HAPs emissions from the facility. These reports shall be submitted by January 31 of each year and shall cover for the previous calendar year.

3. The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

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

1. Emission Limitation-
The volatile organic compound emissions from this emissions unit shall not exceed 0.95 pound per hour (lb/hr).

Applicable Compliance Method-
Compliance shall be determined by multiplying the maximum coating usage rate of 631.5 lbs/hour (i.e., resin before thinning and fillers) multiplied by the worst case coating VOC content of 3% by weight, multiplied by the overall control efficiency of (1-0.95).

2. Emission Limitation-
The volatile organic compound emissions from this emissions unit shall not exceed 4.15 tons per year.

Applicable Compliance Method-
Compliance shall be determined by the record keeping as specified in Section C.4 of this permit.

3. Emission Limitation-
The emissions of hazardous air pollutants (HAP) shall not exceed 9.9 TPY for a single HAP and 24.9 TPY for any combination of HAPs, based on a rolling 12-month summation.

Applicable Compliance Method-
Compliance shall be determined by the record keeping as specified in Section C.5 of this permit.

4. Formulation data shall be used to determine the HAP contents of the coating and cleanup materials.

F. Miscellaneous Requirements

1. This is a modification to PTI 08-4712 issued on November 3, 2005 representing a change in coating material usage rate increasing VOC and HAP emissions. The terms and conditions of this PTI supercedes those of PTI 08-04712.