State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
FRANKLIN COUNTY

Street Address:
122 S. Front Street

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

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

Application No: 01-01297
Fac ID: 0125043094
DATE: 8/15/2006

Entrotech
Jim McGuire
1275 Kinnear Road
Columbus, OH 43212

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

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, 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.

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

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

CC: **USEPA** **CDO**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install	**Issue Date: 8/15/2006**
Terms and Conditions	**Effective Date: 8/15/2006**

FINAL PERMIT TO INSTALL 01-01297

Application Number:	01-01297
Facility ID:	0125043094
Permit Fee:	**$200**
Name of Facility:	Entrotech
Person to Contact:	Jim McGuire
Address:	1275 Kinnear Road Columbus, OH 43212

Location of proposed air contaminant source(s) [emissions unit(s)]:
1255 Kinnear Road
Columbus, **Ohio**

Description of proposed emissions unit(s):
Web cleaner, coating resin cartridge coater and natural gas fired drying oven.

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

Joseph P. Koncelik

Director

Part I - GENERAL TERMS AND CONDITIONS

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 quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. 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	12.4
HAP	9.8
HAPs	10.8

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	Applicable Rules/Requirements	OAC rule 3745-17-07(A)(1)OAC rule 3745-17-10(B)(1)
K001 - film coating line using a cartridge resin coater and 11.55 mmBtu/hr natural gas-fired drying oven controlled by a permanent total enclosure vented to an thermal oxidizer	OAC rule 3745-31-05(A)(3)	
		OAC rule 3745-18-06
		OAC rule 3745-21-08
		OAC rule 3745-23-06
	OAC rule 3745-31-05(C) (synthetic minor to avoid non-attainment NSR)	OAC rule 3745-21-07(B)
	OAC rule 3745-35-07(B) (synthetic minor to avoid TV)	
	OAC rule 3745-35-07(B) (synthetic minor to avoid MACT)	
	OAC rule 3745-21-07(G)(2)	

Applicable Emissions Limitations/Control Measures	
	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
Volatile Organic Compound (VOC) emissions from coating and cleanup operations shall not exceed 2.70 lbs/hr.	Part III.A.2.f.
	Part III.A.2.g.
	Part III.A.2.h.
	Part III.A.2.i.
See Part III.A.2.a below.	
The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C), and OAC rule 3745-35-07(B) .	**Exempt because natural gas is not a photochemically reactive material**.
See Part III.A.2.b,c,d and Part III.B.4,5 below.	
See Part III.A.2.c,d and Part III.B.4,5 below.	
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 The emission unit's 2.70 lbs VOC/remission limitation is based on the emission unit's potential to emit vented through the above referenced control equipment. Therefore, only the monitoring, record keeping and reporting requirements of the control equipment are necessary to ensure compliance with this emission limitation.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the NOx, CO, PE and SO2 from this air contaminant source since the uncontrolled potential to emit for NOx, CO, PE and SO2 is less than ten tons per year.

2.b VOC emissions from emission unit K001 coating and cleanup operations, combined, shall not exceed 11.9 tons per rolling, 12-month period.

2.c The total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emission unit K001 coating and cleanup operations, combined, shall not exceed 9.8 tons for any single HAP and 10.8 tons for any combination of HAPs, per rolling, 12-month period.

2.d Emissions from this emission unit when using non-water based coatings shall be controlled by a permanent total enclosure and vented to a thermal oxidizer (TO) with a destruction removal efficiency (DRE) of not less than 99.0%.

2.e The maximum process weight rate of emission unit K001 shall not exceed 302 pounds of coating per hour. The process weight rate of 302 pounds per hour is the unit's maximum capacity therefore, no monitoring, record keeping or reporting requirements is necessary.

2.f The maximum allowable amount of particulate emissions for any new or existing fuel burning equipment which is fired only with gaseous fuels, excluding blast furnace gas, and/or number two fuel shall be 0.020 pound per million Btu of actual heat input.

2.g Fuel burning equipment are exempt from paragraphs (D), (F), (G) of this rule during any calendar day in which natural gas having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pounds per million standard cubic feet is the only fuel burned.

2.h The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC paragraph 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 3745-31-05(A)(3) in this permit-to-install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, that rule revision was submitted to the USEPA as a revision to Ohio's State Implementation Plan(SIP); however, that rule revision has not yet been approved by the U.S. EPA. Therefore, until the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.i The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC paragraph 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 3745-31-05(A)(3) in this permit-to-install.

On February 14, 2005, OAC rule 3745-23-06 was rescinded and is no longer part of State regulations. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves Ohio's requested revision to the SIP, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

B. Operational Restrictions

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. An air flow monitor or a differential pressure gauge shall be installed at each natural draft opening to simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

2. 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 may be demonstrated by either using an air flow monitor or a differential pressure gauge at each natural draft opening, and maintaining the required facial velocity or a negative pressure at the corresponding pressure drop of 0.013mmHg (0.007 in. H20). In addition, 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%,with no other requirement to be measured:

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 of no less than 200 fpm or 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", 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.

3. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature recommended by the manufacturer until the initial compliance test that demonstrates compliance. After the initial compliance demonstration, the average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance.

4. The maximum coating content, excluding water and exempt solvents shall not exceed the following:

a. 0.82 lbs VOC per lb of coating;
b. 0.74 lbs HAP per lb of coating; and
c. 0.82 lbs HAPs per lb of coating.

5. The cleanup material shall not contain HAP(s).

6. The permittee shall burn only natural gas in this emissions unit.

C. Monitoring and/or Record keeping Requirements

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

   a. the average facial velocity of the air flow or the pressure differential across the enclosure, measured at each natural draft opening; and
   b. a log or record of all times during which the emissions unit was operating and the capture (collection) system, control device and/or the monitoring equipment was not operating.

2. 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 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.

3. 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 and using non-water based coatings. 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 for each day:

   a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation and

using non-water based coatings, was more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance; and

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

4. The permittee shall collect and record the following information each month for this emissions unit:

a. the name and identification of each coating and cleanup material, as applied;
b. the VOC content [1] for each coating material in pounds of VOC per pound of coating material, excluding water and exempt solvents, as applied;
c. the VOC content [1] for each cleanup material in pounds of VOC per pound of cleanup material, excluding water and exempt solvents, as applied;
d. the number of gallons applied, of each coating and cleanup material, excluding water and exempt solvents, as applied;
e. the rolling, 12-month summation of the coating and cleanup material, in gallons, excluding water and exempt solvents;
f. the TO DRE (%), as demonstrated during the most recent DRE test which demonstrated compliance;
g. the total VOC emissions rate for all coating and cleanup material, in pounds per rolling, 12-month summation [b x d x (1-e)].

[1]Formulation data or USEPA Method 24 (for coatings) shall be used to determine the organic compound contents of the coatings.

5. The permittee shall collect and record the following information each month for this emission unit:

a. the name and identification number of each coating, as applied;
b. the individual HAP[1] content for each HAP of each coating in pounds of individual HAP per lb of coating, as applied;
c. the total combined HAP content for each HAP of each coating in pounds of combined HAPs per lb of coating, as applied (sum of all individual HAP contents from b);
d. the number of pounds of each coating employed;
e. the name and identification of each cleanup material employed;
f. the individual HAP content for each HAP of each cleanup material in pounds of

individual HAP per gallon of cleanup material, as applied;

g. the total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum of all individual HAP contents from f);

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

i. the TO DRE (%), as demonstrated during the most recent DRE test which demonstrated compliance;

j. the total individual HAP emissions for each HAP from all coating and cleanup material in pounds or tons per rolling, 12-month period [for each HAP the sum of b times d for each coating and the sum of f times h for each cleanup material multiplied by (1-i)]; and

k. the total combined HAP emissions from all coating and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling, 12-month period [the sum of c times d for each coating plus the sum of g times h for each cleanup material multiplied by (1-i)].

[1]A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or clean materials. This information does not have to be kept on a line-by-line basis.

6. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

7. The permit to install for this emissions unit K001 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):

Pollutant: Toluene
TLV (mg/m3): 50 ppm = 188.4 mg/m3
Maximum Hourly Emission Rate (lbs/hr): 0.76
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7.3 ug/m3

MAGLC (ug/m3): 4490 ug/m3

Pollutant: n-Butanol
TLV (mg/m3): 50 ppm = 61 mg/m3
Maximum Hourly Emission Rate (lbs/hr): 0.54
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 5.2 ug/m3
MAGLC (ug/m3): 1452 ug/m3

8. 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 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.).

9. 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.

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 the 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.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify any of the following scenarios 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 through any natural draft openings was less than 200 feet per minute (3,600 meters per hour) or showed a pressure differential across the enclosure at any natural draft opening of less than 0.013 mm Hg (0.007 in H2O);
   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; and
   f. anything less than 100% of the VOC emissions were captured for discharge through the control device or the control device was bypassed.

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

2. The permittee shall submit quarterly deviation (excursion) reports which 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 in this permit.

3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:

   a. the VOC content limit for coating materials;
   b. the VOC content limit for cleanup materials;
   c. the individual HAP content limit for coating materials;
   d. the combined HAPs content limit for coating materials;
   e. the rolling, 12-month VOC emission limitation;
   f. the rolling, 12-month total individual HAP emission limitation; and
   g. the rolling, 12-month total combined HAPs emission limitation.

4. Quarterly deviation (excursion) reports shall be submitted to the Ohio EPA Central District Office by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviations occurred during a calendar quarter, the permittee shall submit a report which states that no deviations occurred during the calendar quarter.

5. The permittee shall submit annual reports which specify the VOC, individual and/or combined HAP emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 if each year. This reporting requirement may be satisfied by including and identifying the specific emission data from this emissions unit in the annual Fee Emission Report.

6. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

E. Testing Requirements

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

   a. Emission Limitation:
      VOC emissions shall not exceed 2.70 lbs/hr.

Applicable Compliance Method:
Compliance may be demonstrated by summing the maximum coating emission rate and the maximum cleanup emission rate. The coating emissions may be determined by multiplying the maximum hourly coating usage rate of 302 lbs/hour by the maximum VOC content of 0.82 lbs/lb of coating. The cleanup emissions may be determined by multiplying the maximum hourly cleanup usage rate of 23.28 lbs/hr by the maximum VOC content of 1.0 lb/lb of cleanup material. The total emission rate is then multiplied by the minimum control efficiency of (1-0.99).

b. Emission Limitation:
NOx emissions, from natural gas combustion, shall be less than 10 tons per year.

Applicable Compliance Method:
Compliance may be demonstrated by multiplying the maximum capacity of 11.55 mmBtu/hr by the AP-42, Table 1.3-1, (9/98) emission factor of 100 lbs NOx/mmCF and by the conversion factor of mmCF/1020 mmBtu times 8760 hours per year and divided by 2000 lbs per ton.

c. Emission Limitation:
CO emissions, from natural gas combustion, shall be less than 10 tons per year.

Applicable Compliance Method:
Compliance may be demonstrated by multiplying the maximum capacity of 11.55 mmBtu/hr by the AP-42, Table 1.3-1, (9/98) emission factor of 84 lbs CO/mmCF and by the conversion factor of mmCF/1020 mmBtu times 8760 hours per year and divided by 2000 lbs per ton.

d. Emission Limitation:
PE emissions, from natural gas combustion, shall be less than 10 tons per year.

Applicable Compliance Method:
Compliance may be determined by multiplying the maximum natural gas burning capacity of the emissions unit of 11.55 mmBtu/hr by the OAC rule 3745-17-10(B)(1) emission factor of 0.02 lbs/mmBtu times 8760 hours per year and divided by 2000 lbs per ton.

e. Emission Limitation:
SO2 emissions, from natural gas combustion, shall be less than 10 tons per year.

Applicable Compliance Method:
Compliance may be determined by multiplying the maximum natural gas burning capacity of the emissions unit of 11.55 mmBtu/hr by the AP-42, Table 1.4-5, (7/98) emission factor of 0.6 lbs/mmCF and dividing by the maximum heat input capacity by the conversion factor of mmCF/1020 mmBtu times 8760 hours per year and divided by 2000 lbs per ton.

f. Emission Limitation:
OC emissions, from natural gas combustion, shall be less than 10 tons per year.

Applicable Compliance Method:
Compliance may be determined by multiplying the maximum natural gas burning capacity of the emissions unit of 11.55 mmBtu/hr by the AP-42, Table 1.4-5, (7/98) emission factor of 11.0 lbs/mmCF and dividing by the maximum heat input capacity by the conversion factor of mmCF/1020 mmBtu times 8760 hours per year and divided by 2000 lbs per ton.

g. Emission Limitation:
VOC emissions from coating and cleanup operations, combined, shall not exceed 11.9 tons per rolling, 12-month period.

Applicable Compliance Method:
See Part III.C.4.g above.

h. Emission Limitation:
The total allowable emissions of Hazardous Air Pollutants (HAPs), from emission unit K001 coating and cleanup operations, combined, shall not exceed 9.8 tons for any single HAP and 10.8 tons for any combination of HAPs, per rolling, 12-month period.

Applicable Compliance Method:
See Part III.C.5.j and k above.

i. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
The particulate emissions from this emissions unit are due solely to the combustion of natural gas and under normal operating conditions visible emissions are not expected.

2. 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 or the pressure differential across the enclosure at each natural draft opening.

   If the 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 volumetric flow rate 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 perimeter using smoke tubes or tracer gases.

3. The permittee shall also measure and record the following information for the permanent total enclosure and each natural draft opening:

   a. the diameter of each natural draft opening;

   b. the distance measured from each natural draft opening to each VOC emitting point in the process;

   c. the distance measured from each exhaust duct or hood in the enclosure to each natural draft opening; and

   d. the total surface area of each natural draft opening and the surface area of the enclosure's four walls, floor, and ceiling.

4. 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 startup.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC and 99% control efficiency/DRE requirement.

c. The following test method shall be employed to demonstrate compliance with the allowable mass emission rate for VOC: Method 18, 25 and/or 25A, 40 CFR Part 60, Appendix A.

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

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

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. Not later than 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).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be

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

F. Miscellaneous Requirements

None