Facility ID: 0855140498 Issuance type: Final State Permit To Operate

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In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0855140498 Emissions Unit ID: K005 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

   (a) None.

2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

   (a) None.

A. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K005 - No. 10 - New Long Line Coater with a thermal oxidizer	OAC rule 3745-31-05(A)(3) PTI 08-04708	The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 7.61 pounds per hour (lbs/hr), excluding cleanup. The VOC emissions from this emissions unit shall not exceed 15.23 tons per rolling 12 month summation, including cleanup. See A.2.a, A.2.b, B.1., and B.2. The requirements of this rule shall also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-35-07(B), 3745-21-09(F) and 3745-21-09(B)(6) and 40 CFR Part 60, Subpart RR.
	OAC rule 3745-31-05(C) OAC rule 3745-35-07(B) (synthetic minor to avoid PSD and Title V)	The total allowable emissions of VOC from emissions units K002, K003, K004, K005, K006, and K007 shall not exceed 70.13 tons per rolling 12 month summation, including cleanup. The total allowable emissions of individual hazardous air pollutant (HAP) emissions from emissions units K002, K003, K004, K005, K006, and K007 shall not exceed 9.9 tons per rolling 12 month summation, including cleanup. The total allowable emissions of combined hazardous air pollutant (HAP) emissions from emissions units K002, K003, K004, K005, K006, and K007 shall not exceed 24.9 tons per rolling 12 month summation, including cleanup.
	OAC rule 3745-21-09(F)	When operating without the use of a control system the coatings applied shall be less than or equal to 2.9 lbs volatile organic compounds (VOC)/gallon of coating, excluding water and exempt solvents.
	OAC rule 3745-21-09(B)(6)	In lieu of complying with the VOC content specified in OAC rule 21-09(F), the permittee is employing a control system when employing solvent based coatings. See. A.2.b.
	40 CFR Part 60, Subpart RR	When operating with the use of a control system, the emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

When operating without the use of a control system, the VOC emissions from this emissions unit shall not exceed 0.2 kilogram (kg)/kg of coating solids as calculated on a weighted average basis for each calendar month.

2. **Additional Terms and Conditions**

(a) The 7.61 pounds VOC per hour emission limit was established for PTI purposes to reflect the potential to emit for the emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limitation.
The VOC emissions from the use of solvent-based coatings shall be controlled through the application of a permanent total enclosure (PTE) with a 100 percent capture efficiency and a thermal oxidizer system, operating at a minimum of 97% overall VOC removal/destruction efficiency.
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.5. through B.7., C.6., C.7., D.3., E.2.b., E.3. and E.4.), to ensure the integrity of the PTE.

B. **Operational Restrictions**

1. The maximum annual volatile organic material usage for emission units K002, K003, K004, K005, K006 and K007 shall not exceed 70.13 tons per year, based upon a rolling, 12-month summation of the monthly volatile organic material usage figures from a combination of coatings and cleanup. The annual volatile organic material usage in this term equates to the annual VOC emission rate in term A.1 based upon the premise that 100% of all the solvents contained within the material usage is emitted and therefore all the record keeping and reporting requirements of this permit for the VOC emissions will be sufficient to verify the annual volatile organic material usage rate of this term.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the actual volatile organic material usage records over the previous 12 calendar months of operation shall be used to calculate the rolling, 12-month summation from the facility.

2. The maximum annual HAPs material usage for emission units K002, K003, K004, K005, K006 and K007 shall not exceed 9.9 tons per year for any individual HAP and 24.9 tons per year for any combination of HAPs, based upon a rolling, 12-month summation of the monthly HAPs material usage figures from a combination of coatings and cleanup.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the actual individual and combined HAPs material usage records over the previous 12 calendar months of operation shall be used to calculate the rolling, 12-month summation from the facility.

3. When the emissions unit is operating and venting to the Thermal Oxidizer:

   The average temperature of the combustion chamber within the thermal incinerator, for any 3 hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

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

5. 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%.

6. 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.

7. 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.

C. **Monitoring and/or Record Keeping Requirements**

1. For each coating employed on this emissions unit, the company shall record whether it is vented to the atmosphere or thermal oxidizer.

2. The permittee shall collect and record the following information for each month that this emissions unit is operating:

a. The name and identification of each surface coating and cleanup material employed.

b. The number of gallons of each surface coating and cleanup material employed.

c. The weight, in pounds per month, of each surface coating and cleanup material employed, as applied.

d. The VOC content for each surface coating and cleanup material employed, in pounds per gallon.

e. The VOC content of each surface coating and cleanup material, as applied, in percent by weight.

f. The VOC content, in pounds per gallon (excluding water and exempt solvents), of each surface coating vented directly to the atmosphere.

g. The individual HAP content for each surface coating and cleanup material employed, in pounds per gallon.

h. The combined HAP content for each surface coating and cleanup material employed, in pounds per gallon.

The total volatile organic material usage from all surface coating and cleanup material, in pounds.

j. The VOC emission rate from each cleanup material employed (b x d), in pounds.

k. The individual HAP emission rate from each cleanup material employed (b x g), in pounds.

l. The combined HAP emission rate from each cleanup material employed (b x h), in pounds.

m. The uncontrolled VOC emission rate from each surface coating employed (b x d), in pounds.

n. The uncontrolled individual HAP emission rate from each surface coating employed (b x g), in pounds.

o. The uncontrolled combined HAP emission rate from each surface coating employed (b x h), in pounds.

p. The total VOC emission rate from any surface coatings vented directly to the atmosphere, in pounds (the portion of (m) which is vented to the atmosphere based on C.1.).
q. The total uncontrolled VOC emission rate from all the surface coatings vented to the thermal oxidizer, in pounds (the portion of (m) which is vented to the thermal oxidizer based on C.1.).

r. The total individual HAP emission rate from any surface coatings vented directly to the atmosphere, in pounds (the portion of (n) which is vented to the atmosphere based on C.1.).

s. The total uncontrolled individual HAP emission rate from all the surface coatings vented to the thermal oxidizer, in pounds (the portion of (n) which is vented to the thermal oxidizer based on C.1.).

t. The total combined HAP emission rate from any surface coatings vented directly to the atmosphere, in pounds (the portion of (o) which is vented to the atmosphere based on C.1.).

u. The total uncontrolled combined HAP emission rate from all the surface coatings vented to the thermal oxidizer, in pounds (the portion of (o) which is vented to the thermal oxidizer based on C.1.).

v. The total controlled VOC emission rate from all the surface coatings vented to the thermal oxidizer, in pounds, i.e., the value from (q) multiplied by the overall efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance.

w. The total controlled individual HAP emission rate from all the surface coatings vented to the thermal oxidizer, in pounds, i.e., the value from (s) multiplied by the overall efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance.

x. The total controlled combined HAP emission rate from all the surface coatings vented to the thermal oxidizer, in pounds, i.e., the value from (u) multiplied by the overall efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance.
y. The total actual VOC emissions from all coatings and cleanup materials employed, in pounds (i.e., the sum of (j), (p) and (v)).

z. The total actual individual HAP emissions from all coatings and cleanup materials employed, in pounds (i.e., the sum of (k), (r) and (w)).

aa. The total actual combined HAP emissions from all coatings and cleanup materials employed, in pounds (i.e., the sum of (l), (t) and (x)).

bb. The rolling, 12-month summation of the volatile organic material usage from all surface coating and cleanup

material.

cc. The rolling, 12-month summation of the VOC emissions from this emissions unit, in tons, i.e., the summation of (y) for the previous 12-month period divided by 2000 lbs/ton.

dd. The rolling, 12-month summation of the individual HAP emissions from this emissions unit, in tons, i.e., the summation of (z) for the previous 12-month period divided by 2000 lbs/ton.

ee. The rolling, 12-month summation of the combined HAP emissions from this emissions unit, in tons, i.e., the summation of (aa) for the previous 12-month period divided by 2000 lbs/ton.

3. When the emissions unit is operating and venting to the thermal oxidizer:

The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal oxidizer when the emission unit is in operation and venting the VOC emissions to the thermal oxidizer. 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 calibrated, operated and maintained in accordance with t he manufacturer's recommendations with any modifications deemed necessary by the permittee.

4. The permittee shall collect and record the following information for each day the VOC emissions are vented to the thermal oxidizer:

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

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

5. When the emissions unit is operating and NOT venting to a control device, the permittee shall collect and record the following information for each month:

a. The company identification of each surface coating employed.

b. The number of gallons of each surface coating employed.

c. The VOC content for each surface coating employed, in pounds per gallon.

d. The VOC content for each surface coating employed, in pounds per gallon, excluding water and exempt solvents.

e. The VOC content for each surface coating employed, in kilograms per gallon ((c.)/2.20 lbs/kg).

f. The total mass of VOC applied, in kilograms (the sum of the product (e) x (b) for all coatings applied).

g. The solids content for each surface coating employed, in pounds per gallon.

h. The solids content for each surface coating employed, in pounds per gallon kilograms per gallon ((g.)/2.20 lbs/kg).

i. The total mass of solids applied, in kilograms (the sum of the product (h) x (b) for all coatings applied).

j. The uncontrolled VOC emissions, in kg VOC/kg solids ((f)/(i)).

6. 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.

7. 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.

8. The permit to install for this emissions unit K005 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 applications, for K002, K003, K004, K005, K006 and K007. 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: Hexane

TLV (mg/m3): 176

Maximum Hourly Emission Rate (lbs/hr): 28.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1679

MAGLC (ug/m3): 1762

Pollutant: N-Butyl Acrylate

TLV (mg/m3): 10

Maximum Hourly Emission Rate (lbs/hr): 0.660

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.14

MAGLC (ug/m3): 105

Pollutant: Vinyl Acetate

TLV (mg/m3): 35

Maximum Hourly Emission Rate (lbs/hr): 3.342

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 198.18

MAGLC (ug/m3): 352

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 still 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.

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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

9. 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".

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 annual reports which specify the VOC emissions, in tons, from all emissions unit. The permittee shall also submit annual reports which specify the individual HAP and total combined HAP emissions, in tons, from all emissions units at the facility. 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 from this emissions unit in the annual Fee Emission Report.

2. The permittee shall submit quarterly deviation (excursion) reports that include the following:

a. An identification of each month during which the rolling, 12-month volatile organic material usage and/or VOC emissions exceeded the 70.13 TPY rolling, 12-month facility volatile organic material usage and/or VOC emission limitations, and the actual rolling, 12-month volatile organic material usage and/or VOC emission rates for each such month.

b. An identification of each month during which the rolling, 12-month individual facility HAP emission rate exceeded the 9.9 TPY rolling, 12-month individual facility HAP emission limitation, and the actual rolling, 12-month individual facility HAP emission rate for each such month.

c. An identification of each month during which the rolling, 12-month combined facility HAP emission rate exceeded the 24.9 TPY rolling, 12-month combined facility HAP emission limitation, and the actual rolling, 12-month combined facility HAP emission rate for each such month.

3. The permittee shall submit quarterly summary reports 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

i. identification of any exceedances of the HAPs emission limits;
j. when the emissions unit is operating and NOT venting to a control device for purposes of complying with 40 CFR Part 60, Subpart RR, any monthly record showing the use of noncomplying coatings.

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

4. These quarterly deviation (excursion) reports shall be submitted to the Director (the appropriate District Office or local air agency) 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 the calendar quarter, the permittee shall submit a report which states that no deviations occurred during the calendar quarter.

5. When the emissions unit is operating and NOT venting to a control device for purposes of complying with OAC rule 3745-21-09(B) requirements, 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.

E. **Testing Requirements**

1. Compliance with the specified emission limitations in Section A.1. of this permit shall be demonstrated in accordance with the following methods:
Emission Limitation -
7.61 pounds VOC per hour, excluding cleanup

Applicable Compliance Method -
Compliance shall be determined by multiplying the maximum hourly coating usage rate (47 gals ctg) by the maximum VOC content (5.4 lbs VOC/gal ctg) and then multiplying the result by a factor of 1 minus the overall control efficiency of 97%, by weight.
Emission Limitation -
15.23 tons VOC per rolling 12-month summation, including cleanup

Applicable Compliance Method -
Compliance shall be based upon the record keeping requirements specified in Section C.2. of this permit.
Emission Limitation -
9.9 TPY of an individual HAP, based on a 12-month rolling summation

Applicable Compliance Method -
Compliance shall be based upon the record keeping requirements specified in Section C.2. of this permit.
Emission Limitation-
24.9 TPY of any combination of HAPs, based on a 12-month rolling summation

Applicable Compliance Method
Compliance shall be based upon the record keeping requirements specified in Section C.2. of this permit.
Emission Limitation-
2.9 lbs VOC/gallon of coating, excluding water and exempt solvents, when operating without the use of a control system.

Applicable Compliance Method
Compliance shall be based upon the record keeping requirements specified in Section C.5. of this permit.
Emission Limitation-
0.20 kg/kg of coating solids as calculated on a weighted average basis for each calendar month, when operating without the use of a control system.

Applicable Compliance Method
Compliance shall be based upon the record keeping requirements specified in Section C.5. of this permit.

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

3. The permittee shall conduct emissions and compliance demonstration testing on this emissions unit within 6 months of expiration, in accordance with the following requirements:

a. Emissions testing shall be conducted to demonstrate compliance with the allowable mass emission rate and overall control system efficiency for VOCs, which shall include determinations of the capture efficiency and the thermal oxidizer control efficiency of 97%. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 18 of 40 CFR Part 60, Appendix A and Method 25 or 25A of 40 CFR Part 60, Appendix A, as appropriate, before and after the thermal oxidizer, to demonstrate compliance with the destruction efficiency for volatile organic compounds. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

b. A compliance demonstration for the permanent total enclosure shall be conducted to demonstrate compliance with the capture efficiency requirement. The following test method(s) shall be employed to demonstrate compliance: Method 204 of 40 CFR Part 60, Appendix A to demonstrate the permanent total enclosure can achieve 100% capture efficiency.

c. If formulation data is not available and/or if required by the regulating agency, Method 24 or 24A of 40 CFR Part 60, Appendix A shall be conducted for the organic content of the solvent materials applied. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

4. 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, or the pressure differential across, the natural draft openings in accordance with 40 CFR Part 51, Appendix M, Method 204. 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 by checking the direction of air flow through the use of streamers, smoke tubes, or tracer gases at each natural draft opening. 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.

The permittee shall also measure and record the following information for the permanent total enclosure and each natural draft opening during the compliance demonstration:

a. the measured surface area 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.

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, or the pressure differential across, the natural draft openings in accordance with 40 CFR Part 51, Appendix M, Method 204. 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 by checking the direction of air flow through the use of streamers, smoke tubes, or tracer gases at each natural draft opening. 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.

The permittee shall also measure and record the following information for the permanent total enclosure and each natural draft opening during the compliance demonstration:

a. the measured surface area 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.

5. In accordance with 40 CFR Part 51, Appendix M, Method 204, compliance with the requirements with for a permanent total enclosure shall be demonstrated if the following determinations are documented during testing:

a. the average facial velocity of the air flow into the enclosure is maintained at a minimum of 3,600 m/hr (200 feet per minute) or at a minimum pressure differential of 0.013 mm Hg (0.007 in. of water);

b. each natural draft opening is at a distance of at least four equivalent opening diameters, or 4 times the diameter of the opening, from each VOC emitting point in the process;

c. the sum of the surface areas of all of the natural draft openings in the total enclosure are not more than 5 percent of the sum of the surface areas of the enclosure's four walls, floor, and ceiling; calculated by dividing the total area of all natural draft openings by the total inside surface area of the enclosure;

d. there is no leakage detected at any of the closed access doors and windows, and it is certified that they always remain closed during process operations; and

e. all VOC emissions captured by the permanent total enclosure are entirely vented for discharge through the control device.

In accordance with 40 CFR Part 51, Appendix M, Method 204, compliance with the requirements with for a permanent total enclosure shall be demonstrated if the following determinations are documented during

testing:

a. the average facial velocity of the air flow into the enclosure is maintained at a minimum of 3,600 m/hr (200 feet per minute) or at a minimum pressure differential of 0.013 mm Hg (0.007 in. of water);

b. each natural draft opening is at a distance of at least four equivalent opening diameters, or 4 times the diameter of the opening, from each VOC emitting point in the process;

c. the sum of the surface areas of all of the natural draft openings in the total enclosure are not more than 5 percent of the sum of the surface areas of the enclosure's four walls, floor, and ceiling; calculated by dividing the total area of all natural draft openings by the total inside surface area of the enclosure;

d. there is no leakage detected at any of the closed access doors and windows, and it is certified that they always remain closed during process operations; and

e. all VOC emissions captured by the permanent total enclosure are entirely vented for discharge through the control device.

6. The test(s) shall be conducted while the emissions unit K005 is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time (s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or Local Air Agency shall be permitted to witness the tests, 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 tests 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.

The test(s) shall be conducted while the emissions unit K005 is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time (s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or Local Air Agency shall be permitted to witness the tests, 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 tests 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**

1. The following terms and conditions are federally enforceable: Sections A.1 (only the requirements associated with OAC 3745-35-07(B) and 40 CFR Part 60, Subpart RR), A.2.b, B.1 thru 4, C.1 thru 5, D.2 and 3, E.1.c. and d., and E.2.