John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

1/4/2013

Certified Mail

Nicole Hamilton
ASHLAND
5200 Blazer Parkway
DA-4
Dublin, OH 43017

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0125060525
Permit Number: P0112333
Permit Type: OAC Chapter 3745-31 Modification
County: Franklin

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTIO is a final action of the Director 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, made payable to “Ohio Treasurer Josh Mandel," 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
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging 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 Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-CDO

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
ASHLAND

Facility ID:	0125060525
Permit Number:	P0112333
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	1/4/2013
Effective:	1/4/2013
Expiration:	10/17/2017

Division of Air Pollution Control
Permit-to-Install and Operate
for
ASHLAND

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Authorization

Facility ID:	0125060525
Application Number(s):	A0046373
Permit Number:	P0112333
Permit Description:	Chapter 31 modification for web coating system (K004) to add 2 corona treaters to the system.
Permit Type:	OAC Chapter 3745-31 Modification
Permit Fee:	$200.00
Issue Date:	1/4/2013
Effective Date:	1/4/2013
Expiration Date:	10/17/2017

Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

ASHLAND
5200 BLAZER PKWY
Dublin, OH 43017

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049
(614)728-3778

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s))listed in this section 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 described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0112333
Permit Description: Chapter 31 modification for web coating system (K004) to add 2 corona treaters to the system.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**K004**
Company Equipment ID:	Web Coating System
Superseded Permit Number:	P0110613
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

  You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement.Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is takenby Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Central District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting[1] a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

[1] Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. 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).

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

      (1) None.

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

      (1) 2.a) through 2.e)

2. Applicable Emissions Limitations and/or Control Requirements

   a) The specific operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V)	See b)(1) below.

   b) Additional Terms and Conditions

      (1) This permit establishes the following federally enforceable limitations on emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of theClean Air Act, for the purpose of avoiding Title V permitting requirements:

         a. The actual emissions from all emissions units at this facility, including but not limited to any de minimis emissions units as defined in OAC rule 3745-15-05, or any registration status and/or permit exempt/permit-by-rule emissions units pursuant to OAC rule 3745-31-03, combined, shall not exceed 9.9 tons for any single HAP, based upon a rolling, 12-month summation.

         b. The actual emissions from all emissions units at this facility, including but not limited to any de minimis emissions units as defined in OAC rule 3745-15-05, or any registration status and/or permit exempt/permit-by-rule emissions units pursuant to OAC rule 3745-31-03, combined, shall not exceed 24.9 tons for any combination of HAPs, based upon a rolling, 12-month summation.

   c) Monitoring and/or Recordkeeping Requirements

      (1) The permittee shall collect and record the following information each month for the purpose of calculating the rolling, 12-month summation of HAP emissions:

a. the total emissions of each individual HAP from all emissions units at this facility, including any de minimis emissions units as defined in OAC rule 3745-15-05, any registration status and/or permit exempt/permit-by-rule emissions units pursuant to OAC rule 3745-31-03, in tons;

b. the total emissions of combined HAPs from all emissions units at this facility, including any de minimis emissions units as defined in OAC rule 3745-15-05, any registration status and/or permit exempt/permit-by-rule emissions units pursuant to OAC rule 3745-31-03, in tons;

c. the rolling, 12-month summation of the individual HAP emissions from all emissions units operating at the facility, in tons; and

d. the rolling, 12-month summation of the total combined HAP emissions from all emissions units operating at the facility, in tons.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act, or can be obtained by contacting the Ohio EPA, Central District Office.

d) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. any exceedance of the rolling, 12-month individual HAP emission limitation for each HAP; and

ii. anyexceedance of the rolling, 12-month total combined HAPs emission limitation.

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted,electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the director (the Ohio EPA, Central District Office).

e) Testing Requirements

(1) Compliance with the emission limitations specified in 2.b)(1) above shall be determined in accordance with the following methods:

a. Emissions Limitations

Emissions of any single HAP shall not exceed 9.9 tons per rolling, 12-month period.

Emissions of total combined HAPS shall not exceed 24.9 tons per rolling, 12-month period.

Applicable Compliance Method

The permittee shall calculate HAP emissions in accordance with the recordkeeping requirements specified in d)(1) using U.S. EPA approved emissions factors or emissions factors otherwise approved by Ohio EPA, Central District Office.

C. Emissions Unit Terms and Conditions

1. K004, Web Coating System

Operations, Property and/or Equipment Description:

Web Coating System with Oven and Two Corona Treaters

a) 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. b)(1)f., b)(2)d., d)(3) through d)(6) and e)(3)

(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. b)(1)c., b)(2)e., d)(2) and e)(1)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
b.	OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) shall not exceed 0.020 pound per million Btu of actual heat input.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V)	Volatile organic compound (VOC) emissions shall not exceed 9.9 tons per rolling, 12-month period. See b)(2)e. below.
d.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Volatile organic compound (VOC) emissions shall not exceed 5,064.5 lb/day. Ozone emissions shall not exceed 1.46 lb/hr and 6.40 ton/yr.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Carbon monoxide (CO) emissions shall not exceed 0.16 lb/hr and 0.72 ton/yr. Nitrogen oxide (NOx) emissions shall not exceed 0.20 lb/hr and 0.86 ton/yr. Particulate emissions (PE) shall not exceed 0.015 lb/hr and 0.065 ton/yr. Sulfur dioxide (SO_2) emissions shall not exceed 0.001 lb/hr and 0.005 ton/yr. See b)(2)a. and b)(2)c. below.
e.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b. below.
f.	ORC 3704.03(F)(4)(c) (Toxic air contaminant statute)	See b)(2)d. below.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.

b. The following rule paragraphs will apply once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan:

i. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC, ozone, CO, NOx, PE and SO_2 emissions from this air contaminant source since the potentials to emit are less than 10 tons per year.

c. The daily VOC emission limitation as well as the hourly and annualozone, CO, NOx, PE and SO_2 emission limitationswere established to reflect the potential to

emit for this emissions unitin accordance with the information provided in the application. It is not necessary to develop monitoring, recordkeeping, or reporting requirements to ensure compliance with these limitations.

d. In order to demonstrate compliance with the "Toxic Air Contaminant Statute", the director has established, per ORC 3704.03(F)(4)(c), a limit for toluene, which shall not exceed 1,011 pounds per day. This daily allowable emissions rate was calculated by multiplying the approved daily operating schedule submitted in the permit application, by the emission rate modeled (to determine the ground level concentration).

e. The emissions of VOC from this emissions unit shall not exceed 9.9 tons per year, based upon a rolling, 12-month summation of emissions from coatings, adhesives, inks, cleanup materials as follows:

$$9.9 \text{ tons VOC} \geq \sum_{i=1}^{n} (Q_i)(VOC_i) \div (2{,}000 \text{ pound/ton})$$

Where:

Q_i = actual usage of coating/adhesives/inks/cleanup material i, gallons

VOC_i = actual VOC content of coating/adhesives/inks/cleanup material in i, pounds per gallon.

To ensure enforceability during the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative VOC Emissions (Tons)
1	0.83
1-2	1.65
1-3	2.48
1-4	3.30
1-5	4.13
1-6	4.95
1-7	5.78
1-8	6.60
1-9	7.43
1-10	8.25
1-11	9.08
1-12	9.9

After the first 12 calendar months following the issuance of this permit, compliance with the annual emission limitation for VOC shall be based upon a

rolling, 12-month summation of the VOC emissionsfrom coatings, adhesives, inks, cleanup materials and fuel burning in the oven.

c) Operational Restrictions

(1) The permittee shall burn only natural gas in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

(1) 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.

(2) The permittee shall maintain monthly records of the following information:

a. the name and identification number of each coating, adhesive, ink and cleanup material employed;

b. the VOC content of each coating, adhesive, ink and cleanup material employed;

c. the amount of each coating, adhesive, ink and cleanup material employed;

d. the number of hours the oven operated; and

e. the total VOC emissions, in tons; and

f. beginning after the first 12 calendar months of operation, the rolling, 12-month VOC emissions, in tons.

Also, during the first 12 calendar months of operation, the permittee shall record the cumulative VOC emissions for each calendar month.

(3) The permit application for this emissions unit, K004, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The “Toxic Air Contaminant Statute”, ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant emitted using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration results from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled “Review of New Sources of Air Toxic Emissions, Option A”, as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants:

Toxic Contaminant: xylene

TLV (mg/m^3): 434

Maximum Hourly Emission Rate (lb/hr): 210.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 7,606

MAGLC ($ug/^{m3}$): 10,338

Toxic Contaminant: toluene

TLV (mg/m^3): 75

Maximum Hourly Emission Rate (lb/hr): 42.14

Predicted 1-Hour Maximum Ground Level Concentration (ug/m^3): 1,521

MAGLC (ug/m^3): 1,794

The permittee, having demonstrated that emissions of xylene from emissions unit K004 is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC) and emissions of toluene from emissions unit K004 is estimated to be equal or greater than eighty per cent, but less than 100 per cent of the MAGLC, shall not operate the emissions unit at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and

any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

(4) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

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

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F),

initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

(6) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all exceedances of the rolling, 12-month emission limitation for VOC and, for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, thepermittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted,electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the director (the Ohio EPA, Central District Office).

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall include in the annual Permit Evaluation Report (PER) any exceedance of the daily limitation on toxic air emissions, as established by the director, in order to maintain any toxic air contaminant below its MAGLC. The permittee shall also include in the PER any changes made, during the calendar year, to a parameter or value entered into the dispersion model that was used to maintain compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour

maximum ground-level concentration. If no changes to the emissions, emissions unit, or the exhaust stack have been made, then the report shall include a statement to this effect.

(4) 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.

(5) Unless other arrangements have been approved by the director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation

Particulate emissions (PE) shall not exceed 0.020 pound per million Btu of actual heat input.

Applicable Compliance Method

If required, compliance with the PE limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

c. Emissions Limitation

Volatile organic compound (VOC) emissions shall not exceed 9.9 ton/yr, based upon a rolling 12-month summation.

Applicable Compliance Method

Compliance shall be based upon the thesummation of the VOC emissions from coatings, adhesives, inks, cleanup materials and fuel burning in the oven.

VOC emissions from each coating, adhesive, ink and cleanup material shall be calculated using the following equation.

$9.9 \text{ tons VOC} \geq \sum_{i=1}^{n}(Q_i)(VOC_i) \div (2{,}000 \text{ pound/ton})$, where:

Q_i = actual usage of coating/adhesives/inks/cleanup material i, gallons

VOC_i = actual VOC content of coating/adhesives/inks/cleanup material in i, pounds per gallon.

VOC emissions from fuel burning in the oven shall be calculated using the VOC emission factor (EF) specified in the most recent version of AP-42, "Compilation of Air Pollutant Emission Factors" and the following equation.

$VOC_{\text{fuel burning}}$ = EF x 2 MMBtu/hr x hours operated

d. Emission Limitation

Volatile organic compound (VOC) emissions shall not exceed 5,064.5 lb/day (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method

The daily allowable mass emission rate for VOC was established by summing the maximum daily VOC emissions from coatings, adhesives, inks, cleanup materials and fuel burning in the oven.

The maximum daily VOC emissions from coatings, adhesives and inks were calculated for the worst-case material (solvent-based coating) using the following equation.

$VOC_{\text{solvent-based coating}}$ = coating usage x VOC content, where:

Maximum solvent-based coating usage = 301 lb/hr x 24 hr/day

Solvent-based coating VOC content = 70% by weight

The maximum daily VOC emissions from cleanup materials were calculated using the following equation.

$VOC_{\text{cleanup solvent}}$ = cleanup solvent usage x VOC content, where:

Maximum cleanup solvent usage = 1 gal/day

Maximum VOC content = 7.50 lb/gal

If the composition of the worst-case coating or cleanup solvent changes, or a new worst-case coating or cleanup solvent is applied in this emissions unit, then the above calculations should be adjusted to account for the properties of the new material.

The maximum daily VOC emissions from fuel burning in the oven were calculated using the VOC emission factor specified in AP-42, "Compilation of Air

Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (7/98) and the following equation.

$VOC_{fuel\ burning}$ = EF x 2 MMBtu/hr x 24 hr/day, where

EF = (5.5 lb VOC/10^6scf) / (1,020 Btu/scf)

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 18, 25 or 25A.

e. Emission Limitation

Ozone emissions shall not exceed 1.46 lb/hr and 6.40 ton/yr (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method

The hourly allowable mass emission rate for ozone was established using the emission factor provided by the manufacturer of the corona treaters and the following equation.

Ozone = EF x 10 kW x 2 Corona Treaters, where

EF = 0.073 pound of ozone per hour per kW

The annual limitation was calculated by multiplying the hourly limitation by 8,760 hr/yr and then dividing by 2,000 lb/ton.

f. Emission Limitation

Carbon monoxide (CO) emissions shall not exceed 0.16 lb/hr and 0.72 ton/yr (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method

The hourly allowable mass emission rate for CO was established using the CO emission factor specified in AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (7/98) and the following equation.

CO = EF x 2 MMBtu/hr, where

EF = (84 lb CO/10^6scf) / (1,020 Btu/scf)

The annual limitation was calculated by multiplying the hourly limitation by 8,760 hr/yr and then dividing by 2,000 lb/ton.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

g. Emission Limitation

Nitrogen oxide (NOx) emissions shall not exceed 0.20lb/hr and 0.86 ton/yr (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method

The hourly allowable mass emission rate for NOx was established using the NOx emission factor specified in AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (7/98) and the following equation.

NOx = EF x 2 MMBtu/hr, where

EF = (100 lbNOx/10^6scf) / (1,020 Btu/scf)

The annual limitation was calculated by multiplying the hourly limitation by 8,760 hr/yr and then dividing by 2,000 lb/ton.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 7E.

h. Emission Limitation

Particulate emissions (PE) shall not exceed 0.015 lb/hr and 0.065 ton/yr(as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method

The hourly allowable mass emission rate for PE was established using the PE emission factor specified in AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (7/98) and the following equation.

PE = EF x 2 MMBtu/hr, where

EF = (7.6 lb PE/10^6scf) / (1,020 Btu/scf)

The annual limitation was calculated by multiplying the hourly limitation by 8,760 hr/yr and then dividing by 2,000 lb/ton.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

i. Emission Limitation

Sulfur dioxide (SO_2) emissions shall not exceed 0.001 lb/hr and 0.005 ton/yr(as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method

The hourly allowable mass emission rate for SO_2 was established by using the SO_2 emission factor specified in AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (7/98) and the following equation.

SO_2 = EF x 2 MMBtu/hr, where

EF = (0.6 lb $SO_2/10^6$scf) / (1,020 Btu/scf)

The annual limitation was calculated by multiplying the hourly limitation by 8,760 hr/yr and then dividing by 2,000 lb/ton.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 6C.

j. Emission Limitation

Toluene emissions shall not exceed 1,011 pounds per day.

Applicable Compliance Method

The maximum daily toluene emissions from coatings, adhesives and inks were calculated for the worst-case material (solvent-based coating) using the following equation.

$VOC_{solvent\text{-}based\ coating}$ = coating usage x toluene content, where:

Maximum solvent-based coating usage = 301lb/hr x 24 hr/day

Solvent-based coating toluene content = 14% by weight

g) Miscellaneous Requirements

(1) None.