



Environmental
Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

10/13/2010

Brian Bokovoy
Flint Group North America Corp
2675 Henkle Dr
Lebanon, OH 45036

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1483060398
Permit Number: P0106696
Permit Type: Administrative Modification
County: Warren

Certified Mail

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

Dear Permit Holder:

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

The issuance of this PTI 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 Kevin Boyce," 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

If you have any questions, please contact Hamilton County Dept. of Environmental Services at (513)946-7777 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: HCDOES



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Flint Group North America Corp**

Facility ID: 1483060398
Permit Number: P0106696
Permit Type: Administrative Modification
Issued: 10/13/2010
Effective: 10/13/2010
Expiration: 9/27/2020



Division of Air Pollution Control
Permit-to-Install and Operate
for
Flint Group North America Corp

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Authorization

Facility ID: 1483060398

Application Number(s): A0038665

Permit Number: P0106696

Permit Description: Administrative Modification to alter allowable emissions limitations for twenty (20) mixing vessels and milling units with DC-703 pulse jet fabric filter and six (6) small batch mixer/dispersers for printing inks, varnishes, adhesives, and other coatings. New facility-wide PTE VOC and HAPs redesignates facility as NTV rather than FEPTIO.

Permit Type: Administrative Modification

Permit Fee: \$3,050.00

Issue Date: 10/13/2010

Effective Date: 10/13/2010

Expiration Date: 9/27/2020

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

This document constitutes issuance to:

Flint Group North America Corp
2675 HENKLE DR
LEBANON, OH 45036

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

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660
(513)946-7777

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



Chris Korleski
Director



Authorization (continued)

Permit Number: P0106696
Permit Description: Administrative Modification to alter allowable emissions limitations for twenty (20) mixing vessels and milling units with DC-703 pulse jet fabric filter and six (6) small batch mixer/dispersers for printing inks, varnishes, adhesives, and other coatings. New facility-wide PTE VOC and HAPs redesignates facility as NTV rather than FEPTIO.

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

- Emissions Unit ID: P001**
Company Equipment ID: Ink Mixer
Superseded Permit Number: 14-05560
General Permit Category and Type: Not Applicable
- Emissions Unit ID: P003**
Company Equipment ID: Ink Mixer
Superseded Permit Number: 14-05560
General Permit Category and Type: Not Applicable
- Emissions Unit ID: P004**
Company Equipment ID: Ink Mixer
Superseded Permit Number: 14-05560
General Permit Category and Type: Not Applicable
- Emissions Unit ID: P007**
Company Equipment ID: Ink Mill/Blender
Superseded Permit Number: 14-05560
General Permit Category and Type: Not Applicable
- Emissions Unit ID: P008**
Company Equipment ID: Ink Mill
Superseded Permit Number: 14-05560
General Permit Category and Type: Not Applicable
- Emissions Unit ID: P011**
Company Equipment ID: Ink Mixer/Dispenser
Superseded Permit Number: 14-05560
General Permit Category and Type: Not Applicable
- Emissions Unit ID: P018**
Company Equipment ID: Ink Mixer/Dispenser
Superseded Permit Number: 14-05560
General Permit Category and Type: Not Applicable
- Emissions Unit ID: P019**
Company Equipment ID: Ink Mill/Blender
Superseded Permit Number: 14-05560
General Permit Category and Type: Not Applicable
- Emissions Unit ID: P020**
Company Equipment ID: Ink Mill/Blender
Superseded Permit Number: 14-05560
General Permit Category and Type: Not Applicable
- Emissions Unit ID: P021**
Company Equipment ID: Ink Mill/Blender
Superseded Permit Number: 14-05560



General Permit Category and Type: Not Applicable

Emissions Unit ID: P022
 Company Equipment ID: Ink Mill/Blender
 Superseded Permit Number: 14-05560
 General Permit Category and Type: Not Applicable

Emissions Unit ID: P023
 Company Equipment ID: Ink Mill/Blender
 Superseded Permit Number: 14-05560
 General Permit Category and Type: Not Applicable

Group Name: 30-hp Dispersers D414 - D417

Emissions Unit ID:	P013
Company Equipment ID:	Ink Mixer/Dispenser
Superseded Permit Number:	14-05560
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P014
Company Equipment ID:	Ink Mixer/Dispenser
Superseded Permit Number:	14-05560
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P015
Company Equipment ID:	Ink Mixer/Dispenser
Superseded Permit Number:	14-05560
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P016
Company Equipment ID:	Ink Mixer/Dispenser
Superseded Permit Number:	14-05560
General Permit Category and Type:	Not Applicable

Group Name: 50-hp Disersers D419 & D421

Emissions Unit ID:	P010
Company Equipment ID:	Ink Mixer/Dispenser
Superseded Permit Number:	14-05560
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P012
Company Equipment ID:	Ink Mixer/Dispenser
Superseded Permit Number:	14-05560
General Permit Category and Type:	Not Applicable

Group Name: PM 302 & 304, HM60 G301 & G303

Emissions Unit ID:	P005
Company Equipment ID:	Ink Mill/Blender
Superseded Permit Number:	14-05560
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P006
Company Equipment ID:	Ink Mill/Blender
Superseded Permit Number:	14-05560
General Permit Category and Type:	Not Applicable

Group Name: SB Mixers

Emissions Unit ID:	P029
Company Equipment ID:	Ink Mixer/Dispenser
Superseded Permit Number:	14-05560

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Facility ID: 1483060398

Effective Date: 10/13/2010

General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P030
Company Equipment ID:	Ink Mixer/Dispenser
Superseded Permit Number:	14-05560
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P031
Company Equipment ID:	Ink Mixer/Dispenser
Superseded Permit Number:	14-05560
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P032
Company Equipment ID:	Ink Mixer/Dispenser
Superseded Permit Number:	14-05560
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P033
Company Equipment ID:	Ink Mixer/Dispenser
Superseded Permit Number:	14-05560
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P034
Company Equipment ID:	Ink Mixer/Dispenser
Superseded Permit Number:	14-05560
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 taken by 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 Hamilton County Dept. of Environmental Services 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 submitting¹ 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.

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

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).

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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

Final Permit-to-Install and Operate

Flint Group North America Corp

Permit Number: P0106696

Facility ID: 1483060398

Effective Date: 10/13/2010

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) None.

C. Emissions Unit Terms and Conditions

1. P001, Ink Mixer

Operations, Property and/or Equipment Description:

Dispersions Dept. 2000 gal. Mixer G305

- 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. 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.
- 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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 5.37 pounds per batch and 2.69 tons per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.023 pound per hour and 0.10 TPY. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). 2.71 pounds PE per hour.

- (2) Additional Terms and Conditions
- a. The permittee shall employ a dust collector during dry materials addition activities.
 - b. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
 - c. 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.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall perform weekly checks, when any of the emissions units (P001 through P037) exhausted to the common dust collector are in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.
- If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.
- (2) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;

- b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
- e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:
 - a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 5.37 pounds per batch and 2.69 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

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Flint Group North America Corp

Permit Number: P0106696

Facility ID: 1483060398

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The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-TUW36379:

3.3207 lb ethanol + 0.76781 lb ethyl acetate + 0.16183 lb isopropyl alcohol + 1.1144 lb n-propyl acetate = 5.37 pounds VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

5.37 pounds VOC/batch x batch/8.747 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 2.69 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.023 pound per hour and 0.10 TPY.

2.71 pounds PE per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the use of the dust collector with a 98.5% Control Efficiency (CE) during dry materials addition activities:

1.5 pound PE/PM10/hour, uncontrolled x (1 – 0.985 CE) = 0.023 pound PE/PM10, controlled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids] multiplied by the CE of the dust collector (1 – 0.985 CE). The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of

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solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.023 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds = 0.10 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

2. P003, Ink Mixer

Operations, Property and/or Equipment Description:

Dispersions Dept. 1000 gal. Mixer G306

- 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. 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.
- 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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 3.41 pounds per batch and 2.72 tons per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.012 pound per hour and 0.05 TPY. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). 2.65 pounds PE per hour.

(2) Additional Terms and Conditions

- a. The permittee shall employ a dust collector during dry materials addition activities.
- b. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
- c. 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.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when any of the emissions units (P001 through P037) exhausted to the common dust collector are in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (2) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;

- b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
- e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:
 - a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 3.41 pounds per batch and 2.72 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

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The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-R1W00799:

1.4456 lb ethanol + 1.3306 lb ethyl acetate + 0.029304 lb isopropyl alcohol + 0.58381 lb n-propyl acetate + 0.01688 lb n-propanol = 3.41 pounds VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

3.41 pounds VOC/batch x batch/5.497 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 2.72 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.012 pound per hour and 0.05 TPY.

2.65 pounds PE per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the use of the dust collector with a 98.5% Control Efficiency (CE) during dry materials addition activities:

0.8 pound PE/PM10/hour, uncontrolled x (1 - 0.985 CE) = 0.012 pound PE/PM10, controlled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids] multiplied by the CE of the dust collector (1 - 0.985 CE). The result(s) shall be multiplied by the number of batches produced per year and divided by 2000

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pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.012 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds = 0.05 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

3. P004, Ink Mixer

Operations, Property and/or Equipment Description:

Dispersions Dept. 1000 gal. Mixer G307

- 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. 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.
- 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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 1.46 pounds per batch and 1.30 tons per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.012 pound per hour and 0.05 TPY. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). 1.58 pounds PE per hour.

- (2) Additional Terms and Conditions
- a. The permittee shall employ a dust collector during dry materials addition activities.
 - b. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
 - c. 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.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall perform weekly checks, when any of the emissions units (P001 through P037) exhausted to the common dust collector are in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.
- If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.
- (2) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;

- b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
- e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:

a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 1.46 pounds per batch and 1.30 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

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The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-RYW08235:

0.33354 lb ethanol + 0.086338 lb ethyl acetate + 0.067981 lb isopropyl alcohol + 0.73872 lb n-propyl acetate + 0.23226 lb n-propanol = 1.46 pounds VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

1.46 pounds VOC/batch x batch/4.91 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 1.30 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.012 pound per hour and 0.05 TPY.

1.58 pounds PE per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the use of the dust collector with a 98.5% Control Efficiency (CE) during dry materials addition activities:

0.8 pound PE/PM10/hour, uncontrolled x (1 - 0.985 CE) = 0.012 pound PE/PM10, controlled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids] multiplied by the CE of the dust collector (1 - 0.985 CE). The result(s) shall be multiplied by the number of batches produced per year and divided by 2000

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pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.012 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds = 0.05 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

4. P007, Ink Mill/Blender

Operations, Property and/or Equipment Description:

Milling Dept. HM-40 Mill/Blender G404

- 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. 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.
- 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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 3.87 pounds per batch and 1.70 tons per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.002 pound per hour and 0.009 TPY. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). 0.75 pound PE/PM10 per hour.

(2) Additional Terms and Conditions

- a. The permittee shall employ a dust collector during dry materials addition activities.
- b. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
- c. 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.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when any of the emissions units (P001 through P037) exhausted to the common dust collector are in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (2) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;

- b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
- e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:
 - a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 3.87 pounds per batch and 1.70 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

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The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-VNR00604:

2.9806 lb ethanol + 0.18395 lb ethyl acetate + 0.35222 lb isopropyl alcohol + 0.35399 lb n-propyl acetate = 3.87 pounds VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

3.87 pounds VOC/batch x batch/10.00 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 1.70 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.002 pound per hour and 0.009 TPY.

0.75 pound PE/PM10 per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the use of the dust collector with a 98.5% Control Efficiency (CE) during dry materials addition activities:

0.1 pound PE/PM10/hour, uncontrolled x (1 – 0.985 CE) = 0.002 pound PE/PM10, controlled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids] multiplied by the CE of the dust collector (1 – 0.985 CE). The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of

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solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.002 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds =
0.009 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

5. P008, Ink Mill

Operations, Property and/or Equipment Description:

Milling Dept. HM-40 Mill/Blender G405

- 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. 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.
- 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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 3.98 pounds per batch and 1.51 tons per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.002 pound per hour and 0.009 TPY. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). 0.551 pound PE/PM10 per hour.

(2) Additional Terms and Conditions

- a. The permittee shall employ a dust collector during dry materials addition activities.
- b. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
- c. 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.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when any of the emissions units (P001 through P037) exhausted to the common dust collector are in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (2) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;

- b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
- e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:

a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 3.98 pounds per batch and 1.51 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

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The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-VNK00524:

2.9367 lb ethanol + 0.13726 lb ethyl acetate + 0.64133 lb isopropyl alcohol + 0.26653 lb n-propyl acetate = 3.98 pounds VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

3.98 pounds VOC/batch x batch/11.58 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 1.51 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.002 pound per hour and 0.009 TPY.

0.551 pound PE/PM10 per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the use of the dust collector with a 98.5% Control Efficiency (CE) during dry materials addition activities:

0.1 pound PE/PM10/hour, uncontrolled x (1 – 0.985 CE) = 0.002 pound PE/PM10, controlled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids] multiplied by the CE of the dust collector (1 – 0.985 CE). The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of

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solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.002 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds =
0.009 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

6. P011, Ink Mixer/Dispenser

Operations, Property and/or Equipment Description:

Dispersions Dept. 50 hp Dispenser D420

- 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. 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.
- 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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 0.59 pounds per batch and 0.86 tons per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.011 pound per hour and 0.05 TPY. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). 0.99 pounds PE per hour.

- (2) Additional Terms and Conditions
- a. The permittee shall employ a dust collector during dry materials addition activities.
 - b. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
 - c. 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.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall perform weekly checks, when any of the emissions units (P001 through P037) exhausted to the common dust collector are in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.
- If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.
- (2) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;

- b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
- e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:

- a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 0.59 pounds per batch and 0.86 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

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The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-R1B01327:

0.33437 lb ethanol + 0.045837 lb ethyl acetate + 0.023951 lb isopropyl alcohol + 0.12481 lb n-propyl acetate + 0.06035 lb n-propanol = 0.59 pounds VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

0.59 pounds VOC/batch x batch/3.00 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 0.86 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.011 pound per hour and 0.05 TPY.

0.99 pounds PE per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the use of the dust collector with a 98.5% Control Efficiency (CE) during dry materials addition activities:

0.7 pound PE/PM10/hour, uncontrolled x (1 - 0.985 CE) = 0.011 pound PE/PM10, controlled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids] multiplied by the CE of the dust collector (1 - 0.985 CE). The result(s) shall be multiplied by the number of batches produced per year and divided by 2000

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pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.011 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds = 0.05 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

7. P018, Ink Mixer/Dispenser

Operations, Property and/or Equipment Description:

Dispersions Dept. 20 hp Dispenser D413

- 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. 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.
- 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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 0.59 pounds per batch and 0.86 tons per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.011 pound per hour and 0.05 TPY. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). 0.99 pounds PE per hour.

(2) Additional Terms and Conditions

- a. The permittee shall employ a dust collector during dry materials addition activities.
- b. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
- c. 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.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when any of the emissions units (P001 through P037) exhausted to the common dust collector are in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (2) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;

- b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
- e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:
 - a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 0.59 pounds per batch and 0.86 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

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The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-R1B01327:

0.33437 lb ethanol + 0.045837 lb ethyl acetate + 0.023951 lb isopropyl alcohol + 0.12481 lb n-propyl acetate + 0.06035 lb n-propanol = 0.59 pounds VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

0.59 pounds VOC/batch x batch/3.00 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 0.86 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.011 pound per hour and 0.05 TPY.

0.99 pounds PE per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the use of the dust collector with a 98.5% Control Efficiency (CE) during dry materials addition activities:

0.7 pound PE/PM10/hour, uncontrolled x (1 - 0.985 CE) = 0.011 pound PE/PM10, controlled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids] multiplied by the CE of the dust collector (1 - 0.985 CE). The result(s) shall be multiplied by the number of batches produced per year and divided by 2000

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pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.011 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds = 0.05 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

8. P019, Ink Mill/Blender

Operations, Property and/or Equipment Description:

Milling Dept. HM-10 Mill/Blender G406

- 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. 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.
- 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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 6.28 pounds per batch and 3.55 tons per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.0003 pound per hour and 0.0013 TPY. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). 0.551 pound PE/PM10 per hour.

(2) Additional Terms and Conditions

- a. The permittee shall employ a dust collector during dry materials addition activities.
- b. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
- c. 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.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when any of the emissions units (P001 through P037) exhausted to the common dust collector are in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (2) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;

- b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
- e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:
 - a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 6.28 pounds per batch and 3.55 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

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Facility ID: 1483060398

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The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-NDA-02508:

4.9148 lb ethanol + 0.50295 lb isopropyl alcohol + 0.86143 lb n-propyl acetate = 6.28 pounds VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

6.28 pounds VOC/batch x batch/7.75 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 3.55 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.0003 pound per hour and 0.0013 TPY.

0.551 pound PE/PM10 per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the use of the dust collector with a 98.5% Control Efficiency (CE) during dry materials addition activities:

0.02 pound PE/PM10/hour, uncontrolled x (1 – 0.985 CE) = 0.0003 pound PE/PM10, controlled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids] multiplied by the CE of the dust collector (1 – 0.985 CE). The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of

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solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.0003 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds =
0.0013 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

9. P020, Ink Mill/Blender

Operations, Property and/or Equipment Description:

Milling Dept. HM-10 Mill/Blender G407

- 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. 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.
- 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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 1.80 pounds per batch and 0.60 tons per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.0003 pound per hour and 0.0013 TPY. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). 0.551 pound PE/PM10 per hour.

- (2) Additional Terms and Conditions
- a. The permittee shall employ a dust collector during dry materials addition activities.
 - b. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
 - c. 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.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall perform weekly checks, when any of the emissions units (P001 through P037) exhausted to the common dust collector are in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.
 - (2) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;

- b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
- e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:

a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 1.80 pounds per batch and 0.60 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

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The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-NDA-0432:

0.017514 lb ethanol + 1.3879 lb glycol ether PM + 0.36024 lb isopropyl alcohol + 0.032686 lb n-propanol = 1.80 pounds VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

1.80 pounds VOC/batch x batch/13.09 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 0.60 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.0003 pound per hour and 0.0013 TPY.

0.551 pound PE/PM10 per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the use of the dust collector with a 98.5% Control Efficiency (CE) during dry materials addition activities:

0.02 pound PE/PM10/hour, uncontrolled x (1 – 0.985 CE) = 0.0003 pound PE/PM10, controlled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids] multiplied by the CE of the dust collector (1 – 0.985 CE). The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of

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solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.003 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds =
0.0013 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

10. P021, Ink Mill/Blender

Operations, Property and/or Equipment Description:

Milling Dept. HM-20 Mill/Blender G409

- 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. 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.
- 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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 0.13 pound per batch and 0.09 ton per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.0006 pound per hour and 0.0026 TPY. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). 0.551 pound PE/PM10 per hour.

(2) Additional Terms and Conditions

- a. The permittee shall employ a dust collector during dry materials addition activities.
- b. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
- c. 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.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when any of the emissions units (P001 through P037) exhausted to the common dust collector are in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (2) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;

- b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
- e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:

- a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 0.13 pound per batch and 0.09 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

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The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-P-202:

0.033137 lb ethanol + 0.0096335 lb isopropyl alcohol + 0.040123 lb n-propyl acetate + 0.045204 lb n-propanol = 0.13 pound VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

0.13 pound VOC/batch x batch/6.414 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 0.09 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.0006 pound per hour and 0.0026 TPY.

0.551 pound PE/PM10 per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the use of the dust collector with a 98.5% Control Efficiency (CE) during dry materials addition activities:

0.04 pound PE/PM10/hour, uncontrolled x (1 – 0.985 CE) = 0.0006 pound PE/PM10, controlled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids] multiplied by the CE of the dust collector (1 – 0.985 CE). The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of

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solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.0006 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds =
0.0026 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

11. P022, Ink Mill/Blender

Operations, Property and/or Equipment Description:

Milling Dept. HM-20 Mill/Blender G408

- 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. 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.
- 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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 1.83 pounds per batch and 0.78 tons per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.0006 pound per hour and 0.0026 TPY. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). 0.551 pound PE/PM10 per hour.

(2) Additional Terms and Conditions

- a. The permittee shall employ a dust collector during dry materials addition activities.
- b. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
- c. 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.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when any of the emissions units (P001 through P037) exhausted to the common dust collector are in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (2) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;

- b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
- e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:
 - a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 1.83 pounds per batch and 0.78 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

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Flint Group North America Corp

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The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-R1P00415:

0.42787 lb ethanol + 1.4049 lb ethyl acetate = 1.83 pounds VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

1.83 pounds VOC/batch x batch/10.325 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 0.78 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.0006 pound per hour and 0.0026 TPY.

0.551 pound PE/PM10 per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the use of the dust collector with a 98.5% Control Efficiency (CE) during dry materials addition activities:

0.04 pound PE/PM10/hour, uncontrolled x (1 – 0.985 CE) = 0.0006 pound PE/PM10, controlled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids] multiplied by the CE of the dust collector (1 – 0.985 CE). The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of

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solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.0006 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds =
0.0026 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

12. P023, Ink Mill/Blender

Operations, Property and/or Equipment Description:

Milling Dept. HM-40 Mill/Blender G403

- 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. 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.
- 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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 3.98 pounds per batch and 1.51 tons per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.002 pound per hour and 0.009 TPY. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). 0.551 pound PE/PM10 per hour.

(2) Additional Terms and Conditions

- a. The permittee shall employ a dust collector during dry materials addition activities.
- b. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
- c. 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.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when any of the emissions units (P001 through P037) exhausted to the common dust collector are in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (2) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;

- b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
- e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:
 - a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 3.98 pounds per batch and 1.51 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

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The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-VNK00524:

2.9367 lb ethanol + 0.13726 lb ethyl acetate + 0.64133 lb isopropyl alcohol + 0.26653 lb n-propyl acetate = 3.98 pounds VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

3.98 pounds VOC/batch x batch/11.58 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 1.51 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.002 pound per hour and 0.009 TPY.

0.551 pound PE/PM10 per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the use of the dust collector with a 98.5% Control Efficiency (CE) during dry materials addition activities:

0.1 pound PE/PM10/hour, uncontrolled x (1 - 0.985 CE) = 0.002 pound PE/PM10, controlled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids] multiplied by the CE of the dust collector (1 - 0.985 CE). The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of

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solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.002 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds =
0.009 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

13. Emissions Unit Group - 30-hp Dispersers D414 - D417: P013, P014, P015, P016,

EU ID	Operations, Property and/or Equipment Description
P013	Dispersions Dept. 30 hp Disperser D416
P014	Dispersions Dept. 30 hp Disperser D417
P015	Dispersions Dept. 30 hp Disperser D414
P016	Dispersions Dept. 30 hp Disperser D415

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. 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.

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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 0.59 pounds per batch and 0.86 tons per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.011 pound per hour and 0.05 TPY. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). 0.99 pounds PE per hour.

(2) Additional Terms and Conditions

- a. The permittee shall employ a dust collector during dry materials addition activities.
- b. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
- c. 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.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when any of the emissions units (P001 through P037) exhausted to the common dust collector are in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (2) The permittee shall maintain monthly records of the following information for this emissions unit:

- a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;
- b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
- e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:

a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 0.59 pounds per batch and 0.86 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of

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VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-R1B01327:

0.33437 lb ethanol + 0.045837 lb ethyl acetate + 0.023951 lb isopropyl alcohol + 0.12481 lb n-propyl acetate + 0.06035 lb n-propanol = 0.59 pounds VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

0.59 pounds VOC/batch x batch/3.00 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 0.86 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.011 pound per hour and 0.05 TPY.

0.99 pounds PE per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the use of the dust collector with a 98.5% Control Efficiency (CE) during dry materials addition activities:

0.7 pound PE/PM10/hour, uncontrolled x (1 - 0.985 CE) = 0.011 pound PE/PM10, controlled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids]

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multiplied by the CE of the dust collector (1 – 0.985 CE). The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.011 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds = 0.05 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

14. Emissions Unit Group - 50-hp Disersers D419 & D421: P010, P012,

EU ID	Operations, Property and/or Equipment Description
P010	Dispersions Dept. 50 hp Disperser D419
P012	Dispersions Dept. 50 hp Disperser D421

- 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. 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.
- 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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 1.46 pounds per batch and 1.60 tons per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.011 pound per hour and 0.05 TPY. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). 1.39 pounds PE per hour.

(2) Additional Terms and Conditions

- a. The permittee shall employ a dust collector during dry materials addition activities.
- b. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
- c. 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.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when any of the emissions units (P001 through P037) exhausted to the common dust collector are in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (2) The permittee shall maintain monthly records of the following information for this emissions unit:

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- a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;
- b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
- e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:

a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 1.46 pounds per batch and 1.60 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of

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VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-TMB32479:

0.42605 lb ethanol + 0.016219 lb ethyl acetate + 0.12251 lb isopropyl alcohol + 0.61557 lb n-propyl acetate + 0.27511 lb toluene = 1.46 pounds VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

1.46 pounds VOC/batch x batch/4.00 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 1.60 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.011 pound per hour and 0.05 TPY.

1.39 pounds PE per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the use of the dust collector with a 98.5% Control Efficiency (CE) during dry materials addition activities:

0.7 pound PE/PM10/hour, uncontrolled x (1 - 0.985 CE) = 0.011 pound PE/PM10, controlled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids] multiplied by the CE of the dust collector (1 - 0.985 CE). The result(s) shall be

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multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.011 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds = 0.05 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

15. Emissions Unit Group - PM 302 & 304, HM60 G301 & G303: P005, P006,

EU ID	Operations, Property and/or Equipment Description
P005	Pre-Mix G302 HM60 Mill/Blender G301
P006	Pre-Mix 304 HM60 Mill/Blender G303

- 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. 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.
- 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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 6.61 pounds per batch and 2.67 tons per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.002 pound per hour and 0.009 TPY. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). 0.68 pounds PE per hour.

(2) Additional Terms and Conditions

- a. The permittee shall employ a dust collector during dry materials addition activities.
- b. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
- c. 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.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when any of the emissions units (P001 through P037) exhausted to the common dust collector are in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (2) The permittee shall maintain monthly records of the following information for this emissions unit:

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- a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;
- b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
- d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
- e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:

a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 6.61 pounds per batch and 2.67 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of

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VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-VNY00523:

5.4299 lb ethanol + 0.22709 lb ethyl acetate + 0.44073 lb isopropyl alcohol + 0.51232 lb n-propyl acetate = 6.61 pounds VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

6.61 pounds VOC/batch x batch/10.84 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 2.67 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.002 pound per hour and 0.009 TPY.

0.68 pounds PE per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the use of the dust collector with a 98.5% Control Efficiency (CE) during dry materials addition activities:

0.1 pound PE/PM10/hour, uncontrolled x (1 - 0.985 CE) = 0.002 pound PE/PM10, controlled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids] multiplied by the CE of the dust collector (1 - 0.985 CE). The result(s) shall be

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multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.002 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds =
0.009 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

16. Emissions Unit Group - SB Mixers: P029, P030, P031, P032, P033, P034,

EU ID	Operations, Property and/or Equipment Description
P029	Dispersions Dept. 4 hp Specialty Product Mixer 1
P030	Dispersions Dept. 4 hp Specialty Product Mixer 2
P031	Dispersions Dept. 4 hp Specialty Product Mixer 3
P032	Dispersions Dept. 4 hp Specialty Product Mixer 4
P033	Dispersions Dept. 4 hp Specialty Product Mixer 5
P034	Dispersions Dept. 4 hp Specialty Product Mixer 6

- 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. 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.
- 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 3745-31-05(A)(3), as effective 11/30/01	Emissions of volatile organic compounds (VOC) shall not exceed 0.061 pound per batch and 0.26 ton per year (TPY). Particulate emissions and emissions of particulate matter 10 microns and less in diameter (PE/PM10) shall not exceed 0.04 pound per hour and 0.18 TPY. See b)(2)a.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)b.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.551 pound PE/PM10 per hour.

(2) Additional Terms and Conditions

- a. The short-term VOC and PE/PM10 emissions are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
- b. 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.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. The name and identification of the various printing inks, varnishes, adhesives, and other coatings blended;
 - b. The amount of solids charged as dry material additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
 - c. The amount of VOC-containing materials charged as bulk liquid and non-bulk liquid additions, in pounds, in the manufacture of printing inks, varnishes, adhesives, and other coatings, on a per batch basis;
 - d. The amount of VOC-containing materials charged in the cleaning of the vessel on a per batch basis; and
 - e. The number of batches of the various printing inks, varnishes, adhesives, and other coatings.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.

f) Testing Requirements

(1) Compliance with the emission limitations shall be demonstrated in accordance with the following methods:

a. Emission Limitations

Emissions of volatile organic compounds (VOC) shall not exceed 0.061 pound per batch and 0.26 tons per year (TPY)

Applicable Compliance Method

If required, compliance with the short term VOC emission limitation shall be demonstrated by inputting the actual amount of VOC-containing materials charged into a batch and used to clean the vessel, where the finished product is a particular printing ink, varnish, adhesive, or other coating, into the Emission Master 7.6.0.0. batch VOC emissions calculation software. The Total Weight of VOC emissions for all vents from the Emission Master calculations shall be summed yielding the actual VOC emissions in pounds per batch.

The applicable emission limitation was established based on information supplied by the permittee in Application A0038665, April 2010, for PTIO P0106696, for the worst-case VOC emissions product/process 088-RIY03602:

0.036369 lb ethanol + 0.012263 lb ethyl acetate + 0.0055088 lb isopropyl alcohol + 0.0054169 lb n-propyl acetate + 0.001552 lb n-propanol = 0.061 pound VOC per batch

Compliance with the annual VOC emission limitation shall be demonstrated by using the Emission Master 7.6.0.0. calculation software to calculate the pounds of VOC per batch, for each of the various products manufactured. The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY VOC. Varying batch yield quantities of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case VOC emissions product:

0.061 pound VOC/batch x batch/1.00 hours x 24 hours/day x 365 days/year x 1 Ton/2000 pounds = 0.26 TPY VOC

b. Emission Limitations

Particulate emissions and emissions of particulate matter 10 microns and less (PE/PM10) shall not exceed 0.04 pound per hour and 0.18 TPY.

0.551 pounds PE per hour.

Applicable Compliance Method

If required, compliance with the short-term PE/PM10 emission limitation(s) shall be demonstrated by conducting a Method 5 emissions test 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.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the uncontrolled PE/PM10 during dry materials addition activities:

0.04 pound PE/PM10/hour, uncontrolled

Compliance with the annual PE/PM10 emission limitation shall be demonstrated by calculating the pounds of PE/PM10 per batch by multiplying the actual amount of solids charged, in pounds per batch, for each of the various products manufactured, by the emission factor in AP-42, Chapter 6.7, Printing Ink, Table 6.7-1, 5/83 [2 lb PE/PM10/ton of solids or 0.001 pound PE/PM10/pound solids] multiplied by the CE of the dust collector (1 – 0.985 CE). The result(s) shall be multiplied by the number of batches produced per year and divided by 2000 pounds equaling TPY PE/PM10. Varying batch yield quantities, or amounts of solids charged, of a particular Product/Process ID shall be considered, if necessary.

The applicable emission limitation was established based on information supplied by the permittee in the Application for this permit based on the worst-case PE/PM10 emissions product:

0.04 pound PE/PM10, controlled x 8760 hours/year x 1 Ton/2000 pounds = 0.18 TPY PE/PM10

c. Emission Limitation

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

Applicable Compliance Method

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.