John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

Certified Mail

4/23/2015

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

James Kochanny
INX International Ink Co.
1000 Maple Avenue
Homewood, IL 60430

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1483000550
Permit Number: P0118313
Permit Type: Initial Installation
County: Warren

Dear Permit Holder:

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

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

How to appeal this permit

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

If you have any questions, please contact Southwest Ohio Air Quality Agency at (513)946-7777 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,

Erica R. Engel-Ishida, Manager
Permit Issuance and Data Management Section, DAPC

Cc: SWOAQA

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
INX International Ink Co.

Facility ID:	1483000550
Permit Number:	P0118313
Permit Type:	Initial Installation
Issued:	4/23/2015
Effective:	4/23/2015
Expiration:	6/25/2019

Division of Air Pollution Control
Permit-to-Install and Operate
for
INX International Ink Co.

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Authorization

Facility ID:	1483000550
Application Number(s):	A0052078
Permit Number:	P0118313
Permit Description:	Initial FEPTIO for two (2) new Pilot Scale printing ink manufacturing units. This FEPTIO incorporates the new units into the facility-wide requirements to avoid Title V and Major Source NSR for VOC and PE/PM10.
Permit Type:	Initial Installation
Permit Fee:	$400.00
Issue Date:	4/23/2015
Effective Date:	4/23/2015
Expiration Date:	6/25/2019

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

This document constitutes issuance to:

INX International Ink Co.
350 Homan Road
Lebanon, OH 45036

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

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

Southwest Ohio Air Quality Agency
250 William Howard Taft Rd.
Cincinnati, OH 45219
(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

Craig W. Butler
Director

Authorization (continued)

Permit Number: P0118313
Permit Description: Initial FEPTIO for two (2) new Pilot Scale printing ink manufacturing units. This FEPTIO incorporates the new units into the facility-wide requirements to avoid Title V and Major Source NSR for VOC and PE/PM10.

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

Group Name: Pilot Scale Equipment

Emissions Unit ID:	**P030**
Company Equipment ID:	AG-910
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P031**
Company Equipment ID:	AM-910
Superseded Permit Number:	
General Permit Category andType:	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. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. 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 of this permit 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 [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting 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 emission 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 beingpermanently shut down without first applying for and obtaining a permit pursuantto 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 under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

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

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

B. Facility-Wide Terms and Conditions

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

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

      (1) None.

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

      (1) See 2., 3., 4., 5., 7., 8., 9., 10., 11., 12., 13., 14., and 15.

2. The facility-wide emissions of volatile organic compounds (VOC) shall not exceed 73.20 tons per year (TPY), based upon a rolling 12-month summation of the VOC emission rates from emissions units P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, P013, P014, P015, P016, P017, P018, P019, P020, P021, P022, P023, P024, P025, P026, P027, P028, P030, and P031, combined.

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

Month(s)	Maximum Allowable Cumulative Emissions of VOC (Tons)
1-6	36.60
1-7	42.70
1-8	48.80
1-9	54.90
1-10	61.00
1-11	67.10
1-12	73.20

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual emission limitation for VOC shall be based upon a rolling, 12-month summation of the monthly emissions.

3. In order to minimize emissions of volatile organic compounds (VOC), the permittee shall maintain a work practice standard of ensuring the prompt closure of any tank or vessel containing VOC-containing materials.

4. The facility-wide PE/PM10 emissions shall not exceed 2.85 TPY, based upon a rolling, 12-month summation of the PE/PM10 emission rates from emissions units P001 – P031, combined.

   The Synthetic Minor requirements for PE/PM10, pursuant to OAC rule 3745-31-05(A)(3), are primarily driven by the requirement to vent emissions to a fabric filter with a design efficiency of at least 98%. The proper monitoring, recordkeeping, reporting requirements (MRR) for determining compliance with the requirement is included by requiring parametric monitoring of the fabric filter. Thus, a monthly cumulative limit for PE/PM10 was not included in this permit.

5. The emissions from emissions units P001, P002, P008, P009, P010, P011, P012, P013, P014, P015, and P016 shall be vented to a fabric filter, at all times dry ingredients are being added to the emissions units, with a design efficiency of at least 98% control of particulate emissions (PE) and emissions of particulate matter 10 microns and less in diameter (PM10). Emissions units P030 and P031 are not controlled by a fabric filter. The uncontrolled, unrestricted potential to emit (PTE) of PE/PM10 from P030 and P031, combined, is 1.64 TPY.

6. Emissions from emissions units P030 and P031 are included in the facility-wide VOC Applicable Emissions Limitation pursuant to OAC rule 3745-31-05(D). However, since the production rate used to calculate the contribution of VOC emissions from emissions units P030 and P031 to that allowable was based on 8760 hours per year and the premise that 100% of the production rate thru the appropriate emissions unit factor in pound(s) per ton of the production rate is emitted as VOC, there is no corresponding OAC 3745-31-05(D) "Operational Restriction" on production required for these emissions units. In order to determine compliance with the facility-wide VOC emissions limit, the facility is required to calculate the rolling, 12-month actual emissions from emissions units P030 and P031.

7. The permittee shall record each instance where any tank or vessel identified in B.2. containing any VOC-containing material was not promptly closed and the reason(s) for the failure to maintain the work practice standard.

8. For emissions units P001, P002, P008, P009, P010, P011, P012, P013, P014, P015, and P016, the acceptable range for the pressure drop across the fabric filter shall be based upon the manufacturer's specifications, until such time as any required performance testing is conducted and an alternative pressure drop range and/or limit is established.

9. For emissions units P001, P002, P008, P009, P010, P011, P012, P013, P014, P015, and P016, the permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the fabric filter when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the fabric filter on a daily basis. Alternatively, the permittee shall equip the fabric filter with an alarm system to serve as notification of any operation of the unit outside of the prescribed pressure drop range. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable pressure drop shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

   Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a) the date and time the deviation began;

b) the magnitude of the deviation at that time;

c) the date the investigation was conducted;

d) the name(s) of the personnel who conducted the investigation; and

e) the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a) a description of the corrective action;

b) the date corrective action was completed;

c) the date and time the deviation ended;

d) the total period of time (in minutes) during which there was a deviation;

e) the pressure drop readings immediately after the corrective action was implemented; and

f) the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the fabric filter is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an Administrative Modification.

10. Emissions units P003 and P004 do not generate any PE/PM10 and emissions units P005 –P007 do not add dry solids and therefore, do not generate any PE/PM10.

11. For emissions units P008 – P021, combined, the maximum annual ink production rate, shall not exceed 19,920,000 pounds, based upon a rolling, 12-month summation of the ink production rates.

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

Maximum Allowable
Cumulative Production

Month(s)	(pounds)
1-6	9,960,000
1-7	11,620,000
1-8	13,280,000
1-9	14,940000
1-10	16,600,000
1-11	18,260,000
1-12	19,920,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual ink production rate limitation shall be based upon a rolling, 12-month summation of the ink production rates.

12. For emissions units P022 – P024, combined, the maximum annual ink production rate, shall not exceed 240,000 pounds, based upon a rolling, 12-month summation of the ink production rates.

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

Month(s)	Maximum Allowable Cumulative Production (pounds)
1-6	120,000
1-7	140,000
1-8	160,000
1-9	180,000
1-10	200,000
1-11	220,000
1-12	240,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual ink production rate limitation shall be based upon a rolling, 12-month summation of the ink production rates.

13. For emissions units P025 – P027, combined, the maximum annual ink production rate, shall not exceed 240,000 pounds, based upon a rolling, 12-month summation of the ink production rates.

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

Month(s)	Maximum Allowable Cumulative Production (pounds)
1-6	120,000
1-7	140,000
1-8	160,000
1-9	180,000
1-10	200,000
1-11	220,000
1-12	240,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual ink production rate limitation shall be based upon a rolling, 12-month summation of the ink production rates.

14. The permittee shall collect and record the following information each month for the emissions units identified in B.2.:

a) the VOC emission rate for each month of operations; and

b) beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the VOC emissions.

The monthly VOC emissions from the ink manufacturing operations and associated activities shall be calculated as follows:

VOC, Tons per Month = (WI + NV + DL + WB +PI + PS +CS)/2000

Where:

WI = White Ink Dispersion and White Ink Dispersion & Milling Line Emissions, pounds = [(RS-100 production, tons/month x VOC EF, 0.25 pound/ton) + (RS-101 production, tons/month x VOC EF, 0.31 pound/ton) + (AD-111 production, tons/month x VOC EF, 0.28 pound/ton)]*

* No VOC emissions from enclosed mill AM-101

NV = Nitro Varnish Line Emissions, pounds = [(AD-103 production, tons/month x VOC EF, 0.20 pound/ton) + (AD-104 production, tons/month x VOC EF, 0.19 pound/ton) + (AD-105 production, tons/month x VOC EF, 0.25 pound/ton)]

DL = Dispersion Line and Blend & Milled Process Line Emissions, pounds = [(RS-300 + RS-301 + RS-302 + RS-303 + BM-304 + AD-200 + AD-201 + AD-202 + AD-203 production, tons/month) x VOC EF, 12.4 pounds/ton]*

*AD-310 through AD-314 are included the production figures; no VOC emissions from enclosed mills AM-310 through AM-314

WB = Waterbased Ink Process Line Emissions, pounds = [(AGP-810 + AGP-811 + AGP-812 production, tons/month) x VOC EF, 2.4 pounds/ton]

PI = Paste Ink Process Line Emissions, pounds = [(APD-800 + APD-801 + APD-802 production, tons/month) x VOC EF, 0.26 pound/ton]

PS = Pilot Scale Equipment Emissions, pounds = [AG-910 production, tons/month] x VOC EF, 12.4 pounds/ton

CS = Cleaning Solvent Emissions, pounds = [(TW-500, TW-501, FT-500, FT-501, FT-502, ZDS-500, and hand cleaning solvent usage, tons/month) x VOC EF, 400 pounds/ton]

The rolling, 12-month VOC emissions shall be a summation of emissions from the current month (ending) and the 11 previous calendar months.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative VOC emissions for each calendar month for emissions units P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, P013, P014, P015, P016, P017, P018, P019, P020, P021, P022, P023, P024, P025, P026, P027, P028, P030, and P031, combined.

c) the PE/PM10 emission rate for each month of operations; and

d) beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the PE/PM10 emissions.

The monthly PE/PM10 emissions from the ink manufacturing operations P001 – P031 that handle dry ingredients, shall be calculated as follows:

PE/PM10, Tons per Month = [(WI + DL) x (1 – 0.98 CE)] + PS/2000

Where:

WI = White Ink Dispersion and White Ink Dispersion & Milling Line Emissions, pounds = [(RS-100 production, tons/month x actual % dry solids added, converted to pounds/ton x PE/PM10 EF, 0.01 pound/pound) + (RS-101 production, tons/month x actual % dry solids added, converted to pounds/ton x PE/PM10 EF, 0.01 pound/pound)]

DL = Dispersion Line and Blend & Milled Process Line Emissions, pounds = [(RS-300 + RS-301 + RS-302 + RS-303 + BM-304 + AD-200 + AD-201 + AD-202 + AD-203 production, tons/month) x actual % dry solids added, converted to pounds/ton x PE/PM10 EF, 0.01 pound/pound]

CE = Control Efficiency of fabric filters DC-100 and DC-600 given as 98% each based on design efficiency as indicated in Application A0049802 for FEPTIO P0116135.

The monthly PE/PM10 emissions from the ink manufacturing operations P030 and P031, shall be calculated as follows:

PS = Pilot Scale Equipment Emissions, pounds = [(AG/AM-910 production, tons/month x actual % dry solids added, converted to pounds/ton x PE/PM10 EF, 0.01 pound/pound)]

The rolling, 12-month PE/PM10 emissions shall be a summation of emissions from the current month (ending) and the 11 previous calendar months.

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

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

(1) All deviations of the facility-wide rolling, 12-month VOC emissions limit and, for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative VOC emission levels;

(2) All deviations of the facility-wide rolling, 12-month PE/PM10 emissions limit;

(3) All deviations of the rolling, 12-month annual ink production limits; and, for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative ink production levels;

(4) All deviations of the work practice standard for minimizing VOC emissions;

(5) Each period of time (start time and date, and end time and date) when the pressure drop across the fabric filter was outside of the range specified by the manufacturer and outside of the acceptable range following any required compliance demonstration;

(6) Any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the fabric filter;

(7) Each incident of deviation described in (5) where a prompt investigation was not conducted;

(8) Each incident of deviation described in (5) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

(9) Each incident of deviation described in (5) where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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

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

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

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

The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group -Pilot Scale Equipment: P030, P031

EU ID	Operations, Property and/or Equipment Description
P030	AG-910, Pilot Scale Line Mixer
P031	AM-910, Pilot Scale Line Ink Mill

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. g)(1).

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

a. b)(1)c.

b) 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) June 30, 2008	Emissions of VOC shall not exceed 0.339 tons per month averaged over a 12-month rolling period. Emissions of PE/PM10 shall not exceed 0.137 tons per month averaged over a 12-month rolling period. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A) do not apply to the VOC emissions or the PE/PM10 emissions from this air contaminant source since the potential to emit is less than 10 tons per year each. See b)(2)b.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(D) Synthetic Minor to Avoid Major Source NAA-NSR and Title V	See Section B.2. through B.9.
d.	OAC rule 3745-17-07(B)	See b)(2)c.
e.	OAC rule 3745-17-08(B)	See b)(2)d.

(2) Additional Terms and Conditions

a. These Best Available Technology (BAT) emission limits apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).

b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.

c. This emissions unit is exempt from the visible emissions limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.

d. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District

Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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 Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations:

Emissions of VOC shall not exceed 0.339 tons per month averaged over a 12-month rolling period.

Emissions of PE/PM10 shall not exceed 0.137 tons per month averaged over a 12-month rolling period.

Applicable Compliance Method:

If required, compliance with the Applicable Emissions Limitations shall be demonstrated by dividing the portion of the actual rolling, 12-month VOC and/or PE/PM10 emissions, as calculated in B.8 for the Pilot Scale Equipment Emissions (PS), by 12 to yield emissions in tons per month averaged over a 12-month rolling period.

The Applicable Emissions Limitations were established from information provided by the permittee in Application A0052078 for FEPTIO P0118313 and using the VOC Emission Factor from the National Association of Printing Ink Manufacturers (NAPIM) Table 3-3 and the PE/PM10 Emission Factor from AP-42 Table 6.4-1 for Paint and Varnish Manufacturing in the following calculations:

450 pounds product/batch x batch/3 hours x 8760 hours/year x 0.62 pound VOC/100 pound product x 1 Ton/2000 pounds x year/12 months = 0.339 Ton VOC per month

450 pounds product/batch x batch/3 hours x 8760 hours/year x 0.25 pound solids/pound product x 0.01 pound PE/PM10/pound solids x 1 Ton/2000 pounds x year/12 months = 0.137 Ton PE/PM10 per month

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with, the “Toxic Air Contaminant Statute”, ORC 3704.03(F)(4)(b), was not necessary because the emissions units’ maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year contained within P0116135 . OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified FEPTIO prior to making a "modification" as defined by OAC rule 3745-31-01 to P0118313. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year to any of the emissions units contained within P0118313 may require the permittee to apply for and obtain a new FEPTIO.