



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

9/10/2015

Certified Mail

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

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

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

Facility ID: 1483000550  
 Permit Number: P0119275  
 Permit Type: Initial Installation  
 County: Warren

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Western Star. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall  
 Permit Review/Development Section  
 Ohio EPA, DAPC  
 50 West Town Street Suite 700  
 PO Box 1049  
 Columbus, Ohio 43216-1049

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

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Southwest Ohio Air Quality Agency at (513)946-7777.

Sincerely,

Michael E. Hopkins, P.E.  
 Assistant Chief, Permitting Section, DAPC

Cc: U.S. EPA Region 5 Via E-Mail Notification  
 SWOQA; Indiana; Kentucky



## PUBLIC NOTICE

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at: <http://epa.ohio.gov/actions.aspx> or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Ph: 614-644-2129 email: [HClerk@epa.ohio.gov](mailto:HClerk@epa.ohio.gov)

Draft Air Pollution Permit-to-Install and Operate Initial Installation  
INX International Ink Co.

350 Homan Road., Lebanon, OH 45036

ID#:P0119275

Date of Action: 9/10/2015

Permit Desc:Initial FEPTIO for one (1) new ink mixer unit. This FEPTIO incorporates the new unit into the facility-wide requirements to avoid Title V and Major Source NSR for VOC and PE/PM10..

The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the ID # or: Alberta Mellon, Southwest Ohio Air Quality Agency, 250 William Howard Taft Rd., Cincinnati, OH 45219. Ph: (513)946-7777





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

Initial FEPTIO for emissions unit P032, one (1) new ink mixer AD-204 to be added to the existing Blend and Milled Processes at a printing ink manufacturing facility previously permitted under FEPTIO P0116135 and FEPTIO P0118313.

3. Facility Emissions and Attainment Status:

Emissions from the one (1) new unit and the prior permitted units consist of VOC and PE/PM10/PM2.5. The facility is located in Warren County, which is nonattainment for PM2.5 and ozone, and is attainment for PM10, CO, NOx, and SO2.

4. Source Emissions: Potential to emit VOC from P032 is 6.51 tons per year (TPY) and potential to emit PE/PM10/PM2.5 from P032 is 0.05 TPY, based on limited ink production and PE/PM10/PM2.5 control by use of a fabric filter with 98% control efficiency for PE/PM10/PM2.5.

The facility-wide FEPTIO (Synthetic Minor) VOC allowable emissions increases from 73.2 TPY to 79.70 TPY and the FEPTIO (Synthetic Minor) PE/PM10/PM2.5 allowable emissions increases from 2.85 TPY to 2.90 TPY with the installation of this unit.

5. Conclusion:

This FEPTIO incorporates the new unit into the facility-wide requirements to avoid Title V and Major Source NSR for VOC and PE/PM10/PM2.5 and includes the appropriate facility-wide monitoring and record keeping requirements to demonstrate compliance.

6. Please provide additional notes or comments as necessary:

None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	6.51
PE/PM10/PM2.5	0.05





**DRAFT**

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

Facility ID:	1483000550
Permit Number:	P0119275
Permit Type:	Initial Installation
Issued:	9/10/2015
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance





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

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**Draft Permit-to-Install and Operate**

INX International Ink Co.

**Permit Number:** P0119275

**Facility ID:** 1483000550

**Effective Date:** To be entered upon final issuance

## Authorization

Facility ID: 1483000550  
Application Number(s): A0053870  
Permit Number: P0119275  
Permit Description: Initial FEPTIO for one (1) new ink mixer unit. This FEPTIO incorporates the new unit into the facility-wide requirements to avoid Title V and Major Source NSR for VOC and PE/PM10.  
Permit Type: Initial Installation  
Permit Fee: \$500.00 *DO NOT send payment at this time, subject to change before final issuance*  
Issue Date: 9/10/2015  
Effective Date: To be entered upon final issuance  
Expiration Date: To be entered upon final issuance  
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

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



**Draft Permit-to-Install and Operate**

INX International Ink Co.

**Permit Number:** P0119275

**Facility ID:** 1483000550

**Effective Date:** To be entered upon final issuance

## Authorization (continued)

Permit Number: P0119275

Permit Description: Initial FEPTIO for one (1) new ink mixer unit. This FEPTIO incorporates the new unit 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:

<b>Emissions Unit ID:</b>	<b>P032</b>
Company Equipment ID:	AD-204
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



**Draft Permit-to-Install and Operate**  
INX International Ink Co.  
**Permit Number:** P0119275  
**Facility ID:** 1483000550  
**Effective Date:** To be entered upon final issuance

## **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 Southwest Ohio Air Quality Agency 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 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 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.



**Draft Permit-to-Install and Operate**  
INX International Ink Co.  
**Permit Number:** P0119275  
**Facility ID:** 1483000550  
**Effective Date:** To be entered upon final issuance

## **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., 15 and the corresponding applicable federally enforceable terms and conditions in P0116135 and P0118313.
2. The facility-wide emissions of volatile organic compounds (VOC) shall not exceed 79.70 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, P031, and P032, combined.
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 particulate emissions (PE), emissions of particulate matter 10 microns and less in diameter (PM10), and emissions of particulate matter 2.5 microns and less in diameter (PM2.5) shall not exceed 2.90 TPY, based upon a rolling, 12-month summation of the PE/PM10/PM2.5 emission rates from emissions units P001 – P032, combined.
5. The emissions from emissions units P001, P002, P008, P009, P010, P011, P012, P013, P014, P015, P016, and P032 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 PE/PM10/PM2.5. Emissions units P030 and P031 are not controlled by a fabric filter. The uncontrolled, unrestricted potential to emit (PTE) of PE/PM10/PM2.5 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, P016, and P032, 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, P016, and P032, 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/PM2.5 and emissions units P005 – P007 do not add dry solids and therefore, do not generate any PE/PM10/PM2.5.
11. For emissions units P008 – P021 and P032, combined, the maximum annual ink production rate, shall not exceed 22,020,000 pounds, based upon a rolling, 12-month summation of the ink production rates.
12. 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) 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:

$$\text{VOC, Tons per Month} = (\text{WI} + \text{NV} + \text{DL} + \text{WB} + \text{PI} + \text{PS} + \text{CS})/2000$$

Where:

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

\* No VOC emissions from enclosed mill AM-101

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

DL = Dispersion Line and Blend & Milled Process Line Emissions, pounds =  $[(\text{RS-300} + \text{RS-301} + \text{RS-302} + \text{RS-303} + \text{BM-304} + \text{AD-200} + \text{AD-201} + \text{AD-202} + \text{AD-203} + \text{AD-204 production, tons/month}) \times \text{VOC EF, 12.4 pounds/ton}]^*$

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

WB = Waterbased Ink Process Line Emissions, pounds =  $[(\text{AGP-810} + \text{AGP-811} + \text{AGP-812 production, tons/month}) \times \text{VOC EF, 2.4 pounds/ton}]$

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



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.

- c) the PE/PM10/PM2.5 emission rate for each month of operations; and
- d) the rolling, 12-month summation of the PE/PM10/PM2.5 emissions.

The monthly PE/PM10/PM2.5 emissions from the ink manufacturing operations P001 – P032 that handle dry ingredients, shall be calculated as follows:

$$\text{PE/PM10/PM2.5, Tons per Month} = [(WI + DL) \times (1 - 0.98 \text{ CE})] + \text{PS}/2000$$

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/PM2.5 EF, 0.01 pound/pound) + (RS-101 production, tons/month x actual % dry solids added, converted to pounds/ton x PE/PM10/PM2.5 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 + AD-204 production, tons/month) x actual % dry solids added, converted to pounds/ton x PE/PM10/PM2.5 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/PM2.5 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/PM2.5 EF, 0.01 pound/pound)]

The rolling, 12-month PE/PM10/PM2.5 emissions shall be a summation of emissions from the current month (ending) and the 11 previous calendar months.

- 13. 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;
  - (2) All deviations of the facility-wide rolling, 12-month PE/PM10/PM2.5 emissions limit;
  - (3) All deviations of the rolling, 12-month annual ink production limits;
  - (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).

14. The facility-wide emissions of volatile organic compounds (VOC) shall not exceed 79.70 tons per year (TPY), based upon an annual 12-month summation of the VOC emission rates from emissions units P001–P028 and P030–P032, combined.

Compliance with the facility-wide VOC emissions limitations shall be demonstrated by the record keeping requirement as outlined in term 12.b.



The rolling, 12-month VOC emission limitation was established from calculations in the document "Requested Emissions Limitation" as supplied in Application A0053870 for PTI P0119275.

The PTE VOC from emissions units P008–P021 and P032, combined, may be shown to be less than 10 TPY each based on the calculations as supplied by the permittee in Application A0053870 for PTI P0119275 and the contribution of VOC to the facility-wide limit:

$$22,020,000 \text{ pounds sink/year} \times 12.4 \text{ pounds VOC/ton ink} \times 1 \text{ Ton/2000 pounds} \times 1 \text{ Ton/2000 pounds} = 68.26 \text{ TPY VOC}$$

$$68.26 \text{ TPY VOC} \div 10 \text{ EU in the group emitting VOC} = 6.83 \text{ TPY VOC, each}$$

$$1.17 \text{ TPY} + 2.50 \text{ TPY} + 68.26 \text{ TPY} + 2.06 \text{ TPY} + 0.02 \text{ TPY} + 0.14 \text{ TPY} + 1.43 + 4.07 \text{ TPY} = 79.65 \text{ TPY VOC rounded to } 79.70 \text{ TPY VOC.}$$

- 15. The facility-wide PE/PM10/PM2.5 emissions shall not exceed 2.90 TPY, based upon a rolling, 12-month summation of the PE/PM10/PM2.5 emission rates from emissions units P001–P028 and P030–P032, combined.

Compliance with the facility-wide PE/PM10/PM2.5 emissions limitations shall be demonstrated by the record keeping requirement as outlined in term 12.d.

The rolling, 12-month PE/PM10/PM2.5 emission limitation was established from calculations in the document "Requested Emissions Limitation" as supplied in Application A0053870 for PTIO P0119275.

The PTE PE/PM10/PM2.5 from P008–P021 and P032, combined, may be shown to be less than 10 TPY based on the calculation as supplied by the permittee in Application A0053870 for PTIO P0119275 and the contribution of PE/PM10/PM2.5 to the facility-wide limit:

$$22,020,000 \text{ pounds sink/year} \times 0.25 \text{ pound dry solids/pound ink} \times 0.01 \text{ pound PE/PM10/PM2.5/pound dry solids} \times (1 - 0.98 \text{ CE}) \times 1 \text{ Ton/2000 pounds} = 0.55 \text{ TPY PE/PM10/PM2.5}$$

$$0.47 \text{ TPY} + 0.24 \text{ TPY} + 0.55 \text{ TPY} + 1.64 \text{ TPY} = 2.90 \text{ TPY PE/PM10/PM2.5}$$



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INX International Ink Co.  
**Permit Number:** P0119275  
**Facility ID:** 1483000550  
**Effective Date:** To be entered upon final issuance

## **C. Emissions Unit Terms and Conditions**



**1. P032, Vertical Post High Speed Mixer AD-204 of Emissions Unit Group Blend & Milled Processes**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
P032	Vertical Post High Speed Mixer AD-204 fed by dosing station LSD-200 with particulate emissions controlled by dust collector DC-600

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. and b)(2)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.

	<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
a.	OAC rule 3745-31-05(A)(3) June 30, 2008	The permittee shall employ the work practice standard for minimizing emissions of volatile organic compounds (VOC) in b)(2)c. and install a fabric filter with a design efficiency of at least 98% control of particulate emissions (PE), emissions of particulate matter 10 microns and less in diameter (PM10), and emissions of particulate matter 2.5 microns and less in diameter (PM2.5).  See b)(2)a below.
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 PE/PM10/PM2.5 emissions from this air contaminant source since the potential to emit is less than 10 tons per year (TPY) taking into account the federally



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>enforceable restriction in b)(1)c. below.</p> <p>See b)(2)b below.</p>
c.	<p>OAC rule 3745-31-05(D) Synthetic Minor to Avoid Major Source NAA-NSR and Title V</p>	<p>The facility-wide emissions of VOC shall not exceed 79.70 TPY, based upon a rolling 12-month summation of the VOC emission rates from emissions units P001 to P028 and P030 to P032, combined.</p> <p>The facility-wide PE/PM10/PM2.5 emissions shall not exceed 2.90 TPY, based upon a rolling, 12-month summation of the PE/PM10/PM2.5 emission rates from emissions units P001 to P028 and P030 to P032, combined.</p> <p>See Sections B.2., B.4., B.5., B.9., B.11., B.13., B.14., and B.15.</p>
d.	<p>OAC rule 3745-17-07(A)(1)</p>	<p>Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six minute average, except as provided by rule.</p>
e.	<p>OAC rule 3745-17-11(B)(1)</p>	<p>PE from P008, P009, P010, P011, P012, P013, P014, P015, P016, and P032 shall not exceed 12.0 pounds per hour from the stack, based on Figure II.</p> <p>The emission limitation is less stringent than the emission limitation and control requirement established pursuant to OAC rule 3745-31-05(D).</p>

(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.

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aircontaminantsourcetakesintoaccountthefollowingvoluntaryrestrictions(includingt  
heuseofanyapplicableairpollutioncontrolequipment),asproposedbythepermittee,fo



the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) for PE/PM10/PM2.5:

- i. The permittee shall install a fabric filter with a design efficiency of at least 98% control of PE/PM10/PM2.5;
  - ii. The maximum annual ink production rate for emissions units P008–P021 and P032, combined, shall not exceed 22,020,000 pounds;
  - iii. PE/PM10/PM2.5 emissions from emissions units P008–P021 and P032, combined, shall not exceed 0.55 TPY; and
  - iv. VOC from emissions units P008–P021 and P032, combined, shall not exceed 68.26 TPY, with the average VOC emissions from the 10 EUs in the group emitting VOC, being less than 10 TPY each.
- c. In order to minimize emissions of volatile organic compounds (VOC), the permittee shall maintain a work practice standard of promptly covering any tank or vessel that is not fully enclosed containing VOC-containing materials and ensuring the prompt closure of any tank or vessel containing VOC-containing materials.
- d. In order to ensure the source continues to operate as designed pursuant to the installation of a fabric filter with a design efficiency of at least 98% control of PE/PM10/PM2.5 emissions as denoted in b)(1)a. and b)(2)b.i. above, the permittee shall operate this emissions unit in accordance with manufacturer's recommendations and shall follow the manufacturer's recommended maintenance, at the recommended intervals.

The permittee shall keep a record of the maintenance on this emissions unit along with manufacturer's recommendations and shall submit to Southwest Ohio Air Quality Agency (SWOQA) a work practice plan within 30 days of issuance of the final permit based upon the manufacturer's recommendations for maintenance of the baghouse for their approval.

c) Operational Restrictions

- (1) Refer to B.11.

d) Monitoring and/or Recordkeeping Requirements

- (1) Refer to B.7, B.8, B.9. and B.12.
- (2) The permittee shall maintain monthly records of the following information for emissions units P008–P021 and P032, combined:
  - a. the ink production rate for each month, in pounds; and
  - b. 12-month summation of the ink production rates, in pounds.

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 quarterly deviation excursion reports in accordance with B.13.
- (3) 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. Refer to B.14. and B.15.

b. Control Requirement:

The emissions from this emissions unit shall be vented to a fabric filter, at all times drying ingredients are being added to the emissions unit, with a design efficiency of at least 98% control of particulate emissions (PE), emissions of particulate matter 10 microns and less in diameter (PM10), and emissions of particulate matter 2.5 microns and less in diameter.

Applicable Compliance Method:

If required, compliance with the fabric filter design efficiency for PE/PM10/PM2.5 emissions control may be demonstrated by emission tests using methodology including, but not limited to, Method 5, as specified in 40 CFR Part 60, Appendix A. The permittee may request to use an alternative method or procedure for the determination



ion of Capture Efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency", dated January 9, 1995.

The basis for the fabric filter design efficiency is the company-supplied design estimate as supplied in Application A0049802 for FEPTIOP0116135.

c. Emission Limitation:

Visible particulate emissions from the stack 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 limitations shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

d. Emission Limitation:

PE from P008, P009, P010, P011, P012, P013, P014, P015, P016, & P032 shall not exceed 12.0 pounds per hour, based on Figure 11.

Applicable Compliance Method:

If required, compliance with the mass emissions limitation may be demonstrated by emission tests using methodology including, but not limited to, Method 5, as specified in 40 CFR Part 60, Appendix A. The permittee may request to use an alternative method or procedure for the determination of Capture Efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency", dated January 9, 1995.

The mass emissions limitation was established for P008,

P009, P010, P011, P012, P013, P014, P015, P016, & P032, combined, based on the method in the Appendix to OAC rule 3745-17-11, Figure 11 using the amount of dry solids as supplied by the permittee in Application A0053870, information from PTIO P0116135, and the PE emission factor from AP-42, Table 6.4-1:

4000 pounds ink / batch x 0.25 pound dry solids / pound ink = 1000 pound dry solids / pound ink

1000 pounds dry solids / pound ink x 0.01 pound PE / PM10 / PM2.5 / pound dry solids = 10.0 pounds PE / PM10 / PM2.5 / batch

10 pounds per batch is estimated to be emitted in 1 hour for EUs P012, P013, P014, P015, and P016

10 pounds per batch is emitted in 50 minutes for EUs P008, P009, P010, P011, and P032



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10 pounds/50 minutes x 1 hour/60 minutes = 12 pounds per hour

Total uncontrolled particulate emissions = (5 EUs x 10 pounds/hour) + (5 EUs x 12 pounds/hour) = 110 pounds per hour

110.0pounds PE/hour; Figurell, (b) A=  $0.5782 \times U^{0.6456} A = 0.5782 \times (110)^{0.6456} A = 12.0\text{poundsPE/hour}$ .

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. 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 P0119275, P0118313, and P0116135 may require the permittee to apply for and obtain a new FEPTIO.