



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

10/18/2016

Certified Mail

Doug McLaughlin
Bang Printing of Ohio dba Hess Print Solutions
3765 Sunnybrook Road
Brimfield, OH 44240

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1667000047
Permit Number: P0121431
Permit Type: Initial Installation
County: Portage

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**
- **What should you do if you notice a spill or environmental emergency?**

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.

What should you do if you notice a spill or environmental emergency?

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Akron Regional Air Quality Management District at (330)375-2480 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



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

Cc: ARAQMD



Response to Comments

| | |
|---|--|
| Facility ID: | 1667000047 |
| Facility Name: | Bang Printing of Ohio dba Hess Print Solutions |
| Facility Description: | Book Printing |
| Facility Address: | 3765 Sunnybrook Road Brimfield Twp., OH 44240 Portage County |
| Permit: | P0121431, Permit-To-Install and Operate - Initial Installation |
| A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Record Courier on 09/17/2016. The comment period ended on 10/17/2016. | |
| Hearing date (if held) | |
| Hearing Public Notice Date (if different from draft public notice) | |

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. Topic: None

- a. Comment: None
- b. Response: None



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Bang Printing of Ohio dba Hess Print Solutions**

| | |
|----------------|----------------------|
| Facility ID: | 1667000047 |
| Permit Number: | P0121431 |
| Permit Type: | Initial Installation |
| Issued: | 10/18/2016 |
| Effective: | 10/18/2016 |
| Expiration: | 2/26/2018 |



Division of Air Pollution Control
Permit-to-Install and Operate
for
Bang Printing of Ohio dba Hess Print Solutions

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Final Permit-to-Install and Operate
Bang Printing of Ohio dba Hess Print Solutions
Permit Number: P0121431
Facility ID: 1667000047
Effective Date: 10/18/2016

Authorization

Facility ID: 1667000047
Application Number(s): A0056443
Permit Number: P0121431
Permit Description: Initial installation of a Heatset Web Offset Printing Press No. 212 controlled with an existing regenerative thermal oxidizer
Permit Type: Initial Installation
Permit Fee: \$200.00
Issue Date: 10/18/2016
Effective Date: 10/18/2016
Expiration Date: 2/26/2018
Permit Evaluation Report (PER) Annual Date: Apr 1 - Mar 31, Due May 15

This document constitutes issuance to:

Bang Printing of Ohio dba Hess Print Solutions
3765 Sunnybrook Road
Brimfield Twp., OH 44240

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

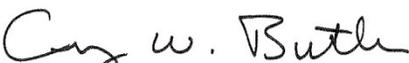
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Akron Regional Air Quality Management District
1867 West Market St.
Akron, OH 44313
(330)375-2480

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



Final Permit-to-Install and Operate
Bang Printing of Ohio dba Hess Print Solutions
Permit Number: P0121431
Facility ID: 1667000047
Effective Date: 10/18/2016

Authorization (continued)

Permit Number: P0121431

Permit Description: Initial installation of a Heatset Web Offset Printing Press No. 212 controlled with an existing regenerative thermal oxidizer

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

| | |
|-----------------------------------|----------------|
| Emissions Unit ID: | K013 |
| Company Equipment ID: | Press 212 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |



Final Permit-to-Install and Operate
Bang Printing of Ohio dba Hess Print Solutions
Permit Number: P0121431
Facility ID: 1667000047
Effective Date: 10/18/2016

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 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.



Final Permit-to-Install and Operate
Bang Printing of Ohio dba Hess Print Solutions
Permit Number: P0121431
Facility ID: 1667000047
Effective Date: 10/18/2016

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) All.
2. The emissions of any individual hazardous air pollutant (HAP) from emissions units K003, K005, K006, K008, K009, K011, K013 and the four Pre Presses*, combined, shall not exceed 8.0 tons per year, based upon a rolling, 12-month summation of the monthly emissions.
3. The emissions of combined hazardous air pollutants (HAPs) from emissions units K003, K005, K006, K008, K009, K011, K013 and the four Pre Presses*, combined, shall not exceed 20.0 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

*The four Pre Presses are considered exempt per OAC rule 3745-15-05 based on daily and annual record keeping of the actual emissions. The potential to emit for the four Pre Presses for an individual HAP and combined HAPs is over 10 tons per year and 14 tons per year, respectively.
4. In order to demonstrate compliance with the emission limitations in 2 and 3 above, the permittee shall collect and record the following information monthly for emissions units K003, K005, K006, K008, K009, K011, K013 and the four Pre Presses:
 - a) For emissions units K003, K005, K006, K009, K011, and K013:
 - (1) the company identification for each coating, concentrated fountain solution, automatic cleanup material and manual cleanup material employed;
 - (2) the amount of each coating, concentrated fountain solution, automatic cleanup material and manual cleanup material employed, in gallons, pounds or number of rolls used;
 - (3) the individual HAP content of each HAP of each coating, concentrated fountain solution, automatic cleanup material and manual cleanup material employed, in pound(s) per gallon, weight percent or pound(s) per roll;
 - (4) the combined HAPs content of each coating, concentrated fountain solution, automatic cleanup material and manual cleanup material employed (the sum of all the individual HAP contents in a)(3) above), in pound(s) per gallon, weight percent or pound(s) per roll;
 - (5) the uncontrolled individual HAP emission rate for each HAP from all coatings employed, in pounds or tons per month;

- (6) the controlled individual HAP emission rate for each HAP from all coatings employed, in pounds or tons per month;
- (7) the uncontrolled combined HAPs emission rate from all coatings employed, in pounds or tons per month;
- (8) the controlled combined HAPs emission rate from all coatings employed, in pounds or tons per month;
- (9) the uncontrolled individual HAP emission rate for each HAP from all concentrated fountain solutions employed, in pounds or tons per month;
- (10) the controlled individual HAP emission rate for each HAP from all concentrated fountain solutions employed, in pounds or tons per month;
- (11) the uncontrolled combined HAPs emission rate from all concentrated fountain solutions employed, in pounds or tons per month;
- (12) the controlled combined HAPs emission rate from all concentrated fountain solutions employed, in pounds or tons per month;
- (13) the individual HAP emission rate for each HAP from all manual cleanup materials employed, in pounds or tons per month;
- (14) the combined HAPs emission rate from all manual cleanup materials employed, in pounds or tons per month;
- (15) the uncontrolled individual HAP emission rate for each HAP from all automatic cleanup material employed, in pounds or tons per month;
- (16) the controlled individual HAP emission rate for each HAP from all automatic cleanup material employed, in pounds or tons per month;
- (17) the uncontrolled combined HAP emission rate from all automatic cleanup material employed, in pounds or tons per month;
- (18) the controlled combined HAP emission rate from all automatic cleanup material employed, in pounds or tons per month;
- (19) the individual HAP emission rate for each HAP from all automatic cleanup materials, all manual cleanup materials, all concentrated fountain solutions and all coatings employed, in pounds or tons per month; and
- (20) the combined HAPs emission rate from all automatic cleanup materials, all manual cleanup materials, all concentrated fountain solutions and all coatings employed, in pounds or tons per month.

- b) For emissions unit K008:
- (1) the company identification for each non-heatset ink, aqueous coating, concentrated fountain etch solution, fountain solution additive, manual cleanup material and automatic cleanup material employed;
 - (2) the amount of each non-heatset ink, aqueous coating, concentrated fountain etch solution, fountain solution additive, manual cleanup material and automatic cleanup material employed, in gallons or pounds;
 - (3) the individual HAP content of each HAP of each non-heatset ink, aqueous coating, concentrated fountain etch solution, fountain solution additive, manual cleanup material and automatic cleanup material employed, in pound(s) per gallon or weight percent;
 - (4) the combined HAPs content of each non-heatset ink, aqueous coating, concentrated fountain etch solution, fountain solution additive, manual cleanup material and automatic cleanup material employed (the sum of all the individual HAP contents in b)(3) above), in pound(s) per gallon or weight percent;
 - (5) the individual HAP emission rate for each HAP from all non-heatset inks employed, in pounds or tons;
 - (6) the combined HAPs emission rate from all non-heatset inks employed, in pounds or tons;
 - (7) the individual HAP emission rate for each HAP from all aqueous coatings employed, in pounds or tons;
 - (8) the combined HAPs emission rate from all aqueous coatings employed, in pounds or tons;
 - (9) the individual HAP emission rate for each HAP from all concentrated fountain etch solutions employed, in pounds or tons;
 - (10) the combined HAPs emission rate from all concentrated fountain etch solutions employed, in pounds or tons;
 - (11) the individual HAP emission rate for each HAP from all fountain solution additives employed, in pounds or tons;
 - (12) the combined HAPs emission rate from all fountain solution additives employed, in pounds or tons;
 - (13) the individual HAP emission rate for each HAP from all manual cleanup materials employed, in pounds or tons;
 - (14) the combined HAPs emission rate from all manual cleanup materials employed, in pounds or tons;
 - (15) the individual HAP emission rate for each HAP from all automatic cleanup materials employed, in pounds or tons;

- (16) the combined HAPs emission rate from all automatic cleanup materials employed, in pounds or tons;
 - (17) the individual HAP emission rate for each HAP from all non-heatset ink, all aqueous coating, all concentrated fountain etch solution, all fountain solution additive, all manual cleanup material and all automatic cleanup material employed, in pounds or tons per month; and
 - (18) the combined HAPs emission rate from all non-heatset ink, all aqueous coating, all concentrated fountain etch solution, all fountain solution additive, all manual cleanup material and all automatic cleanup material employed, in pounds or tons per month.
- c) For the four Pre Presses:
- (1) the company identification for each material employed;
 - (2) the amount of each material employed, in gallons or pounds;
 - (3) the individual HAP content of each HAP of each material employed, in pound(s) per gallon or weight percent;
 - (4) the individual HAP emission rate for each HAP from all materials employed, in pounds or tons per month; and
 - (5) the combined HAPs emission rate from all materials employed, in pounds or tons.
- d) For emissions units K003, K005, K006, K008, K009, K011, K013 and the four Pre Presses:
- (1) the total individual HAP emission rate for each HAP, in tons per month;
 - (2) the total combined HAPs emission rate, in tons per month;
 - (3) the rolling, 12-month summation of individual HAP emissions for each HAP for each month, in tons; and
 - (4) the rolling, 12-month summation of the total combined HAPs emissions for each month, in tons.

If the rolling, 12-month summation of combined HAPs is 8.0 tons per year or less for each month, then the rolling, 12-month summations of each individual HAP do not need to be calculated unless any subsequent rolling, 12-month summation exceeds 8.0 tons per year.

For determining the HAP emission in 4.a), the permittee shall use the retention factors and the capture efficiencies as described in OAC rule 3745-21-22(I) and the control efficiency for the control equipment, as determined during the most recent emissions test that demonstrated the emissions units were in compliance.

For determining the HAP emission in 4.b), the permittee shall use the retention factors and the capture efficiencies as described in OAC rule 3745-21-22(I)



5. 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 exceedances of the rolling, 12-month emission limitation for any individual HAP; and
 - (2) all exceedances of the rolling, 12-month emission limitation for the total combined HAPs.
 - 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, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

6. Compliance with the Emissions Limitations and/or Control Requirements specified in 2 and 3 above shall be determined in accordance with the following methods:

- a) Emission Limitations:

The emissions of any individual HAP from emissions units K003, K005, K006, K008, K009, K011, K013 and the four Pre Presses, combined, shall not exceed 8.0 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

The emissions of combined HAPs from emissions units K003, K005, K006, K008, K009, K011, K013 and the four Pre Presses, combined, shall not exceed 20.0 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with the annual allowable emission limitations above shall be demonstrated through the record keeping requirements established in 4.a), 4.b), 4.c) and 4.d) above. Formulation data shall be used to determine the HAP content of the non-heatset inks, aqueous coatings, coatings, concentrated fountain solutions, concentrated fountain etch solutions, fountain solution additives, cleanup materials employed in emissions units K003, K005, K006, K008, K009, K011, K013 and the materials employed in the Pre Presses.



Final Permit-to-Install and Operate
Bang Printing of Ohio dba Hess Print Solutions
Permit Number: P0121431
Facility ID: 1667000047
Effective Date: 10/18/2016

C. Emissions Unit Terms and Conditions



1. K013, Press 212

Operations, Property and/or Equipment Description:

Heatset Web Offset Printing Press Lithoman IV Press No. 212

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

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|---|
| a. | ORC 3704.03(T) OAC rule 3745-31-05(A)(3) | The BAT requirements for VOC emissions established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-05(D). |
| b. | OAC rule 3745-22-21(D) | <p>The permittee shall maintain the dryer air pressure lower than the pressroom air pressure at all times the press is operating and operate a control system.</p> <p>The control efficiency requirement specified by this rule is less stringent than the control efficiency requirement established pursuant to OAC rule 3745-31-05(D).</p> <p>See b)(2)a. through b)(2)d. below.</p> |
| c. | OAC rule 3745-31-05(D) (Synthetic Minor to Avoid Title V Permitting) | The control (destruction) efficiency of the RTO thermal oxidizer shall be at least 95%, by weight for VOC and organic |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|--|-------------------------------|--|
| | | hazardous air pollutant (HAP). See b)(2)e. below. The emissions of VOC from this emissions unit shall not exceed 12.4 tons per year, as a rolling, 12-month summation. See b)(2)f. below. See 2 through 6 of Section B – Facility-Wide Terms and Conditions. |

(2) Additional Terms and Conditions

- a. The permittee shall maintain the as-applied VOC content of the fountain solution at or below 5.0 per cent, by weight and use no alcohol in the fountain solution.
- b. The permittee shall maintain the as-applied VOC composite partial vapor pressure at or below ten mm Hg at twenty degrees Celsius (sixty-eight degrees Fahrenheit) for each cleaning solution used for cleaning on the press.
- c. The permittee shall keep all solvent containers closed at all times unless filling, draining, or performing cleanup operations.
- d. The permittee shall keep all solvent-laden shop towels in closed containers when not being used.
- e. The VOC and organic HAP emissions from the emissions unit shall be vented to the RTO thermal oxidizer when the emissions unit is in operation.
- f. The emissions of VOC from this emissions unit shall not exceed 13.5 tons per year, as a rolling, 12-month summation. 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 | 2.25 |
| 1-2 | 2.25 |
| 1-3 | 4.5 |
| 1-4 | 4.5 |
| 1-5 | 6.75 |



| | |
|------|-------|
| 1-6 | 6.75 |
| 1-7 | 9.0 |
| 1-8 | 9.0 |
| 1-9 | 11.25 |
| 1-10 | 11.25 |
| 1-11 | 12.4 |
| 1-12 | 12.4 |

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.

c) Operational Restrictions

- (1) The dryer ovens for the emissions unit shall only employ natural gas.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information monthly for this emissions unit:
- a. the company identification for each coating, concentrated fountain solution, manual cleanup material and automatic cleanup material employed;
 - b. the amount of each coating, concentrated fountain solution, automatic cleanup material and manual cleanup material employed, in gallons, pounds or number of rolls used;
 - c. the VOC content of each coating, concentrated fountain solution, automatic cleanup material and manual cleanup material employed, in pound(s) per gallon, weight percent or pound(s) per roll;
 - d. the uncontrolled VOC emission rate from all coatings employed, in pounds or tons per month;
 - e. the controlled VOC emission rate from all coatings employed, in pounds or tons per month;
 - f. the uncontrolled VOC emission rate from all concentrated fountain solutions employed, in pounds or tons per month;
 - g. the controlled VOC emission rate from all concentrated fountain solutions employed, in pounds or tons per month;
 - h. the VOC emission rate from all manual cleanup materials employed, in pounds or tons per month;
 - i. the uncontrolled VOC emission rate from all automatic cleanup material employed, in pounds or tons per month;

- j. the controlled VOC emission rate from all automatic cleanup material employed, in pounds or tons per month;
- k. the total VOC emission rate from this emissions unit, in pounds or tons per month; and
- l. the rolling, 12-month summation of the VOC emissions from this emissions unit, for each month, in tons.

For calculating the VOC emissions, the permittee shall use the retention factors and the capture efficiencies as described in OAC rule 3745-21-22(I) and the control efficiency for the control equipment, as determined during the most recent emissions test that demonstrated the emissions units were in compliance.

- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable combustion temperature within the thermal oxidizer during any period of time when the emissions unit(s) controlled by the thermal oxidizer is/are in operation, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance.
- (3) The permittee shall install and operate continuous temperature monitoring and recording equipment that measures and records temperature data at least once every fifteenminutes, and shall collect and record the following information and maintain the information at the facility for a period of five years:
 - a. a log or record of any time when the control device and/or, monitoring equipment, are not in operation when any associated press is in operation; and
 - b. for thermal oxidizers all three-hour periods of operation during which the average combustion temperature was more than fifty degrees Fahrenheit below the average combustion temperature during the most recent emission test that demonstrated that the emissions units listed above were in compliance.
- (4) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range or limit 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/limit 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:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the temperature readings immediately after the corrective action was implemented; and
- k. 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.

The temperature range/limit 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 temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/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.

- (5) The VOC content of the as-applied fountain solution shall be determined by one of the methods in d)(5)a. to d)(5)c.:
 - a. U.S. EPA Method 24 shall be used to determine the VOC content of the as-applied fountain solution;
 - b. If diluted prior to use, a calculation shall be performed for VOC content that combines U.S. EPA Method 24 analytical data for the concentrated materials used to prepare the as-applied fountain solution and the proportions in which they are mixed to make the as-applied fountain solution. The analysis of the concentrated material(s) may be performed by the supplier(s) of those material(s). The analytical data may be derived from a material safety data sheet (MSDS) or equivalent information from the supplier as long as it is based on U.S. EPA Method 24 results; or
 - c. If not diluted prior to use, the permittee shall use formulation information provided by the supplier, such as a MSDS sheet or equivalent information from the supplier. In the event of a dispute between information provided by the supplier and data obtained by U.S. EPA Method 24, the data obtained by U.S. EPA Method 24 shall be employed.

- (6) The VOC composite partial vapor pressure of cleaning solutions shall be determined by one of the following methods:
- a. If diluted prior to use, calculate the VOC composite vapor pressure of the as-applied solvent by using the formula for “VOC composite vapor pressure” as follows:
 - i. Determine the identity and quantity of each compound in a blended organic solvent by using ASTM D2306, or by using ASTM E260 for organics and ASTM D3792 for water content, if applicable, or the manufacturer’s product formulation data.
 - ii. Determine the vapor pressure of each pure VOC component by using ASTM D2879 or publications such as “Perry’s Chemical Engineer’s Handbook, CRC Handbook of Chemistry and Physics, or Lange’s Handbook of Chemistry.”
 - iii. Calculate the VOC composite partial pressure of the solvent by using the formula for “VOC composite partial pressure.” For the purpose of this calculation, the blended solvent shall be assumed to be an ideal solution where “Raoult’s Law” applies. The partial vapor pressures of each compound at twenty degrees Celsius (sixty-eight degrees Fahrenheit) shall be used in the formula. The VOC composite partial pressure shall be calculated as follows:

$$PP_c = \sum_{i=1}^n \frac{\frac{(W_i)(VP_i)}{MW_i}}{\frac{W_w}{MW_w} + \frac{W_e}{MW_e} + \sum_{i=1}^n \frac{W_i}{MW_i}}$$

Where:

W_i = Weight of the “i”th VOC compound, in grams.

W_w = Weight of water, in grams.

W_e = Weight of exempt compound, in grams.

MW_i = Molecular weight of the “i”th VOC compound, in grams per gram-mole.

MW_w = Molecular weight of water, in grams per gram-mole.

MW_e = Molecular weight of the “e”th exempt compound, in grams per gram-mole.

PP_c = VOC composite partial vapor pressure at twenty degrees Celsius (sixty-eight degrees Fahrenheit), in mmHg.

VP_i = Vapor pressure of the "i"th VOC compound at twenty degrees Celsius (sixty-eight degrees Fahrenheit), in mmHg.

- b. If not diluted prior to use, the permittee shall use formulation information provided by the supplier, such as a MSDS or equivalent information from the supplier as long as it is based on results determined in accordance with the procedure under d)(6)a. above.
- (7) The permittee shall maintain records, for a period of five years, of one of the following for fountain solution preparation:
- a. For a permittee maintaining a recipe log for each batch of fountain solution prepared for use in the press:
 - i. A recipe log that identifies all recipes used to prepare the as-applied fountain solution. Each recipe shall be maintained in the recipe log for a period of five years from the date the recipe was last prepared for a press. Each recipe shall clearly identify the following:
 - (a) VOC content of each concentrated alcohol substitute, added to make the batch of fountain solution, based upon the manufacturer's laboratory analysis using U.S. EPA Method 24.
 - (b) The proportions in which the fountain solution is mixed, including the addition of alcohol and/or water. The proportion may be identified as a volume when preparing a discrete batch or may be identified as the settings when an automatic mixing unit is employed.
 - (c) The calculated VOC content of the final, mixed recipe.
 - ii. Identification of the recipe used to prepare each batch of fountain solution for use in the press.
 - iii. The date and time when the batch was prepared.
 - iv. An affirmation the batch was prepared in accordance with the recipe.
 - b. For a permittee not maintaining a recipe log in accordance with paragraph d)(7)a. above, for each batch of fountain solution prepared for use in the press:
 - i. The volume and VOC content of each concentrated alcohol substitute, added to make the batch of fountain solution, based upon the manufacturer's laboratory analysis using U.S. EPA Method 24.
 - ii. The volume of alcohol added to make the batch of fountain solution.
 - iii. The volume of water added to make the batch of fountain solution.
 - iv. The calculated VOC content of the final, mixed batch.

- v. The date and time the batch was prepared.

For purposes of d)(7)a. and d)(7)b. above, a fountain solution that is continuously blended with an automatic mixing unit is considered to be the same batch until such time that the recipe or mix ratio is changed.

- (8) The permittee shall maintain records, for a period of five years, of the following for all cleaning solutions employed in all the offset lithographic and letterpress printing operations:
 - a. For a permittee maintaining a recipe log for each batch of cleaning solution prepared:
 - i. A recipe log that identifies all recipes used to prepare the as-applied cleaning solution. Each recipe shall be maintained in the recipe log for a period of five years from the date the recipe was last prepared. Each recipe shall clearly identify the VOC composite partial vapor pressure of each cleaning solution, based upon the method under d)(6) above.
 - ii. Identification of the recipe used to prepare each batch of cleaning solution.
 - iii. The date and time when the batch was prepared.
 - iv. An affirmation the batch was prepared in accordance with the recipe.
 - b. For a permittee not maintaining a recipe log in accordance with d)(8)(a) above, for each batch of cleaning solution prepared, records of the VOC composite partial vapor pressure and the date and time the batch was prepared.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. all exceedances of the rolling 12-month emission limitation for VOC; and
 - ii. 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 thermal oxidizer.
 - 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, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (2) The permittee shall notify the director of any of the following exceedances of the applicable requirements:
- a. each calculated VOC content that exceeds the VOC content limitation specified in b)(2)a. above;
 - b. each instance when an exceedance of the VOC composite partial vapor pressure specified in b)(2)b. above for cleaning solutions occurs; and
 - c. all three-hour blocks of time during which the average combustion temperature within the thermal oxidizer was below the temperature limitation specified in d)(2) above.

Each notification shall be submitted to the director within forty-five days after the instance occurs, and it shall include a copy of the record showing the instance.

- (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.
- (4) The permittee shall notify the Ohio environmental protection agency district office or local air agency in writing within thirty days following the completion of any of the following requirements:
- a. For an offset lithographic or letterpress printing press subject to the VOC emission requirements in paragraphs (D)(2) to (D)(8) of OAC rule 3745-21-22, the first documented achievement of compliance with each of the requirements;
 - b. For an offset lithographic or letterpress printing press subject to the VOC emission control requirement in paragraph (D)(1) of OAC rule 3745-21-22:
 - i. The completion of installation and initial use of a VOC emission control system for the offset lithographic or letterpress printing press;
 - ii. The completion of installation and initial use of any monitoring devices required under paragraph (G) of OAC rule 3745-21-22 for the offset lithographic printing press; and
 - iii. The completion of any compliance testing conducted in accordance with paragraph (F) of OAC rule 3745-21-22 to demonstrate compliance with the applicable control requirement.



- (5) The compliance certification under e)(4) above shall provide the following, where applicable:
- a. A description of the requirements;
 - b. A description of the VOC emission control system;
 - c. A description of the monitoring devices;
 - d. A description of the records that document continuing compliance;
 - e. The results of any compliance tests, including documentation of test data;
 - f. The results of any records that document continuing compliance, including calculations; and
 - g. A statement by the owner or operator of the offset lithographic or letterpress printing facility as to whether the offset lithographic or letterpress printing press has complied with the requirement(s).
- (6) 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.

f) Testing Requirements

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

The control efficiency of the RTO thermal oxidizer shall be at least 95%, by weight for VOC and organic HAP

Applicable Compliance Method:

Compliance with the control (destruction) efficiency shall be demonstrated based on the results of emission testing conducted in accordance with Methods 1-4,



and 18 or 25/25A, as appropriate, of 40 CFR Part 60, Appendix A. Emission testing for the control efficiency was conducted on November 20, 2015.

b. Emission Limitation:

The emissions of VOC from this emissions unit shall not exceed 12.4 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be demonstrated through the record keeping requirements established in d)(1) above. Formulation data or U.S. EPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the VOC contents of the coatings, concentrated fountain solutions, manual cleanup materials and automatic cleanup materials.

c. Emission Limitation:

The permittee shall maintain the as-applied VOC content of the fountain solution at or below 5.0 per cent, by weight and use no alcohol in the fountain solution.

Applicable Compliance Method:

Compliance with the allowable VOC content limitation above shall be demonstrated through the record keeping requirements in d)(5) and d)(7) above.

d. Emission Limitation:

The permittee shall maintain the as-applied VOC composite partial vapor pressure at or below ten mm Hg at twenty degrees Celsius (sixty-eight degrees Fahrenheit) for each cleaning solution used for cleaning on the press.

Applicable Compliance Method:

Compliance with the allowable VOC composite partial vapor pressure limitation above shall be demonstrated through the record keeping requirements in d)(6) and d)(8) above.

- (2) The negative dryer pressure shall be established as required by OAC rule 3745-21-22 using an airflow direction indicator, such as a smoke stick or aluminum ribbons, or differential pressure gauge. Capture efficiency and continuous dryer air flow monitoring is not required.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions unit's capture performance.

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 federally enforceable permit-to-install and operate (FEPTIO) prior to making a “modification” as defined by OAC rule 3745-31-01. 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 may require the permittee to apply for and obtain a new FEPTIO.