



State of Ohio Environmental Protection Agency

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P.O. Box 1049
Columbus, OH 43216-1049

3/16/2009

Carl Udell
Metromedia Technologies, Inc.
1061 Venture Boulevard
Wooster, OH 44691

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0285030295
Permit Number: P0104395
Permit Type: Initial Installation
County: Wayne

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate ("PTIO") which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully.

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, www.epa.state.oh.us/dapc, from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of \$70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northeast District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page www.epa.state.oh.us/dapc.

Sincerely,

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

Cc: Ohio EPA-NEDO

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director



**State of Ohio Environmental Protection Agency
Division of Air Pollution Control**

FINAL

**Air Pollution Permit-to-Install and Operate
for
Metromedia Technologies, Inc.**

Facility ID: 0285030295
Permit Number: P0104395
Permit Type: Initial Installation
Issued: 3/16/2009
Effective: 3/16/2009
Expiration: 9/25/2013



State of Ohio Environmental Protection Agency
 Division of Air Pollution Control

Air Pollution Permit-to-Install and Operate
 for
 Metromedia Technologies, Inc.

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Final Permit-to-Install and Operate
Permit Number: P0104395
Facility ID: 0285030295
Effective Date: 3/16/2009

Authorization

Facility ID: 0285030295
Application Number(s): A0036740
Permit Number: P0104395
Permit Description: 54 inch electrostatic Scotchprint 2000 print machine printing on self adhesive vinyl or other substrate, controlled by a Regensorb concentrator and thermal oxidizer.
Permit Type: Initial Installation
Permit Fee: \$400.00
Issue Date: 3/16/2009
Effective Date: 3/16/2009
Expiration Date: 9/25/2013
Permit Evaluation Report (PER) Annual Date: Apr 1 - Mar 31, Due May 15

This document constitutes issuance to:

Metromedia Technologies, Inc.
1061 Venture Boulevard
Wooster, OH 44691

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

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

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087
(330)425-9171

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



Authorization (continued)

Permit Number: P0104395
Permit Description: 54 inch electrostatic Scotchprint 2000 print machine printing on self adhesive vinyl or other substrate, controlled by a Regensorb concentrator and thermal oxidizer.

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

Emissions Unit ID:	R031
Company Equipment ID:	Scotchprint 2000 #1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

Emissions Unit ID:	R032
Company Equipment ID:	Scotchprint 2000 #2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104395

Facility ID: 0285030295

Effective Date: 3/16/2009

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 will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

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

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

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



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

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

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting 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



State of Ohio Environmental Protection Agency
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Final Permit-to-Install and Operate

Permit Number: P0104395

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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.



State of Ohio Environmental Protection Agency
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Permit Number: P0104395

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Effective Date: 3/16/2009

B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104395

Facility ID: 0285030295

Effective Date: 3/16/2009

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104395

Facility ID: 0285030295

Effective Date: 3/16/2009

C. Emissions Unit Terms and Conditions



1. R031, Scotchprint 2000 Electrostatic printing machine no. 1

Operations, Property and/or Equipment Description:

54 inch electrostatic Scotchprint 2000 print machine no. 1 printing on self adhesive vinyl or other substrate, controlled by a Regensorb concentrator and thermal oxidizer.

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. b)(2)b, b)(2)d, d)(5), and e)(2).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	See b)(2)b and b)(2)d below.
b.	OAC rule 3745-31-05(E)	See b)(2)a below.
c.	OAC rule 3745-21-07(G)(2)	The emission limitations required by this applicable rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(E). See b)(2)e below.

(2) Additional Terms and Conditions

a. Permit-to-install P0104395 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC 3745-31-05(A)(3).

i. All organic compounds/volatile organic compounds (OC/VOC) emitted by this emissions unit shall be vented to a flow concentrator and thermal oxidizer with a minimum capture efficiency of 100 percent, by weight, and a minimum destruction efficiency of 90 percent, by weight.



- ii. OC/VOC emissions from all coatings and inks employed in this emissions unit shall not exceed 0.20 pound per hour.
 - b. OC/VOC emissions from all coatings and inks employed in emissions units R001 through R022, R025 through R028, R031, R032, and R123 shall not exceed 19.48 pounds per hour and 85.32 tons per year.
 - c. The hourly and annual OC/VOC emission limitations are based on this emissions unit's and the facility's potential to emit. Therefore, no record keeping or reporting are required to maintain compliance with these limits.
 - d. The building enclosure housing this emissions unit meets the criteria of a permanent total enclosure (defined in U.S. EPA's Reference Method 204), as previously demonstrated in the compliance tests performed on June 30, 1999, March 24, 2005, and June 25, 2008.
 - e. OAC rule 3745-21-07(G)(2) shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, this rule shall no longer be an applicable rule and shall be void.
- c) Operational Restrictions
- (1) The permittee has provided a detailed analysis of facility-wide potential to emit that indicates that emissions of chemical(s) considered to be a Hazardous Air Pollutant (HAP) as identified in Section 112(b) of Title III of the Clean Air Act are less than major source thresholds (i.e., less than 10 tons of any single HAP; less than 25 tons of total HAPs used), without add-on controls.

The permittee shall not use HAP-containing materials in this emissions unit unless an updated potential-to-emit analysis has been submitted to and approved in writing by Ohio EPA's Northeast District Office; and the results of that analysis indicate that the facility remains an area (i.e., non-major) source of HAP without controls.
 - (2) The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall be no more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
 - (3) The set point for the desorption air stream temperature shall be maintained at or above the temperature established during the most recent emission test that demonstrated the emissions unit was in compliance. The temperature of the desorption air stream during the regeneration cycle shall not be more than 50 degrees Fahrenheit below this set point. An audible alarm shall be activated whenever the temperature of the desorption air stream is more than 50 degrees Fahrenheit below the set point.
 - (4) The set point for the regeneration cycle time shall be maintained at the value established during the most recent emissions test that demonstrated compliance. The permittee shall maintain the duration of each regeneration cycle within five (5) percent of the set point. An audible alarm shall be activated whenever the duration of each regeneration cycle is not within five (5) percent of the set point.



- (5) Operation of the control equipment outside of the restrictions established above may or may not indicate a mass emission violation. If required by Ohio EPA, compliance with the mass emission limitation shall be determined by performing concurrent mass emission tests and parameter readings shall be used in determining whether or not the operation of the control equipment outside of the restrictions specified above is indicative of a possible violation of the mass emission limitation.
 - (6) Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be reported to the Northeast District Office of Ohio EPA in accordance with OAC rule 3745-15-06(B). Parameter deviations due to such malfunctions, that comply with the requirements of OAC rule 3745-15-06(B), do not constitute violations of the operational restrictions for this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall operate and maintain continuous temperature and time monitors that measure the following when the emissions unit is in operation:
 - a. the temperature of the exhaust gases in the combustion zone of the thermal oxidizer;
 - b. the temperature of the desorption air stream entering the concentrator; and
 - c. the duration of each regeneration cycle for the concentrator.
 - d. The permittee shall operate a continuous temperature recorder for the temperature of the exhaust gases in the combustion zone of the thermal oxidizer, and record the temperature when the emissions unit is in operation.
 - e. Units shall be in degrees Fahrenheit and minutes. The accuracy for each thermocouple, monitor, clock, and recorder shall be guaranteed by the manufacturer to be within one (1) percent of the temperature/time being measured or five (5) degrees Fahrenheit/0.5 minute, whichever is greater. The temperature monitors and recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
 - (2) The permittee shall operate and maintain audible alarms for deviations in the temperature of the desorption air stream entering the concentrator and the duration of each regeneration cycle for the concentrator. The set points and alarm activation levels shall be set at the values specified in c)(3) and c)(4) above.

The permittee shall maintain a log of each instance when an audible alarm is activated, the cause of the alarm, the time interval of the deviation, the magnitude of the deviation (in degrees Fahrenheit and/or in minutes, as applicable), and the corrective action taken to restore the correct operational parameters.
 - (3) The permittee shall maintain a log or record of operating time for the capture (collection) system, control devices, monitoring equipment, and the associated emissions unit.
 - (4) On each day of operation of the control system for this emissions unit, the permittee shall record the set points and alarm activation levels, and the corresponding values of



temperature and time duration. At least once per calendar month, the permittee shall calibrate the set points and alarm activation levels and maintain records of the results of each calibration.

- (5) The permittee shall collect and record the following information each month for all organic compounds employed in emissions units R001 through R022, R025 through R028, R031, R032, and R123:
- a. the name and identification of each liquid organic compound contained in coatings, inks, and cleanup materials employed;
 - b. the amount of each liquid organic compound employed in coatings, inks, and cleanup materials, in gallons;
 - c. the OC content of each liquid organic compound employed in coatings, inks, and cleanup materials, in lbs of OC/gallon; and
 - d. the total combined monthly OC emissions [summation of (b x c) for each liquid organic compound employed in coatings, inks, and cleanup materials multiplied by one (1) minus the retention factor determined in the 12/30/97 BAT study (0.209), multiplied by one (1) minus the overall control efficiency determined during the most recent emission test that demonstrated the emissions unit was in compliance].

This information does not have to be kept on a line-by-line basis.

e) Reporting Requirements

- (1) The permittee shall submit quarterly temperature/time deviation (excursion) reports that identify the following:
- a. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated the emissions unit was in compliance.
 - b. all instances when the set points and alarm activation levels for the temperature of the desorption air stream prior to the concentrator did not comply with the limitations specified in c)(3), based on the records maintained pursuant to limitations specified in d)(4) of these terms and conditions, and the magnitude of each deviation;
 - c. all instances when the set points and alarm activation levels for the duration of the regeneration cycle did not comply with the limitations specified in c)(4), based on the records maintained pursuant to d)(4) of these terms and conditions, and the magnitude of each deviation; and
 - d. all instances when an audible alarm was activated, the cause of each alarm (if known), the time interval of the deviation, the magnitude of the deviation (in degrees Fahrenheit and/or in minutes, as applicable), and the corrective action taken to restore the correct operating parameters.



- (2) The permittee shall submit annual reports that specify the total OC emissions for emissions units R001 through R022, R026 through R028, R031, R032, and R123, combined, for the previous calendar year. These reports shall be submitted to the Northeast District Office of Ohio EPA by January 30 of each year and shall cover the previous calendar year.
- (3) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emission limitations specified in b)(1) and b)(2), shall be determined in accordance with the following methods:

a. Emission Limitation:

All OC/VOC emitted by this emissions unit shall be vented to a flow concentrator and thermal oxidizer with a minimum capture efficiency of 100 percent, by weight, and a minimum destruction efficiency of 90 percent, by weight.

Applicable Compliance Method:

Compliance with the above requirement shall be determined through emission testing as specified in f)(2) below. Method 24A shall be used to determine the organic compound contents of the coatings, inks, and cleanup materials.

b. Emission Limitation:

OC/VOC emissions from all coatings and inks employed in this emissions unit shall not exceed 0.20 pound per hour.

Applicable Compliance Method:

Compliance with the hourly OC/VOC limitation shall be determined using the following equation:

$$E = MP \times G \times OC \times (1 - RF) \times (1 - DE)$$

where:

E = hourly emission rate, in lbs/hr;

MP = maximum amount of material printed per hour (sq. ft./hr);

G = ink usage factor, in gallons of ink/coating per sq. ft. (0.0026 gal/sq. ft.);

OC = maximum ink/coating OC content (6.8 lbs/gal);



RF = solvent retention factor, determined through the 12/30/97 BAT study (0.209); and

DE = minimum fractional destruction efficiency of the control system (0.90).

c. Emission Limitation:

OC/VOC emissions from all coatings and inks employed in emissions units R001 through R022, R025 through R028, R031, R032, and R123 shall not exceed 19.48 pounds per hour and 85.32 tons per year.

Applicable Compliance Method:

The hourly and annual OC/VOC emission limitations are based on this emissions unit's and the facility's potential to emit. Compliance with the hourly and annual OC/VOC emission limitations shall be determined by the record keeping requirements specified in sections b)(2)a through b)(2)d.

(2) The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements.

- a. The emissions testing shall be conducted prior to June 25, 2013.
- b. The emissions testing shall be conducted to demonstrate compliance with the destruction efficiency requirement specified in section b)(2)a.
- c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an approved alternative test protocol. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
- d. The test(s) shall be conducted while all emissions units vented to the control device are operating at or near their maximum capacities, unless otherwise specified or approved by the Northeast District Office of Ohio EPA.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Northeast District Office of Ohio EPA. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Northeast District Office of Ohio EPA's refusal to accept the results of the emissions test(s).
- f. Personnel from the Northeast District Office of Ohio EPA 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 from the emissions unit and/or the performance of the control equipment.



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- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the test and submitted to the Northeast District Office of Ohio EPA within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Northeast District Office of Ohio EPA.

g) Miscellaneous Requirements

- (1) None.



2. R032, Scotchprint 2000 Electrostatic printing machine no. 2

Operations, Property and/or Equipment Description:

54 inch electrostatic Scotchprint 2000 print machine no. 2 printing on self adhesive vinyl or other substrate, controlled by a Regensorb concentrator and thermal oxidizer.

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. b)(2)b, b)(2)d, d)(5), and e)(2).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	See b)(2)b and b)(2)d below.
b.	OAC rule 3745-31-05(E)	See b)(2)a below.
c.	OAC rule 3745-21-07(G)(2)	The emission limitations required by this applicable rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(E). See b)(2)e below.

(2) Additional Terms and Conditions

a. Permit-to-install P0104395 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC 3745-31-05(A)(3).

i. All organic compounds/volatile organic compounds (OC/VOC) emitted by this emissions unit shall be vented to a flow concentrator and thermal oxidizer with a minimum capture efficiency of 100 percent, by weight, and a minimum destruction efficiency of 90 percent, by weight.



- ii. OC/VOC emissions from all coatings and inks employed in this emissions unit shall not exceed 0.20 pound per hour.
 - b. OC/VOC emissions from all coatings and inks employed in emissions units R001 through R022, R025 through R028, R031, R032, and R123 shall not exceed 19.48 pounds per hour and 85.32 tons per year.
 - c. The hourly and annual OC/VOC emission limitations are based on this emissions unit's and the facility's potential to emit. Therefore, no record keeping or reporting are required to maintain compliance with these limits.
 - d. The building enclosure housing this emissions unit meets the criteria of a permanent total enclosure (defined in U.S. EPA's Reference Method 204), as previously demonstrated in the compliance tests performed on June 30, 1999, March 24, 2005, and June 25, 2008.
 - e. OAC rule 3745-21-07(G)(2) shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, this rule shall no longer be an applicable rule and shall be void.
- c) Operational Restrictions
- (1) The permittee has provided a detailed analysis of facility-wide potential to emit that indicates that emissions of chemical(s) considered to be a Hazardous Air Pollutant (HAP) as identified in Section 112(b) of Title III of the Clean Air Act are less than major source thresholds (i.e., less than 10 tons of any single HAP; less than 25 tons of total HAPs used), without add-on controls.

The permittee shall not use HAP-containing materials in this emissions unit unless an updated potential-to-emit analysis has been submitted to and approved in writing by Ohio EPA's Northeast District Office; and the results of that analysis indicate that the facility remains an area (i.e., non-major) source of HAP without controls.
 - (2) The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall be no more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
 - (3) The set point for the desorption air stream temperature shall be maintained at or above the temperature established during the most recent emission test that demonstrated the emissions unit was in compliance. The temperature of the desorption air stream during the regeneration cycle shall not be more than 50 degrees Fahrenheit below this set point. An audible alarm shall be activated whenever the temperature of the desorption air stream is more than 50 degrees Fahrenheit below the set point.
 - (4) The set point for the regeneration cycle time shall be maintained at the value established during the most recent emissions test that demonstrated compliance. The permittee shall maintain the duration of each regeneration cycle within five (5) percent of the set point. An audible alarm shall be activated whenever the duration of each regeneration cycle is not within five (5) percent of the set point.



- (5) Operation of the control equipment outside of the restrictions established above may or may not indicate a mass emission violation. If required by Ohio EPA, compliance with the mass emission limitation shall be determined by performing concurrent mass emission tests and parameter readings shall be used in determining whether or not the operation of the control equipment outside of the restrictions specified above is indicative of a possible violation of the mass emission limitation.
 - (6) Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be reported to the Northeast District Office of Ohio EPA in accordance with OAC rule 3745-15-06(B). Parameter deviations due to such malfunctions, that comply with the requirements of OAC rule 3745-15-06(B), do not constitute violations of the operational restrictions for this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall operate and maintain continuous temperature and time monitors that measure the following when the emissions unit is in operation:
 - a. the temperature of the exhaust gases in the combustion zone of the thermal oxidizer;
 - b. the temperature of the desorption air stream entering the concentrator; and
 - c. the duration of each regeneration cycle for the concentrator.
 - d. The permittee shall operate a continuous temperature recorder for the temperature of the exhaust gases in the combustion zone of the thermal oxidizer, and record the temperature when the emissions unit is in operation.
 - e. Units shall be in degrees Fahrenheit and minutes. The accuracy for each thermocouple, monitor, clock, and recorder shall be guaranteed by the manufacturer to be within one (1) percent of the temperature/time being measured or five (5) degrees Fahrenheit/0.5 minute, whichever is greater. The temperature monitors and recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
 - (2) The permittee shall operate and maintain audible alarms for deviations in the temperature of the desorption air stream entering the concentrator and the duration of each regeneration cycle for the concentrator. The set points and alarm activation levels shall be set at the values specified in c)(3) and c)(4) above.

The permittee shall maintain a log of each instance when an audible alarm is activated, the cause of the alarm, the time interval of the deviation, the magnitude of the deviation (in degrees Fahrenheit and/or in minutes, as applicable), and the corrective action taken to restore the correct operational parameters.
 - (3) The permittee shall maintain a log or record of operating time for the capture (collection) system, control devices, monitoring equipment, and the associated emissions unit.
 - (4) On each day of operation of the control system for this emissions unit, the permittee shall record the set points and alarm activation levels, and the corresponding values of



temperature and time duration. At least once per calendar month, the permittee shall calibrate the set points and alarm activation levels and maintain records of the results of each calibration.

- (5) The permittee shall collect and record the following information each month for all organic compounds employed in emissions units R001 through R022, R025 through R028, R031, R032, and R123:
- a. the name and identification of each liquid organic compound contained in coatings, inks, and cleanup materials employed;
 - b. the amount of each liquid organic compound employed in coatings, inks, and cleanup materials, in gallons;
 - c. the OC content of each liquid organic compound employed in coatings, inks, and cleanup materials, in lbs of OC/gallon; and
 - d. the total combined monthly OC emissions [summation of (b x c) for each liquid organic compound employed in coatings, inks, and cleanup materials multiplied by one (1) minus the retention factor determined in the 12/30/97 BAT study (0.209), multiplied by one (1) minus the overall control efficiency determined during the most recent emission test that demonstrated the emissions unit was in compliance].

This information does not have to be kept on a line-by-line basis.

e) Reporting Requirements

- (1) The permittee shall submit quarterly temperature/time deviation (excursion) reports that identify the following:
- a. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated the emissions unit was in compliance.
 - b. all instances when the set points and alarm activation levels for the temperature of the desorption air stream prior to the concentrator did not comply with the limitations specified in c)(3), based on the records maintained pursuant to limitations specified in d)(4) of these terms and conditions, and the magnitude of each deviation;
 - c. all instances when the set points and alarm activation levels for the duration of the regeneration cycle did not comply with the limitations specified in c)(4), based on the records maintained pursuant to d)(4) of these terms and conditions, and the magnitude of each deviation; and
 - d. all instances when an audible alarm was activated, the cause of each alarm (if known), the time interval of the deviation, the magnitude of the deviation (in degrees Fahrenheit and/or in minutes, as applicable), and the corrective action taken to restore the correct operating parameters.



- (2) The permittee shall submit annual reports that specify the total OC emissions for emissions units R001 through R022, R026 through R028, R031, R032, and R123, combined, for the previous calendar year. These reports shall be submitted to the Northeast District Office of Ohio EPA by January 30 of each year and shall cover the previous calendar year.
- (3) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emission limitations specified in b)(1) and b)(2), shall be determined in accordance with the following methods:

a. Emission Limitation:

All OC/VOC emitted by this emissions unit shall be vented to a flow concentrator and thermal oxidizer with a minimum capture efficiency of 100 percent, by weight, and a minimum destruction efficiency of 90 percent, by weight.

Applicable Compliance Method:

Compliance with the above requirement shall be determined through emission testing as specified in f)(2) below. Method 24A shall be used to determine the organic compound contents of the coatings, inks, and cleanup materials.

b. Emission Limitation:

OC/VOC emissions from all coatings and inks employed in this emissions unit shall not exceed 0.20 pound per hour.

Applicable Compliance Method:

Compliance with the hourly OC/VOC limitation shall be determined using the following equation:

$$E = MP \times G \times OC \times (1 - RF) \times (1 - DE)$$

where:

E = hourly emission rate, in lbs/hr;

MP = maximum amount of material printed per hour (sq. ft./hr);

G = ink usage factor, in gallons of ink/coating per sq. ft. (0.0026 gal/sq. ft.);

OC = maximum ink/coating OC content (6.8 lbs/gal);



RF = solvent retention factor, determined through the 12/30/97 BAT study (0.209); and

DE = minimum fractional destruction efficiency of the control system (0.90).

c. Emission Limitation:

OC/VOC emissions from all coatings and inks employed in emissions units R001 through R022, R025 through R028, R031, R032, and R123 shall not exceed 19.48 pounds per hour and 85.32 tons per year.

Applicable Compliance Method:

The hourly and annual OC/VOC emission limitations are based on this emissions unit's and the facility's potential to emit. Compliance with the hourly and annual OC/VOC emission limitations shall be determined by the record keeping requirements specified in sections b)(2)a through b)(2)d.

(2) The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements.

- a. The emissions testing shall be conducted prior to June 25, 2013.
- b. The emissions testing shall be conducted to demonstrate compliance with the destruction efficiency requirement specified in section b)(2)a.
- c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an approved alternative test protocol. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
- d. The test(s) shall be conducted while all emissions units vented to the control device are operating at or near their maximum capacities, unless otherwise specified or approved by the Northeast District Office of Ohio EPA.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Northeast District Office of Ohio EPA. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Northeast District Office of Ohio EPA's refusal to accept the results of the emissions test(s).
- f. Personnel from the Northeast District Office of Ohio EPA 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 from the emissions unit and/or the performance of the control equipment.



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- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the test and submitted to the Northeast District Office of Ohio EPA within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Northeast District Office of Ohio EPA.

g) Miscellaneous Requirements

- (1) None.