



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

9/10/2013

Certified Mail

Gary Armstrong
Okamoto Sandusky Manufacturing LLC
3130 West Monroe Street
Sandusky, OH 44870

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0322020019
Permit Number: P0115007
Permit Type: OAC Chapter 3745-31 Modification
County: Erie

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

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

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

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)3528461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael W. Ahern, Manager

Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA
Ohio EPA-NWDO; Michigan; Canada



Response to Comments

Facility ID:	0322020019
Facility Name:	Okamoto Sandusky Manufacturing LLC
Facility Description:	The company produces vinyl products for the automotive industry.
Facility Address:	3130 West Monroe Street Sandusky, OH 44870 Erie County
Permit:	P0115007, Permit-To-Install - OAC Chapter 3745-31 Modification
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the Sandusky Register on 08/01/2013. The comment period ended on 08/31/2013.	
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: No comments were received from US EPA or the facility.
- b. Response: None.

2. Note:

During DAPC's review of the facility's quarterly deviation reports it was discovered that PTI P0112965 issued February 26, 2013 and the draft PTI P0115007 did not reflect the correct combustion temperature limit of 1635 degrees Fahrenheit for the RTO established according to section 63.3360(e)(3)(i) of 40 CFR Part 63, Subpart JJJJ during recent stack testing.

An administrative modification PTI P0115239 initiated by DAPC was issued August 16, 2013 to reflect the correct combustion temperature limit of the RTO during recent stack testing; however, these changes should have been incorporated into the Chapter 31 Modification PTI P0115007 instead. Therefore, PTI P0115239 was revoked and the corrected combustion temperature limit of the RTO has been incorporated into PTI P0115007.



FINAL

**Division of Air Pollution Control
Permit-to-Install
for
Okamoto Sandusky Manufacturing LLC**

Facility ID: 0322020019
Permit Number: P0115007
Permit Type: OAC Chapter 3745-31 Modification
Issued: 9/10/2013
Effective: 9/10/2013



Division of Air Pollution Control
Permit-to-Install
for
Okamoto Sandusky Manufacturing LLC

Table of Contents

Authorization	1
A. Standard Terms and Conditions	3
1. Federally Enforceable Standard Terms and Conditions	4
2. Severability Clause	4
3. General Requirements	4
4. Monitoring and Related Record Keeping and Reporting Requirements.....	5
5. Scheduled Maintenance/Malfunction Reporting	6
6. Compliance Requirements	6
7. Best Available Technology	7
8. Air Pollution Nuisance	7
9. Reporting Requirements	7
10. Applicability	8
11. Construction of New Sources(s) and Authorization to Install	8
12. Permit-To-Operate Application	9
13. Construction Compliance Certification	9
14. Public Disclosure	9
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations	10
16. Fees.....	10
17. Permit Transfers	10
18. Risk Management Plans	10
19. Title IV Provisions	10
B. Facility-Wide Terms and Conditions.....	11
C. Emissions Unit Terms and Conditions	13
1. P029, Expansion Line	14
2. Emissions Unit Group - Laminator/Embossers: P030 and P031	21
3. Emissions Unit Group - Rotogravure Printers: K003 and K004	35



Authorization

Facility ID: 0322020019
Facility Description: The company produces vinyl products for the automotive industry.
Application Number(s): A0048013
Permit Number: P0115007
Permit Description: Chapter 31 modification to reflect changes to operating conditions, production throughput changes and efficiency of control devices.
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: \$1,800.00
Issue Date: 9/10/2013
Effective Date: 9/10/2013

This document constitutes issuance to:

Okamoto Sandusky Manufacturing LLC
3130 West Monroe Street
Sandusky, OH 44870

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

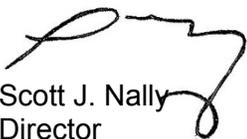
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

The above named entity is hereby granted a Permit-to-Install for the 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 emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Scott J. Nally
Director



Authorization (continued)

Permit Number: P0115007
 Permit Description: Chapter 31 modification to reflect changes to operating conditions, production throughput changes and efficiency of control devices.

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

Emissions Unit ID:	P029
Company Equipment ID:	Expansion Line
Superseded Permit Number:	P0110842
General Permit Category and Type:	Not Applicable

Group Name: Laminator/Embosser

Emissions Unit ID:	P030
Company Equipment ID:	Kawakami Laminator
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P031
Company Equipment ID:	Embosser #5
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

Group Name: Rotogravure Printers

Emissions Unit ID:	K003
Company Equipment ID:	Printer #3
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K004
Company Equipment ID:	Printer #4
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Final Permit-to-Install
Okamoto Sandusky Manufacturing LLC
Permit Number: P0115007
Facility ID: 0322020019
Effective Date: 9/10/2013

A. Standard Terms and Conditions



1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A.2.a), Severability Clause
 - (2) Standard Term and Condition A.3.c) through A. 3.e)General Requirements
 - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A.9., Reporting Requirements
 - (5) Standard Term and Condition A.10., Applicability
 - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A.14., Public Disclosure
 - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A.16., Fees
 - (10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.



- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.



- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northwest District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
 - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Northwest District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Northwest District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

- a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.
- b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.



- c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- d) The permittee shall submit progress reports to the Ohio EPA DAPC, Northwest District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have



been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northwest District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., 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) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in Ohio EPA's "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).



- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., 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). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.



15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in Air Services once the transfer is legally completed. The change must be submitted through Air Services within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.



Final Permit-to-Install
Okamoto Sandusky Manufacturing LLC
Permit Number: P0115007
Facility ID: 0322020019
Effective Date: 9/10/2013

B. Facility-Wide Terms and Conditions



Final Permit-to-Install
Okamoto Sandusky Manufacturing LLC
Permit Number: P0115007
Facility ID: 0322020019
Effective Date: 9/10/2013

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.



Final Permit-to-Install
Okamoto Sandusky Manufacturing LLC
Permit Number: P0115007
Facility ID: 0322020019
Effective Date: 9/10/2013

C. Emissions Unit Terms and Conditions



1. P029, Expansion Line

Operations, Property and/or Equipment Description:

Expansion Line

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
- 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)	<u>Plastic film heating:</u> 0.43 pound of particulate matter 10 microns or less in size (PM10) per hour and 1.88 tons of PM10 per year Visible particulate emissions (PE) shall not exceed 10 percent opacity, as a six-minute average. 13.41 pounds of volatile organic compounds (VOC) per hour and 58.74 tons of VOC per year See b)(2)a., b)(2)b., b)(2)f., and c)(1).
b.	ORC 3704.03(T)	See b)(2)c.
c.	OAC rule 3745-31-05(A)(3), as effective 11-30-01	<u>Combustion of natural gas:</u> 0.38 lb nitrogen oxides (NOx) per hour and 1.66 tons of NOx per year 0.32 lb carbon dioxide (CO) per hour and 1.40 tons of CO per year 0.002 lb sulfur dioxide (SO2) per hour and 0.01 ton of SO2 per year 0.03 lb volatile organic compounds (VOC) per hour and 0.14 ton of VOC per year



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.03 lb PM10 per hour and 0.13 ton of PM10 per year See b)(2)d.
d.	OAC rule 3745-31-05(A)(3), as effective 12-01-06	See b)(2)e.
e.	OAC rule 3745-21-09(H)	See b)(2)g.
f.	OAC rule 3745-17-11(B)	See b)(2)h.
g.	OAC rule 3745-17-07(A)	See b)(2)i.

(2) Additional Terms and Conditions

- a. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE). The federally enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(D) and are based on the operational restrictions contained in c)(1):
 - i. 0.43 pound of PM10/hr and 1.88 tons of PM10/yr; and
 - ii. Visible PE shall not exceed 10 percent opacity, as a six-minute average.
- b. This permit establishes the following federally enforceable emission limitations for the purpose of representing the potential to emit of the emissions unit:
 - i. 13.41 lbs VOC/hr from plastic film heating; and
 - ii. 58.74 tons VOC/yr from plastic film heating.
- c. The Best Available Technology (BAT) requirements for VOC emissions under ORC 3704.03(T) have been determined to be compliance with OAC rule 3745-21-09(H).
- d. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective 12-1-06 will no longer apply.



- e. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of the OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3)(a), effective December 1, 2006 do not apply to the emissions of CO, NOx, SO2, or PM10 from the combustion of natural gas since the potential to emit for CO, NOx, SO2, and PM10 is less than 10 tons per year.

- f. All PE is considered to be PM10.
- g. The VOC content of the coatings employed in the vinyl coating line, as determined under paragraph (B) of rule OAC 3745-21-10 of the Administrative Code, shall not exceed 4.8 lbs of VOC per gallon of vinyl coating, excluding water and exempt solvents or twenty-five percent VOC by volume of the volatile matter of the vinyl coating.
- h. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
- i. The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(D).

c) Operational Restrictions

- (1) The following operational restrictions have been included in this permit for the purpose of establishing the following legally and practically enforceable requirements which limit PTE: [See b)(2)a.]
 - a. use of a CVM Fume Eliminator that is designed to have a 100% capture efficiency and a 90% control efficiency of PE from this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emissions incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:



- a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, and
- b. describe any corrective actions taken to eliminate the visible particulate emissions.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

f) Testing Requirements

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

- a. Emission Limitations:

0.43 pound of PM10 per hour and 1.88 tons of PM10 per year from plastic film heating operations

Applicable Compliance Method:

The pounds per hour emissions limitation is based on results obtained from stack testing of this source on March 5, 2013. If required, the permittee shall demonstrate compliance with the pound per hour limitation through stack testing using Methods 1-4 of 40 CFR, Part 60, Appendix A, and Methods 201, 201A and 202 of 40 CFR, Part 51, Appendix M.

The tons per year limitation was developed by multiplying the pounds per hour limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall be demonstrated.

- b. Emission Limitations:

13.41 pounds of VOC per hour and 58.74 tons of VOC per year from plastic film heating operations

Applicable Compliance Method:

The pounds per hour emissions limitation is based on results obtained from stack testing of this source on March 5, 2013. If required, the permittee shall demonstrate compliance with the pound per hour limitation through stack testing using Methods 1-4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

The tons per year limitation was developed by multiplying the pounds per hour limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance annual limitation shall be demonstrated.



c. Emission Limitations:

0.38 lbNO_x per hour and 1.66 tons of NO_x per year from combustion of natural gas

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 100 pounds of NO_x per million standard cubic foot (scf) by 3.78 million Btu per hour and a conversion factor of 1 scf/1,000 Btu. If required, the permittee shall demonstrate compliance with the pound per hour emission limitation by testing in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with hourly emission limitation, compliance with the annual limitation shall also be demonstrated.

d. Emission Limitations:

0.32 lb CO per hour and 1.40 tons of CO per year from combustion of natural gas

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 84 pounds of CO per million standard cubic foot (scf) by 3.78 million Btu per hour and a conversion factor of 1 scf/1,000 Btu. If required, the permittee shall demonstrate compliance with the pound per hour emission limitation by testing in accordance with Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with hourly emission limitation, compliance with the annual limitation shall be demonstrated.

e. Emission Limitations:

0.002 lb SO₂ per hour and 0.01 ton of SO₂ per year from the combustion of natural gas

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 0.6 pounds of SO₂ per million standard cubic foot (scf) by 3.78 million Btu per hour and a conversion factor of 1 scf/1,000 Btu. If required, the permittee shall demonstrate compliance with the pound per hour emission limitation by testing in accordance with Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A.



The annual emission limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr, and then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with hourly emission limitation, compliance with the annual limitation shall be demonstrated.

f. Emission Limitations:

0.03lb VOC per hour and 0.14 ton of VOC per year from the combustion of natural gas

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 8.7 pounds of VOC per million standard cubic foot (scf) by 3.78 million Btu per hour and a conversion factor of 1 scf/1,000 Btu. If required, the permittee shall demonstrate compliance with the pound per hour limitation through stack testing using Methods 1-4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr, and then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with hourly emission limitation, compliance with the annual limitation shall be demonstrated.

g. Emission Limitations:

0.03 lb PM10 per hour and 0.13 ton of PM10 per year from the combustion of natural gas

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 7.6 pounds of PE per million standard cubic foot (scf) by 3.78 million Btu per hour and a conversion factor of 1 scf/1,000 Btu. If required, the permittee shall demonstrate compliance with the pound per hour emission limitation by testing in accordance with Methods 1 through 4 and 40 CFR, Part 60, Appendix A and Methods 201, 201A and 202 of 40 CFR, Part 51, Appendix M.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr, and then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with hourly emission limitation, compliance with the annual limitation shall be demonstrated.

h. Emission Limitation:

Visible PE shall not exceed 10 percent opacity, as a six-minute average.

Applicable Compliance Method:



Final Permit-to-Install
Okamoto Sandusky Manufacturing LLC
Permit Number: P0115007
Facility ID: 0322020019
Effective Date: 9/10/2013

If required, compliance with the visible emission limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

- g) Miscellaneous Requirements
 - (1) None.



2. Emissions Unit Group - Laminator/Embosser: P030 and P031

EU ID	Operations, Property and/or Equipment Description
P030	Kawakami Laminator
P031	Embosser No. 5

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- 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.	ORC 3704.03(T)	See b)(2)a.
b.	OAC rule 3745-31-05(D)	<u>For emissions unit P030:</u> 8.72 pounds of volatile organic compounds (VOC) per hour and 38.19 tons of VOC per year from adhesive application operations 0.09 pound of VOC per hour and 0.39 ton of VOC per year from cleanup materials <u>For emissions unit P031:</u> 3.24 pounds of VOC per hour and 14.19 tons of VOC per year from adhesive application operations 0.26 pound of VOC per hour and 1.14 tons of VOC per year from cleanup materials See b)(2)b. and c)(1).
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<u>Combustion of natural gas from RTO from emissions units P030, P031, K003, and K004 combined</u> 0.54 lb nitrogen oxides (NOx) per hour



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>and 2.37 tons of NOx per year</p> <p>0.45 lb carbon monoxide (CO) per hour and 1.99 tons of CO per year</p> <p>0.003 lb sulfur dioxide (SO2) per hour and 0.22 ton SO2 per tear</p> <p>0.04 lb particulate matter less than ten microns in size (PM10) per hour and 0.18 ton of PM10 per year</p> <p>0.05lb of volatile organic compounds (VOC) per hour and 0.22 ton of VOC per year</p> <p>Visible particulate emissions from the stack serving the RTO shall not exceed 0 percent opacity, as a six-minute average</p> <p>See b)(2)c.</p>
d.	OAA rule 3745-31-05(A)(3), as effective 12/1/06	See b)(2)d.
e.	OAC rule 3745-21-09(H)	See b)(2)e.
f.	OAC rule 3745-17-11(B)	See b)(2)f.
g.	OAC rule 3745-17-07(A)	See b)(2)f.
h.	40 CFR, Part 60, Subpart FFF	See b)(2)e.
i.	<p>40 CFR, Part 63, Subpart JJJJ [40 CFR 63.3280-3420]</p> <p>[In accordance with 40 CFR, 63.3300, these emissions units are web coating lines subject to the emission limitation/control measures specified in Subpart JJJJ.]</p>	<p>Comply with one of the following:</p> <p>Organic hazardous air pollutant (HAP) emissions shall be limited to no more than 5 percent of the organic HAP applied for each month (95 percent reduction) at existing affected sources; or</p> <p>Organic HAP emissions shall be limited to no more than 4 percent of coatings applied for the month; or organic HAP emissions shall be limited to no more than 20 percent of solids applied for the month.</p> <p>Outlet organic HAP concentration of no greater than 20 parts by million by volume (ppmv) by compound on a dry basis and the efficiency of the capture system is 100 percent.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
j.	40 CFR 63.1-15 [40 CFR 63.3340]	Table 2 to Subpart JJJJ of Part 63 - Applicability of 40 CFR Part 63 General Provisions to Subpart JJJJ shows which parts of the General Provisions in sections 63.1 - 63.15 of 40 CFR Part 63, Subpart A apply.

(2) Additional Terms and Conditions

- a. The “Best Available Technology” (BAT) requirements for VOC emissions under ORC 3704.03(T) have been determined to be the compliance with 40 CFR, Part 63, Subpart JJJJ.
- b. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Prevention of Significant Deterioration (PSD) requirements. The federally enforceable emission limitations are based on the operational restrictions contained in c)(1):
 - i. 8.72 pounds of VOC/hr and 38.19 tons of VOC/yr from adhesive application operations from emissions unit P030;
 - ii. 0.09 pound of VOC/hr and 0.39 tons of VOC/yr from cleanup materials from emissions unit P030;
 - iii. 3.24 pounds of VOC/hr and 14.19 tons of VOC/yr from adhesive application operations from emissions unit P031; and
 - iv. 0.26 pound of VOC/hr and 1.14 tons of VOC/yr from cleanup materials from emissions unit P031.
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective 12-1-06 will no longer apply.
- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of the OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3)(a), effective December 1, 2006 do not apply to the emissions of CO, NOx, SO2, or PM10 from the



combustion of natural gas since the potential to emit for CO, NOx, SO2, and PM10 is less than 10 tons per year.

- e. The requirements of this rule are less stringent than the requirements in 40 CFR, Part 63, Subpart JJJJ.
- f. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/2001.

c) Operational Restrictions

- (1) The following operational restrictions have been included in this permit for the purpose of establishing federally enforceable requirements which limit potential to emit [See b)(2)b.):
 - a. For VOC emissions, this emissions unit shall be vented to a RTO which achieves an overall capture efficiency of 100% and a 96% destruction efficiency.
- (2) All of the VOC emissions from these emissions units shall be vented to the regenerative thermal oxidizer (RTO) that shall meet the operational, monitoring, and record keeping requirements of this permit, when one or more of the emissions units are in operation.
- (3) The permanent total enclosure shall be constructed to totally enclose the emissions unit such that all volatile organic compound emission are captured, contained, and directed to the control device.
- (4) The permanent total enclosure shall be maintained under negative pressure whenever the emissions unit is in operation, and shall be designed and maintained to have an average facial velocity of air through each natural draft opening of at least 200 feet per minute (3,600 m/hr). Compliance with the average facial velocity shall be demonstrated during the compliance test, by either using an air flow monitor or a differential pressure gauge at each natural draft opening, and maintaining the required facial velocity or the corresponding negative pressure. The permanent total enclosure shall meet all of the following criteria if the capture efficiency of the enclosure and control device is to be assumed to be 100%:
 - a. Any natural draft opening shall be at least four equivalent opening diameters, or 4 times the diameter of the opening, from each VOC emitting point. An equivalent diameter is the diameter of a circle that has the same area as the opening. If the opening is not circular the equivalent diameter (ED) is calculated as follows:

$$ED = (4 \text{ area}/\pi)^{0.5}$$

- b. The total area of all natural draft openings (A_N) shall not exceed 5 percent of the total surface area of the enclosure (A_T), i.e, the four walls, floor, and ceiling. The natural draft opening to enclosure area ratio (NEAR) is calculated as follows:

$$NEAR = A_N/ A_T$$



- c. The direction of air flow through all natural draft openings shall be into the enclosure, with an average facial velocity of no less than 200 feet per minute (3,600 m/hr) or a pressure drop of 0.013 mm Hg (0.007 in. H₂O).
 - d. All access doors and windows to the enclosure that do not meet the requirements of a natural draft opening and whose surface areas are not included in the 5 percent surface area determination in c)(4)b, shall be completely closed to any air movement during process operations.
 - e. All VOC emissions shall be captured and contained for discharge through the control device.
- (5) The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.013 mm Hg (0.007 inch of water), whenever the emissions unit is in operation.
- (6) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart JJJJ, including the following sections:

Subpart JJJJ section	Subpart JJJJ requirement
63.3321(a)	Requirement to meet operating limits at all times after they are established

d) **Monitoring and/or Recordkeeping Requirements**

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the RTO, for any 3-hour block of time when the emissions units controlled by the RTO are in operation, must not fall below 1635 degrees Fahrenheit or below the combustion temperature limit established according to section 63.3360(e)(3)(i) of 40 CFR Part 63, Subpart JJJJ.
- (2) The permittee shall properly install, operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the RTO when the emissions unit is in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee and prior approval by the Northwest District Office. The permittee shall collect and record the following information for each day the emissions units are in operation:
 - a. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit; and
 - b. all 3-hour blocks of time during which the average combustion temperature within the RTO, when the emissions unit was in operation, fell below 1635



degrees Fahrenheit or fell below the combustion temperature limit established according to section 63.3360(e)(3)(i) of 40 CFR Part 63, Subpart JJJJ.

- (3) Whenever the monitored average combustion temperature within the RTO deviates from the range/limit specified in 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 Northwest District Office. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate for the controlled emissions unit(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.



- (4) The permittee shall measure, document/calculate, and maintain a permanent record of the following information for the permanent total enclosure, which may be the same record documented during the compliance test(s):
 - a. the measured diameter of each natural draft opening;
 - b. the distance measured from each natural draft opening to each VOC emitting point;
 - c. the total calculated surface area of all natural draft openings and the surface area of the enclosure's four walls, floor, and ceiling;
 - d. the calculation or demonstration that the distance from each VOC emitting point to each natural draft opening is at least 4 times the diameter of the opening; and
 - e. the calculation demonstrating that the sum of the surface areas of all of the natural draft openings to the enclosure is not more than 5 percent of the sum of the surface areas of the enclosure's four walls, floor, and ceiling.

- (5) The permittee shall maintain and operate monitoring devices and a recorder which continuously and simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

- (6) The permittee shall record and maintain on a daily basis the difference in pressure between the permanent total enclosure and the surrounding area(s) throughout the day.

- (7) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart JJJJ, including the following sections:

Subpart JJJJ section	Subpart JJJJ requirement
63.3350(a)	Summary of monitoring required
63.3350(b)	Requirement to install and operate monitoring equipment
63.3350(e)	Requirements for continuous parameter monitoring system (CPMS)
63.3350(f)	Requirements for capture system monitoring
63.3410(a)	Recordkeeping requirements



e) Reporting Requirements

- (1) The permittee shall submit quarterly summaries of the following records:
 - a. a log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;
 - b. any records of downtime (date and length of time) for the capture (collection) system, the control device, and/or the monitoring equipment when the emissions units were in operation;
 - c. all 3-hour blocks of time (when the emissions units were in operation) during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inches of water;
 - d. all 3-hour blocks of time (when the emissions units were in operation) during which the average combustion temperature within the RTO, when the emissions unit was in operation, fell below 1635 degrees Fahrenheit or fell below the combustion temperature limit established according to section 63.3360(e)(3)(i) of 40 CFR Part 63, Subpart JJJJ;
 - e. an identification of each incident of deviation described in e)(1)b. (above) where a prompt investigation was not conducted;
 - f. an identification of each incident of deviation described in e)(1)b. where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - g. an identification of each incident of deviation described in e)(1)b. where proper records were not maintained for the investigation and/or the corrective action(s).

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

- (2) The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions units were in operation and the VOC emissions were not vented to the RTO. Each report shall be submitted within 30 days after the deviation occurs.
- (3) The permittee shall submit quarterly summaries that include a log of the downtime for the capture (collection) system, control device, monitoring equipment, when the associated emissions unit was in operation.
- (4) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all periods of time during which the permanent total enclosure was not maintained at the required differential pressure specified in section c)(4) of the terms and conditions of this permit; and
 - b. all 3-hour blocks of time during which the average combustion temperature within the RTO, when the emissions unit was in operation, fell below the



average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

- (5) All quarterly reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.
- (6) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District Office or local air agency as are required pursuant to 40 CFR Part 63, Subpart JJJJ, per the following sections:

Subpart JJJJ section	Subpart JJJJ requirement
63.3400(a)	Requirement to submit reports
63.3400(b)	Requirement to submit initial notification
63.3400(c)	Requirement to submit semi-annual compliance reports
63.3400(d)	Requirement to submit a Notification of Performance Tests
63.3400(e)	Requirement to submit a Notification of Compliance Status
63.3400(f)	Requirement to submit performance test reports
63.3400(g)	Requirement to submit startup, shutdown, and malfunction reports

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 Limitations:

8.72 pounds of VOC per hour and 38.19 tons of VOC per year from adhesive application operations associated with emissions unit P030

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying the maximum hourly rating, which was derived by dividing the maximum annual rate of 252,039 gallons coating used by 8,760 hour/year, by an emission factor of 7.58 lbs VOC/gallon coating multiplied by a capture efficiency of 100% and a control efficiency of 96%. If required, the permittee shall



demonstrate compliance with the pound per hour limitation through stack testing using Methods 1-4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

The tons per year limitation was developed by multiplying the pounds per hour limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

b. Emission Limitations:

3.24 pounds of VOC per hour and 14.19 tons of VOC per year from adhesive application operations associated with emissions unit P031

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying the maximum hourly rating, which was derived by dividing the maximum annual rate of 113,918 gallons coating used by 8,760 hour/year, by an emission factor of 6.24lbs VOC/gallon coating multiplied by a capture efficiency of 100% and a control efficiency of 96%. If required, the permittee shall demonstrate compliance with the pound per hour limitation through stack testing using Methods 1-4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

The tons per year limitation was developed by multiplying the pounds per hour limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

c. Emission Limitations:

0.09 pound of VOC per hour and 0.39 ton of VOC per year from cleanup materials from P030

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying the maximum hourly rating, which was derived by dividing the maximum annual rate of 2,920 gallons cleanup used by 8,760 hour/year, by an emission factor of 6.70 lbs VOC/gallon cleanup multiplied by a capture efficiency of 100% and a control efficiency of 96%. If required, the permittee shall demonstrate compliance with the pound per hour limitation through stack testing using Methods 1-4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual limitation shall also be demonstrated.



d. Emission Limitations:

0.26 pound of VOC per hour and 1.14 tons of VOC per year from cleanup materials from P031.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying the maximum hourly rating, which was derived by dividing the maximum annual rate of 8,575 gallons cleanup/thinners used by 8,760 hour/year, by an emission factor of 6.70 lbs VOC/gallon cleanup/thinner multiplied by a capture efficiency of 100% and a control efficiency of 96%. If required, the permittee shall demonstrate compliance with the pound per hour limitation through stack testing using Methods 1-4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual limitation shall also be demonstrated.

e. Emission Limitations:

0.54 lb of NO_x per hour and 2.37 tons of NO_x per year from combustion emissions from the RTO serving emissions units P030, P031, K003, and K004 combined

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 100 pounds of NO_x per million standard cubic foot (scf) by 5.4 million Btu per hour and a conversion factor of 1 scf/1000 Btu. If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation by testing in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with hourly emission limitation, compliance with the annual limitation shall also be demonstrated.

f. Emission Limitations:

0.45 lb of CO per hour and 1.99 tons of CO per year from combustion emissions from the RTO serving emissions units P030, P031, K003, and K004 combined

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 84 pounds of CO per million



standard cubic foot (scf) by 5.4 million Btu per hour and a conversion factor of 1 scf/1,000 Btu. If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation by testing in accordance with Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with hourly emission limitation, compliance with the annual limitation shall also be demonstrated.

g. Emission Limitations:

0.003 lb of SO₂ per hour and 0.01 ton of SO₂ per year from combustion emissions from the RTO serving emissions units P030, P031, K003, and K004 combined

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 0.6 pounds of SO₂ per million standard cubic foot (scf) by 5.4 million Btu per hour and a conversion factor of 1 scf/1,000 Btu. If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation by testing in accordance with Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with hourly emission limitation, compliance with the annual limitation shall also be demonstrated.

h. Emission Limitations:

0.04 lb of PM₁₀ per hour and 0.18 ton of PM₁₀ per year from combustion emissions from the RTO serving emissions units P030, P031, K003, and K004 combined

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 7.6 pounds of PE per million standard cubic foot (scf) by 5.4 million Btu per hour and a conversion factor of 1 scf/1,000 Btu. If required, the permittee shall demonstrate compliance with the pound per hour emission limitation by testing in accordance with Methods 1 through 4 and 40 CFR, Part 60, Appendix A and Methods 201, 201A and 202 of 40 CFR, Part 51, Appendix M.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with hourly emission limitation, compliance with the annual limitation shall also be demonstrated.



i. Emission Limitations:

0.05 lb of VOC per hour and 0.22 ton of VOC per year from combustion emissions from the RTO serving emissions units P030, P031, K003, and K004 combined

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 8.7 pounds of VOC per million standard cubic foot (scf) by 5.4 million Btu per hour and a conversion factor of 1 scf/1,000 Btu. If required, the permittee shall demonstrate compliance with the pound per hour limitation through stack testing using Methods 1-4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with hourly emission limitation, compliance with the annual limitation shall also be demonstrated.

j. Emission Limitation:

Organic hazardous air pollutant (HAP) emissions shall be limited to no more than 5 percent of the organic HAP applied for each month (95 percent reduction) for each month at new affected sources; or

Organic HAP emissions are limited to no more than 4% of coating applied for each month; or

Organic HAP emissions are limited to no more than 20% of solids applied for each month.

Outlet organic HAP concentration of no greater than 20 parts by million by volume (ppmv) by compound on a dry basis and the efficiency of the capture system is 100 percent.

Applicable Compliance Method:

Compliance was demonstrated based on results obtained from stack testing of this source on February 28, 2013 and the monitoring and recordkeeping requirements in section d)(9).

- (3) The permittee shall comply with the applicable compliance procedures and performance test methods as required under 40 CFR, 63 Subpart JJJJ, including the following sections:

Subpart JJJJ section	Subpart JJJJ requirement
63.3360(e)	Establishing control device efficiency



Subpart JJJJ section	Subpart JJJJ requirement
63.3360(f)	Establishing capture efficiency
63.3370(a)(4)	Summary of methods to demonstrate compliance using capture system and control device
63.3370(e), and (k)	Methodology to determine compliance with 63.3320(b)(1) using an oxidizer as described in (k)
63.3370(f) and (k)	Methodology to determine compliance with 63.3320(b)(3) using an oxidizer as described in (k)
63.3370(g) and (k)	Methodology to determine compliance with 63.3320(b)(2) using an oxidizer as described in (k)
63.3370(h) and (k)	Methodology to determine compliance with monthly organic HAP emission rate using an oxidizer as described in (k)

- g) Miscellaneous Requirements
 - (1) None.



3. Emissions Unit Group - Rotogravure Printers: K003 and K004

EU ID	Operations, Property and/or Equipment Description
K003	Printer No. 3
K004	Printer No. 5

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
- (1) None.
- 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.	ORC 3704.03(T)	See b)(2)a.
b.	OAC rule 3745-31-05(D)	<u>For emissions unit K003:</u> 7.59 lbs of volatile organic compounds (VOC) per hour and 33.24 tons of VOC per year for ink application 2.04 pounds of VOC per hour and 8.94 tons of VOC per year from cleanup materials <u>For emissions unit K004:</u> 5.59 lbs of volatile organic compounds (VOC) per hour and 24.48 tons of VOC per year for coating and cleanup materials 1.17 pounds of VOC per hour and 5.12 tons of VOC per year from cleanup materials See b)(2)b. and c)(1).
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<u>Combustion of natural gas from RTO from emissions units P030, P031, K003, and K004 combined:</u>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.54 lb of nitrogen oxides (NOx) per hour and 2.37 tons of NOx per year 0.45 lb of carbon monoxide (CO) per hour and 1.99 tons of CO per year 0.003 lb of sulfur dioxide (SO2) per hour and 0.01 ton of SO2 per year 0.04 lb of particulate matter less than ten microns in size (PM10) and 0.18 ton of PM10 per year 0.05lb of VOC per hour and 0.22 ton of VOC per year Visible particulate emissions from the stack serving the RTO shall not exceed 0 percent opacity, as a six-minute average See b)(2)c.
d.	OAC rule 3745-31-05(A)(3), as effective 12/1/06	See b)(2)d.
e.	OAC rule 3745-21-09(H)	See b)(2)e.
f.	OAC rule 3745-17-11(B)	See b)(2)f.
g.	OAC rule 3745-17-07(A)	See b)(2)f.
h.	40 CFR Part 60 Subpart FFF	See b)(2)e.
i.	40 CFR, Part 63, Subpart JJJJ [40 CFR 63.3280-3420] [In accordance with 40 CFR, 63.3300, these emissions units are web coating lines subject to the emission limitation/control measures specified in Subpart JJJJ.]	Comply with one of the following limits: Organic hazardous air pollutant (HAP) emissions shall be limited to no more than 5 percent of the organic HAP applied for each month (95 percent reduction) at existing affected sources; or Organic HAP emissions shall be limited to no more than 4% of coatings applied for the month; or Organic HAP emissions shall be limited to no more than 20% of solids applied for the month; or Operate the oxidizer such that an outlet organic HAP concentration of no greater than 20 parts per million by volume (ppmv) by compound on a dry basis is



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		achieved and the efficiency of the capture system is 100 percent.
j.	40 CFR 63.1-15 [40 CFR 63.3340]	Table 2 to Subpart JJJJ of Part 63 - Applicability of 40 CFR Part 63 General Provisions to Subpart JJJJ shows which parts of the General Provisions in sections 63.1 - 63.15 of 40 CFR Part 63, Subpart A apply.

(2) Additional Terms and Conditions

- a. The “Best Available Technology” (BAT) requirements for VOC emissions under ORC 3704.03(T) have been determined to be the compliance with 40 CFR, Part 63, Subpart JJJJ.
- b. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Prevention of Significant Deterioration (PSD) requirements. The federally enforceable emission limitations are based on the operational restrictions contained in c)(1):
 - i. 7.59 pounds of VOC/hr and 33.24 tons of VOC/yr for coating from emissions unit K003;
 - ii. 2.04 pounds of VOC/hr and 8.94 tons of VOC/yr for cleanup materials from emissions unit K003;
 - iii. 5.59 pounds of VOC/hr and 24.48 tons of VOC/yr for coating from emissions unit K004; and
 - iv. 1.17 pounds of VOC/hr and 5.12 tons of VOC/yr for cleanup materials from emissions unit K004.
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective 12-1-06 will no longer apply.
- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of the OAC rule 3745-31-05 as part of the State Implementation Plan.



The BAT requirements under OAC rule 3745-31-05(A)(3)(a), effective December 1, 2006 do not apply to the emissions of CO, NO_x, SO₂, or PM₁₀ from the combustion of natural gas since the potential to emit for CO, NO_x, SO₂, and PM₁₀ is less than 10 tons per year.

- e. The requirements of this rule are less stringent than the requirements in 40 CFR, Part 63, Subpart JJJJ for Paper and other Web Coating.
- f. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing federally enforceable requirements which limit potential to emit [See b)(2)b.):

a. For VOC emissions, this emissions unit shall be vented to a RTO which achieves an overall capture efficiency of 100% and a 96% destruction efficiency.

(2) All of the VOC emissions from these emissions units shall be vented to the regenerative thermal oxidizer (RTO) that shall meet the operational, monitoring, and record keeping requirements of this permit, when one or more of the emissions units are in operation.

(3) The permanent total enclosure shall be constructed to totally enclose the emissions unit such that all volatile organic compound emissions are captured, contained, and directed to the control device.

(4) The permanent total enclosure shall be maintained under negative pressure whenever the emissions unit is in operation, and shall be designed and maintained to have an average facial velocity of air through each natural draft opening of at least 200 feet per minute (3,600 m/hr). Compliance with the average facial velocity shall be demonstrated during the compliance test, by either using an air flow monitor or a differential pressure gauge at each natural draft opening, and maintaining the required facial velocity or the corresponding negative pressure. The permanent total enclosure shall meet all of the following criteria if the capture efficiency of the enclosure and control device is to be assumed to be 100%:

a. Any natural draft opening shall be at least four equivalent opening diameters, or 4 times the diameter of the opening, from each VOC emitting point. An equivalent diameter is the diameter of a circle that has the same area as the opening. If the opening is not circular the equivalent diameter (ED) is calculated as follows:

$$ED = (4 \text{ area}/\pi)^{0.5}$$

b. The total area of all natural draft openings (A_N) shall not exceed 5 percent of the total surface area of the enclosure (A_T), i.e., the four walls, floor, and ceiling. The natural draft opening to enclosure area ratio (NEAR) is calculated as follows:



$NEAR = A_N / A_T$

- c. The direction of air flow through all natural draft openings shall be into the enclosure, with an average facial velocity of no less than 200 feet per minute (3,600 m/hr) or a pressure drop of 0.013 mm Hg (0.007 in. H₂O).
 - d. All access doors and windows to the enclosure that do not meet the requirements of a natural draft opening and whose surface areas are not included in the 5 percent surface area determination in c)(4)b., shall be completely closed to any air movement during process operations.
 - e. All VOC emissions shall be captured and contained for discharge through the control device.
- (5) The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.013 mm Hg (0.007 inch of water), whenever the emissions unit is in operation.
- (6) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart JJJJ, including the following sections:

Subpart JJJJ section	Subpart JJJJ requirement
63.3321(a)	Requirement to meet operating limits at all times after they are established

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the RTO, for any 3-hour block of time when the emissions units controlled by the RTO are in operation, must not fall below 1635 degrees Fahrenheit or below the combustion temperature limit established according to section 63.3360(e)(3)(i) of 40 CFR Part 63, Subpart JJJJ.
- (2) The permittee shall properly install, operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the RTO when the emissions unit is in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee and prior approval by the Northwest District Office. The permittee shall collect and record the following information for each day the emissions units are in operation:
 - a. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit; and



- b. all 3-hour blocks of time during which the average combustion temperature within the RTO, when the emissions unit was in operation, fell below 1635 degrees Fahrenheit or fell below the combustion temperature limit established according to section 63.3360(e)(3)(i) of 40 CFR Part 63, Subpart JJJJ.
- (3) Whenever the monitored average combustion temperature within the RTO deviates from the range/limit specified in 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 Northwest District Office. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate for the controlled emissions unit(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.

- (4) The permittee shall measure, document/calculate, and maintain a permanent record of the following information for the permanent total enclosure, which may be the same record documented during the compliance test(s):
 - a. the measured diameter of each natural draft opening;
 - b. the distance measured from each natural draft opening to each VOC emitting point;
 - c. the total calculated surface area of all natural draft openings and the surface area of the enclosure’s four walls, floor, and ceiling;
 - d. the calculation or demonstration that the distance from each VOC emitting point to each natural draft opening is at least 4 times the diameter of the opening; and
 - e. the calculation demonstrating that the sum of the surface areas of all of the natural draft openings to the enclosure is not more than 5 percent of the sum of the surface areas of the enclosure’s four walls, floor, and ceiling.
- (5) The permittee shall maintain and operate monitoring devices and a recorder which continuously and simultaneously measure and record the pressure inside and outside the permanent total enclosure. The monitoring and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
- (6) The permittee shall record and maintain on a daily basis the difference in pressure between the permanent total enclosure and the surrounding area(s) throughout the day.
- (7) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart JJJJ, including the following sections:

Subpart JJJJ section	Subpart JJJJ requirement
63.3350(a)	Summary of monitoring required
63.3350(b)	Requirement to install and operate monitoring equipment
63.3350(e)	Requirements for continuous parameter monitoring system (CPMS)
63.3350(f)	Requirements for capture system monitoring
63.3410(a)	Recordkeeping requirements



e) Reporting Requirements

- (1) The permittee shall submit quarterly summaries of the following records:
 - a. a log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;
 - b. any records of downtime (date and length of time) for the capture (collection) system, the control device, and/or the monitoring equipment when the emissions units were in operation;
 - c. all 3-hour blocks of time (when the emissions units were in operation) during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inches of water;
 - d. all 3-hour blocks of time (when the emissions units were in operation) during which the average combustion temperature within the RTO, when the emissions unit was in operation, fell below 1635 degrees Fahrenheit or fell below the combustion temperature limit established according to section 63.3360(e)(3)(i) of 40 CFR Part 63, Subpart JJJJ;
 - e. an identification of each incident of deviation described in e)(1)b. (above) where a prompt investigation was not conducted;
 - f. an identification of each incident of deviation described in e)(1)b. where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - g. an identification of each incident of deviation described in e)(1)b. where proper records were not maintained for the investigation and/or the corrective action(s).

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

- (2) The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions units were in operation and the VOC emissions were not vented to the RTO. Each report shall be submitted within 30 days after the deviation occurs.
- (3) The permittee shall submit quarterly summaries that include a log of the downtime for the capture (collection) system, control device, monitoring equipment, when the associated emissions unit was in operation.
- (4) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all periods of time during which the permanent total enclosure was not maintained at the required differential pressure specified in section c)(4) of the terms and conditions of this permit; and
 - b. all 3-hour blocks of time during which the average combustion temperature within the RTO, when the emissions unit was in operation, fell below the



average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

- (5) All quarterly reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.
- (6) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District Office or local air agency as are required pursuant to 40 CFR Part 63, Subpart JJJJ, per the following sections:

Subpart JJJJ section	Subpart JJJJ requirement
63.3400(a)	Requirement to submit reports
63.3400(b)	Requirement to submit initial notification
63.3400(c)	Requirement to submit semi-annual compliance reports
63.3400(d)	Requirement to submit a Notification of Performance Tests
63.3400(e)	Requirement to submit a Notification of Compliance Status
63.3400(f)	Requirement to submit performance test reports
63.3400(g)	Requirement to submit startup, shutdown, and malfunction reports

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 Limitations:

7.59 pounds of VOC per hour and 33.24 tons of VOC per year from ink application operations associated with emissions unit K003

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying the maximum hourly rating, which was derived by dividing the maximum annual rate of 230,026 gallons coating used by 8,760 hour/year, by an emission factor of 7.23 lbs VOC/gallon coating multiplied by a capture efficiency of 100% and a control efficiency of 96%. If required, the permittee shall



demonstrate compliance with the pound per hour limitation through stack testing using Methods 1-4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

The tons per year limitation was developed by multiplying the pounds per hour limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

b. Emission Limitations:

5.59 pounds of VOC per hour and 24.48 tons of VOC per year from ink application operations associated with emissions unit K004

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying the maximum hourly rating, which was derived by dividing the maximum annual rate of 174,279 gallons coating used by 8,760 hour/year, by an emission factor of 7.02 lbs VOC/gallon coating multiplied by a capture efficiency of 100% and a control efficiency of 96%. If required, the permittee shall demonstrate compliance with the pound per hour limitation through stack testing using Methods 1-4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

The tons per year limitation was developed by multiplying the pounds per hour limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

c. Emission Limitations:

2.04 pounds of VOC per hour and 8.94 tons of VOC per year from cleanup materials from K003

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying the maximum hourly rating, which was derived by dividing the maximum annual rate of 6,623 gallons cleanup/thinner used by 8,760 hour/year, by an emission factor of 6.70 lbs VOC/gallon cleanup multiplied by a capture efficiency of 100% and a control efficiency of 96%. If required, the permittee shall demonstrate compliance with the pound per hour limitation through stack testing using Methods 1-4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual limitation shall also be demonstrated.



d. Emission Limitations:

1.17 pounds of VOC per hour and 5.12 tons of VOC per year from cleanup materials from K004.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by multiplying the maximum hourly rating, which was derived by dividing the maximum annual rate of 38,195 gallons cleanup/thinners used by 8,760 hour/year, by an emission factor of 6.70 lbs VOC/gallon cleanup/thinner multiplied by a capture efficiency of 100% and a control efficiency of 96%. If required, the permittee shall demonstrate compliance with the pound per hour limitation through stack testing using Methods 1-4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual limitation shall also be demonstrated.

e. Emission Limitation:

Organic hazardous air pollutant (HAP) emissions shall be limited to no more than 5 percent of the organic HAP applied for each month (95 percent reduction) at existing affected sources; or

Organic HAP emissions shall be limited to no more than 4% of coatings applied for the month; or

Organic HAP emissions shall be limited to no more than 20% of solids applied for the month; or

Operate the oxidizer such that an outlet organic HAP concentration of no greater than 20 parts per million by volume (ppmv) by compound on a dry basis is achieved and the efficiency of the capture system is 100 percent.

Applicable Compliance Method:

Compliance was demonstrated based on results obtained from stack testing of this source on February 28, 2013 and the monitoring and recordkeeping requirements in section d)(9).

f. Emission Limitations:

0.54 lb of NO_x per hour and 2.37 tons of NO_x per year from combustion emissions from the RTO serving emission units P030, P031, K003, and K004 combined



Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 100 pounds of NO_x per million standard cubic foot (scf) by 5.4 million Btu per hour and a conversion factor of 1 scf/1,000 Btu. If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation by testing in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with hourly emission limitation, compliance with the annual limitation shall also be demonstrated.

g. Emission Limitations:

0.45 lb of CO per hour and 1.99 tons of CO per year from combustion emissions from the RTO serving emission units P030, P031, K003, and K004 combined

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 84 pounds of CO per million standard cubic foot (scf) by 5.4 million Btu per hour and a conversion factor of 1 scf/1,000 Btu. If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation by testing in accordance with Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with hourly emission limitation, compliance with the annual limitation shall also be demonstrated.

h. Emission Limitations:

0.003 lb of SO₂ per hour and 0.01 ton of SO₂ per year from combustion emissions from the RTO serving emissions units P030, P031, K003, and K004 combined

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 0.6 pounds of SO₂ per million standard cubic foot (scf) by 5.4 million Btu per hour and a conversion factor of 1 scf/1,000 Btu. If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation by testing in accordance with Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000



lbs/ton. Therefore, provided compliance is shown with hourly emission limitation, compliance with the annual limitation shall also be demonstrated.

i. Emission Limitations:

0.04 lb of PM10 per hour and 0.18 ton of PM10 per year from combustion emissions from the RTO serving emission units P030, P031, K003 and K004 combined

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 7.6 pounds of PE per million standard cubic foot (scf) by 5.4 million Btu per hour and a conversion factor of 1 scf/1,000 Btu. If required, the permittee shall demonstrate compliance with the pound per hour emission limitation by testing in accordance with Methods 1 through 4 and 40 CFR, Part 60, Appendix A and Methods 201, 201A and 202 of 40 CFR, Part 51, Appendix M.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with hourly emission limitation, compliance with the annual limitation shall also be demonstrated.

j. Emission Limitations:

0.05 lb of VOC per hour and 0.22 ton of VOC per year from combustion emissions from the RTO serving emission units P030, P031, K003 and K004 combined

Applicable Compliance Method:

Compliance with the hourly limitation shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 8.7 pounds of VOC per million standard cubic foot (scf) by 5.4 million Btu per hour and a conversion factor of 1 scf/1,000 Btu. If required, the permittee shall demonstrate compliance with the pound per hour limitation through stack testing using Methods 1-4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

The annual limitation was developed by multiplying the lbs/hr emission limitation by a maximum annual operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with hourly emission limitation, compliance with the annual limitation shall also be demonstrated.

- (2) The permittee shall comply with the applicable compliance procedures and performance test methods as required under 40 CFR, 63 Subpart JJJJ, including the following sections:



Subpart JJJJ section	Subpart JJJJ requirement
63.3360(e)	Establishing control device efficiency
63.3360(f)	Establishing capture efficiency
63.3370(a)(4)	Summary of methods to demonstrate compliance using capture system and control device
63.3370(e), and (k)	Methodology to determine compliance with 63.3320(b)(1) using an oxidizer as described in (k)
63.3370(f) and (k)	Methodology to determine compliance with 63.3320(b)(3) using an oxidizer as described in (k)
63.3370(g) and (k)	Methodology to determine compliance with 63.3320(b)(2) using an oxidizer as described in (k)
63.3370(h) and (k)	Methodology to determine compliance with monthly organic HAP emission rate using an oxidizer as described in (k)

g) Miscellaneous Requirements

(1) None.