State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.ohio.gov

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

12/11/2009

Pamela Blakley *Via E-Mail Notification*
United States Environmental Protection Agency
Mail Code: AR-18J
77 West Jackson Blvd.
Chicago, IL 60604-3507

RE: PROPOSED AIR POLLUTION TITLE V PERMIT
Facility Name: Okamoto Sandusky Manufacturing LLC
Facility ID: 0322020019
Permit Type: Renewal
Permit Number: P0105022

Dear Ms. Blakley:

A proposed OAC Chapter 3745-77 Title V permit for the referenced facility has been issued for review by U.S. EPA. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page http://www.epa.ohio.gov/dapc in Microsoft Word and Adobe Acrobat format. If U.S. EPA does not object to this proposed permit, the permit will be processed for issuance as a final action not less than 45 days from the date of this letter. Please contact me at (614) 644-3631 by the end of the 45 day review period if you wish to object to the proposed permit.

Sincerely,

Michael W. Ahern

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

Cc: Ohio EPA DAPC, Northwest District Office

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

PROPOSED

Air Pollution Title V Permit
for
Okamoto Sandusky Manufacturing LLC

Facility ID: 0322020019
Permit Number: P0105022
Permit Type: Renewal
Issued: 12/11/2009
Effective: To be entered upon final issuance
Expiration: To be entered upon final issuance

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Title V Permit
for
Okamoto Sandusky Manufacturing LLC

Table of Contents

Authorization 1
A. Standard Terms and Conditions 2
1. Federally Enforceable Standard Terms and Conditions 3
2. Monitoring and Related Record Keeping and Reporting Requirements 3
3. Scheduled Maintenance 6
4. Risk Management Plans 6
5. Title IV Provisions 6
6. Severability Clause 7
7. General Requirements 7
8. Fees 8
9. Marketable Permit Programs 8
10. Reasonably Anticipated Operating Scenarios 8
11. Reopening for Cause 8
12. Federal and State Enforceability 9
13. Compliance Requirements 9
14. Permit Shield 10
15. Operational Flexibility 10
16. Emergencies 11
17. Off-Permit Changes 11
18. Compliance Method Requirements 12
19. Insignificant Activities or Emissions Levels 12
20. Permit to Install Requirement 12
21. Air Pollution Nuisance 12
22. Permanent Shutdown of an Emissions Unit 12
23. Title VI Provisions 13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only 13
25. Records Retention Requirements Under State Law Only 13
26. Inspections and Information Requests 13
27. Scheduled Maintenance/Malfunction Reporting 14
28. Permit Transfers 14

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 14

B. Facility-Wide Terms and Conditions 15

C. Emissions Unit Terms and Conditions 18

1. P010, Ink Mixing 19
2. P028, Calendering Line 20
3. P029, Expansion Line 24
4. Emissions Unit Group - Laminator/Embosser: P030, P031 30
5. Emissions Unit Group - Rotogravure Printers (2, 3, & 4): K002, K003, K004, ... 43

Authorization

Facility ID: 0322020019
Facility Description: The company produces vinyl products for the automotive industry.
Application Number(s): A0017833, A0017834, A0037694
Permit Number: P0105022
Permit Description: The company produces vinyl products for the automotive industry. This permit is a renewal, however there are many changes from the original Title V due to the changes made by the new owners, Okamoto Sandusky Manufacturing LLC.
Permit Type: Renewal
Issue Date: 12/11/2009
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Superseded Permit Number:

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

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

Ohio 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 Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Northwest District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

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. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions

(2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting

(4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
(Authority for term: ORC 3704.036(A))

2. 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 (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), 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.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

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 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.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c) The permittee shall submit required reports in the following manner:

(1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

(4) 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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

(5) Reports of any required monitoring and/or record keeping information shall be submitted to Ohio EPA DAPC, Northwest District Office.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

4. Risk Management Plans

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

5. 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.
(Authority for term: OAC rule 3745-77-07(A)(5))

6. Severability Clause

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.
(Authority for term: OAC rule 3745-77-07(A)(6))

7. 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 reissuance, or modification, or for denial of a permit renewal application.

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, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. 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, reopening 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.

f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

(1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

(2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

(3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminent sources once this permit ceases to be enforceable. The permittee

shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.
(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. 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.
(Authority for term: OAC rule 3745-77-07(A)(8))

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.
(Authority for term: OAC rule 3745-77-07(A)(9))

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.
(Authority for term: OAC rule 3745-77-07(A)(10))

11. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that 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, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

(Authority for term: OAC rule 3745-77-07(B))

13. Compliance Requirements

a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V 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.

b) 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 paragraph (E) of OAC rule 3745-77-03.

(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.

c) The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency 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.

d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the

Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

(1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.

(2) Compliance certifications shall include the following:

(a) An identification of each term or condition of this permit that is the basis of the certification.

(b) The permittee's current compliance status.

(c) Whether compliance was continuous or intermittent.

(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.

(e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

(3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

14. Permit Shield

a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as

soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).
(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.
(Authority for term: OAC rule 3745-77-07(G))

17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.
(Authority for term: OAC rule 3745-77-07(I))

18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.
(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.
(Authority for term: OAC rule 3745-77-07(A)(1))

20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.
(Authority for term: OAC rule 3745-77-07(A)(1))

21. 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.
(Authority for term: OAC rule 3745-77-07(A)(1))

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible 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 responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that 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 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.
(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11))

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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.)

25. Records Retention Requirements Under State Law Only

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.

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports

pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.
(Authority for term: OAC rule 3745-77-07(C))

27. 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 of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of 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 emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.
(Authority for term: OAC rule 3745-77-01(C))

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or

b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or

c) where the company's responsible official has certified that an emissions unit has been permanently shut down.

B. Facility-Wide Terms and Conditions

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) 4.

2. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart JJJJ, National Emission Standards for Paper and Other Web Coating: K002, K003, K004, P030, and P031. The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart JJJJ. The permittee shall also comply with all applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 2 of 40 CFR Part 63, Subpart JJJJ. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63, Subpart JJJJ and Subpart A.

   All the requirements of 40 CFR Part 63, Subpart JJJJ have been established in the Title V permit for this facility, which will encompass these emissions units upon reissuance. The applicable sections of 40 CFR Part 63, Subpart JJJJ have been cited in the appropriate sections for the non-insignificant emissions units (K002, K003, K004, P030, and P031) subject to this rule The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA District office or local air agency.

3. The following insignificant emissions units located at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within the identified permit-to-install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirement contained in a permit-to-install, or in the SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.

   a) B002 – two 8.0 mmBtu/hr natural gas-fired hydrotherm oil heaters;

   b) B003 – nineteen air make-up units with individual capacities of less than 10 mmBtu/hr each and total capacity of 52.11 mmBtu/hr;

   c) B010 – 6.8 mmBtu/hr natural gas fired boiler (Bryan Boiler #1) replacing B006;

   d) B011 – 6.8 mmBtu/hr natural gas fired boiler (Bryan Boiler #2) replacing B007;

   e) L001 – maintenance cold solvent parts washer (formerly Z007);

   f) L002 – tooling area cold solvent parts washer #1 (formerly Z008); and

   g) L003 – tooling area cold solvent parts washer #2 (formerly Z009).

   Emissions units B002, B003, B010, and B011 are also subject to a case-by-case MACT determination pursuant to section 112(j) of the Clean Air Act (CAA) due to the June 8, 2007 D.C.Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD).

   If notified by the Ohio EPA or U.S.EPA, the permittee shall submit an application for a revision to this Title V permit that meets the requirements of 40 CFR 63.52(a)(2) pertaining to case-by-case MACT determinations. The 30-day clock for submittal of a 112(j) application does not begin until such notification is made by Ohio EPA or U.S.EPA.

4. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the “de minimis” criteria established in OAC rule 3745-15-05:

a) P003 – embosser #3 (formerly laminator #3);

b) P013 – R & D lab vinyl sheeting calendar;

c) P032 – embosser #4 (formerly Z023);

C. Emissions Unit Terms and Conditions

1. P010, Ink Mixing

Operations, Property and/or Equipment Description:

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 3745-21-07(G)	See b)(2)a.

(2) Additional Terms and Conditions

a. This facility is located in Erie County, which is not considered a “Priority I” county as defined in OAC rule 3745-21-06 and is not a “new source”. Therefore, this emissions unit is not subject to the requirements of OAC rule 3745-21-07.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

2. P028, Calendering Line

Operations, Property and/or Equipment Description:

Calendering Line – dry materials handling and blending operations, and heated rolling and calendaring operations

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(A)(3)(a) (PTI #P0105610, issued 12-03-2009)	0.009 grains particulate matter 10 microns or less (PM10) per dry standard cubic foot (dscf) and 0.79 tons PM10 per year, from Banbury mixing operations Visible particulate emissions (PE) shall not exceed 0% opacity, as a 6-minute average, from Banbury mixing operations. 3.92 pounds of particulate matter 10 microns or less (PM10) per hour and 17.17 tons of PM10 per year from the heated rolling and calendering operations 3.92 pounds of volatile organic compounds (VOC) per hour and 17.17 tons of VOC per year from the Banbury mixing operations, and the heated rolling and calendering operations Visible PE shall not exceed 10% opacity, as a 6-minute average from the heated rolling and calendering operations See b)(2)a., b)(2)b. and b)(2)c.
b.	OAC rule 3745-17-11(B)	See b)(2)d.
c.	OAC rule 3745-17-07(A)	See b)(2)e.

(2) Additional Terms and Conditions

a. Permit to Install P0105610 for this air contaminant source has taken into account the following control equipment as proposed by the permittee for the purpose of complying with Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. use of a mist eliminator followed by a two-stage fabric filter, to control PE from the Banbury mixing operations.

b. The mist eliminator followed by a two-stage fabric filter vents inside the building serving the Banbury mixing operations. Therefore, the visible PE limit of 0 % opacity as a 6-minute average shall apply to emissions from the building egress points associated with the Banbury mixing operations.

c. All emissions of particulate matter are considered to be PM10.

d. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)(a).

e. The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3)(a).

c) Operational Restrictions

(1) None.

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 stacks serving the heated rolling and calendering operations. 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.

[OAC rule 3745-77-07(C)(1) and PTI #P0105610]

(2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions associated with the Banbury mixing operation and from the building serving the Banbury mixing operation. 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 location and color of the emissions;

b. the total duration of any visible emissions incident; and

c. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and PTI #P0105610]

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stacks serving the heated rolling and calendering operations, and/or emissions associated with the Banbury mixing operations from the building serving this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[OAC rule 3745-77-07(C)(1) and PTI #P0105610]

f) Testing Requirements

(1) Compliance with the emission limitations in sections b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.009 grains particulate matter 10 microns or less (PM10) per dry standard cubic foot (dscf) and 0.79 tons PM10 per year, from Banbury mixing operations

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the grain loading by emissions testing in accordance with Methods 1 through 4, 201/201A, and 202, of 40 CFR Part 60, Appendix A. Alternative U.S.EPA approved test methods may be used with prior approval from the Ohio EPA Northwest District Office.

The annual limitation was developed by multiplying the grain loading of 0.009 gr/dscf by a maximum air flow of 2,300 cfm and 60 minutes/hour, and dividing by 7000 gr/pound, and by multiplying by a maximum operating schedule of 8760 hours/year and dividing by a conversion factor of 2000 pounds/ton.

[OAC rule 3745-77-07(C)(1) and PTI #P0105610]

b. Emission Limitation:

Visible PE shall not exceed 0% opacity, as a 6-minute average, from Banbury mixing operations.

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with test Method 9 as set forth in “Appendix on Test Methods” in 40 CFR Part 60 (“Standards of Performance for New Stationary Sources”).

[OAC rule 3745-77-07(C)(1) and PTI #P0105610]

c. Emission Limitation:

3.92 pounds PM10 per hour and 17.17 tons PM10 per year from the heated rolling and calendering operations.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the facility emission factor of 0.005 pounds of PE per pound of plasticizer with 783.89 pounds of plasticizer processed per hour.

The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI #P0105610]

d. Emission Limitation:

3.92 pounds of VOC per hour and 17.17 tons of VOC per year from the Banbury mixing operations and the heated rolling and calendering operations.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the facility emission factor of 0.005 pounds of VOC per pound of plasticizer with 783.89 pounds of plasticizer processed per hour.

The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI #P0105610]

e. Emission Limitation:

Visible PE shall not exceed 10% opacity, as a 6-minute average from heated rolling and calendering operations.

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with test Method 9 as set forth in “Appendix on Test Methods” in 40 CFR Part 60 (“Standards of Performance for New Stationary Sources”).

[OAC rule 3745-77-07(C)(1) and PTI #P0105610]

g) Miscellaneous Requirements

(1) None.

3. 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(A)(3) (PTI # P0105207, issued 07-27-09)	<u>Plastic film heating</u>: 0.97 pounds of volatile organic compounds (VOC) per hour and 4.26 tons of VOC per year 0.97 pounds of particulate emissions (PE) per hour and 4.26 tons of PE per year Visible particulate emissions from the stack serving this emissions unit shall not exceed 10 percent opacity, as a six-minute average. See b)(2)a. and b)(2)b. <u>Combustion of natural gas</u>: 1.66 tons of nitrogen oxides (NOx) per year 1.39 tons of carbon monoxide (CO) per year 0.09 tons of VOC per year 0.13 tons of PE per year See b)(2)b.
b.	OAC rule 3745-21-09(H)	See b)(2)a.
c.	OAC rule 3745-17-11(B)	See b)(2)c.
d.	OAC rule 3745-17-07(A)	See b)(2)d.

(2) Additional Terms and Conditions

a. Permit to Install 03-17438 for this air contaminant source takes into account the following control equipment as proposed by the permittee for the purpose of complying with requirements under OAC rule 3745-21-09(H)(2):

i. use of a CVM Fume Eliminator that is designed to have a 100% capture efficiency and a 95% control efficiency of PE and VOC emissions from this emissions unit.

b. All PE is considered as particulate matter 10 microns in diameter or less (PM10).

c. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

d. The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) None.

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 stacks 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.

[OAC rule 3745-77-07(C)(1) and PTI P0105207]

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stacks serving this emissions unit, and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[OAC rule 3745-77-07(C)(1) and PTI P0105207]

f) Testing Requirements

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

a. The emission testing shall be conducted within 6 months after commencing operation of this emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the hourly emission rate of PE and VOC and the capture and control efficiency of the control equipment.

c. The following test method(s) shall be employed to demonstrate compliance with the emission limitations: for PE, Methods 1-5 of 40 CFR, Part 60, Appendix A, and for VOC, Methods 1-4, 18 and 25 or 25A of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR, Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

e. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

f. The testing shall be conducted while the emissions unit is operating at or near maximum loading conditions, unless otherwise specified or approved by the Northwest District Office.

g. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Northwest District Office's refusal to accept the results of the emission test(s).

h. Personnel from the Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

i. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Northwest District Office within 30 days following completion of the test(s). The

permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Northwest District Office.

[OAC rule 3745-77-07(C)(1) and PTI P0105207]

(2) Compliance with the emission limitations in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.97 pounds of PE per hour and 4.26 tons of PE per year from plastic film heating operations

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated based upon emission testing in accordance with the requirements specified in section f)(1).

The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI P0105207]

b. Emission Limitation:

0.97 pounds of VOC per hour and 4.26 tons of VOC per year from plastic film heating operations

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated based upon emission testing in accordance with the requirements specified in section f)(1).

The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI P0105207]

c. Emission Limitation:

1.66 tons of NO_x per year

Applicable Compliance Method:

Compliance 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)

with 3.78 million Btu per hour and conversion factors 1 scf/1000 Btu, 1 ton/2000 pounds and 8760 hrs/yr.

[OAC rule 3745-77-07(C)(1) and PTI P0105207]

d. Emission Limitation:

1.39 tons of CO per year

Applicable Compliance Method:

Compliance 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) with 3.78 million Btu per hour and conversion factors 1 scf/1000 Btu, 1 ton/2000 pounds and 8760 hrs/yr.

[OAC rule 3745-77-07(C)(1) and PTI P0105207]

e. Emission Limitation:

0.09 tons of VOC per year

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 5.5 pounds of VOC per million standard cubic foot (scf) with 3.78 million Btu per hour and conversion factors 1 scf/1000 Btu, 1 ton/2000 pounds and 8760 hrs/yr.

[OAC rule 3745-77-07(C)(1) and PTI P0105207]

f. Emission Limitation:

0.13 tons of PE per year

Applicable Compliance Method:

Compliance 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) with 3.78 million Btu per hour and conversion factors 1 scf/1000 Btu, 1 ton/2000 pounds and 8760 hrs/yr.

[OAC rule 3745-77-07(C)(1) and PTI P0105207]

g. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 10 percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources").

[OAC rule 3745-77-07(C)(1) and PTI P0105207]

g) Miscellaneous Requirements

(1) None.

4. Emissions Unit Group - Laminator/Embosser: P030, 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.	OAC rule 3745-31-05(A)(3)(a) (For P030, PTI #P0103967, issued 04-06-09; and for P031, PTI #P0105208, issued 07-27-09)	<u>For emissions unit P030</u>: 7.53 pounds of volatile organic compounds (VOC) per hour and 33.0 tons of VOC per year from adhesive application operations 3.10 pounds of xylene per hour and 13.59 tons of xylene per year from adhesive application operations 1.33 pounds of MIBK per you and 5.82 tons of MIBK per year from adhesive application operations 0.37 pounds of VOC per hour and 1.63 tons of VOC per year from cleanup materials 0.37 pounds of toluene per hour and 1.63 tons of toluene per year from cleanup materials <u>For emissions unit P031</u>: 2.02 pounds of VOC per hour and 8.87 tons of VOC per year from adhesive application operations 0.54 pounds of MIBK per you and 2.35 tons of MIBK per year from adhesive

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		application operations 0.37 pounds of VOC per hour and 1.63 tons of VOC per year from cleanup materials 0.37 pounds of toluene per hour and 1.63 tons of toluene per year from cleanup materials 0.67 pounds of VOC per hour and 2.93 tons of VOC per year from embossing with heat operations 0.67 pounds of PE per hour and 2.93 tons of PE per year from embossing with heat operations Visible particulate emissions from the stack serving this emissions unit shall not exceed 5 percent opacity, as a six-minute average. See b)(2)a.
b.	OAC rule 3745-21-09(H)	See b)(2)b.
c.	OAC rule 3745-17-11(B)	See b)(2)c.
d.	OAC rule 3745-17-07(A)	See b)(2)d.
e.	40 CFR, Part 60, Subpart FFF	See b)(2)b.
f.	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: 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 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. 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 Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	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 requirements of this rule also include compliance with the requirements of 40 CFR, Part 60, Subpart FFF and 40 CFR, Part 63, Subparts A and JJJJ.

b. The requirements of this rule are less stringent than the requirements in 40 CFR Part 63 Subpart JJJJ for Paper and other Web Coating.

c. The emission limitation specified by this rule which is applicable to emissions unit P031, is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

d. The visible emission limitation specified by this rule which is applicable to emissions unit P031, is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) All of the VOC emissions from emissions units K002, K003, K004, P030 and P031 shall be vented to the regenerative thermal oxidizer (RTO) when one or more of these emissions units are in operation.

[OAC rule 3745-77-07(A)(1) and PTI #P0103967]

(2) The coating line shall be equipped with a permanent total enclosure (PTE)* which shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204. The PTE shall meet the following criteria:

a. any "Natural Draft Opening" (NDO)* shall be at least 4 equivalent diameters from each VOC emission point;

b. the total area of all NDOs shall not exceed 5% of the surface area of the enclosure's four walls, floor and ceiling;

c. the average facial velocity (FV) of air through all NDOs shall be at least 3,600 m/hr (200 fpm) which corresponds to a pressure differential of 0.007 inch of water, and the direction of air through all NDOs shall be into the enclosure;

d. all access doors and windows whose areas are not included in paragraph (b) and are not included in the calculation in paragraph (c) shall be closed during routine operation; and

e. all VOC emissions must be captured and vented to the VOC control device.

By satisfying the above criteria for a permanent total enclosure, the VOC capture efficiency shall be assumed to be 100%.

* Definitions for PTE and NDO:

Permanent Total Enclosure (PTE) - a permanently installed enclosure that completely surrounds a source of emissions such that all VOC emissions are captured and contained for discharge through a control device.

Natural Draft Opening (NDO) - any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct to which a fan is installed.

[OAC rule 3745-77-07(A)(1) and PTI #P0103967]

(3) The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inch of water, as an hourly average (equivalent to at least 200 feet/minute airflow into the permanent total enclosure through all natural draft openings), whenever the emissions unit is in operation and all the VOCs are being vented to the RTO.

[OAC rule 3745-77-07(A)(1) and PTI #P0103967]

(4) 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

[OAC rule 3745-77-07(A)(1), PTI #P0103967, and 40 CFR Part 63, Subpart JJJJ]

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, in any 3-hour block of time when the emissions units controlled by the RTO are in operation, must not fall below 1525 degrees Fahrenheit or below the combustion temperature limit established according to section 63.3360(e)(3)(i) of 40 CFR Part 63, Subpart JJJJ.

[OAC rule 3745-77-07(C)(1), PTI # P0103967, and 40 CFR Part 63, Subpart JJJJ]

(2) The permittee shall 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. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any

modifications deemed necessary by the permittee and prior approval by the Northwest District Office.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(3) The permittee shall collect and record the following information for each day for the control equipment:

a. a log 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 1525 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.

See 40 CFR Part 63, Subpart JJJJ (40 CFR 63.3350(e)-(f) and 40 CFR 63.3410(a)).

[OAC rule 3745-77-07(C)(1), PTI #P0103967, and 40 CFR Part 63, Subpart JJJJ]

(4) 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.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(5) 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:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

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

e. the temperature readings immediately after the corrective action was implemented; and

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

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

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(6) 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.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(7) 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.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(8) 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.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(9) 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

[OAC rule 3745-77-07(C)(1), PTI # P0103967, and 40 CFR Part 63, Subpart JJJJ]

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. all 3-hour blocks of time during which the average combustion temperature within the RTO, when the emissions unit was in operation, fell below 1525 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;

c. an identification of each incident of deviation described in "b" (above) where a prompt investigation was not conducted;

d. an identification of each incident of deviation described in "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

e. an identification of each incident of deviation described in "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.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(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.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(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.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(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, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(5) All quarterly reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(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

[OAC rule 3745-77-07(C)(1), PTI # P0103967, and 40 CFR Part 63, Subpart JJJJ]

f) Testing Requirements

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

a. The emission testing shall be conducted within 6 months after commencing operation of this emissions unit, and every two and a half years thereafter, unless otherwise approved by Ohio EPA, NWDO.

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations, as well as mass emission limitations for VOC and HAP (P030 and P031) and PE (P031).

c. The following test method(s) shall be employed to demonstrate compliance with the emission limitations: Methods 1-4, 18 and 25 or 25A of 40 CFR Part 60, for P030 and P031, and Method 5, for P031. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

e. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10, 40 CFR Part 60 Subpart JJJJ or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

f. The testing shall be conducted while the emissions unit is operating at or near maximum VOC loading conditions, unless otherwise specified or approved by the Northwest District Office. The operating scenario may also require the permittee to test this emissions unit at normal VOC loading conditions to demonstrate worst-case loading conditions.

g. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Northwest District Office's refusal to accept the results of the emission test(s).

h. Personnel from the Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(2) Compliance with the emissions limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

7.53 pounds of volatile organic compounds (VOC) per hour and 33.00 tons of VOC per year from adhesive application operations associated with emissions unit P030; and 2.02 pounds of volatile organic compounds (VOC) per hour and 8.87 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 based upon emission testing in accordance with the requirements specified in section f)(1).

The annual limitation was developed by multiplying the potential lbs/hr emission rate by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

b. Emission Limitation:

3.10 pounds of xylene per hour and 13.59 tons of xylene per year from adhesive application operations associated with emissions unit P030

c. Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated based upon emission testing in accordance with the requirements specified in section f)(1).

The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

d. Emission Limitation:

1.33 pounds of MIBK per hour and 5.82 tons of MIBK per year from adhesive application operations associated with emissions unit P030; and 0.54 pounds of MIBK per hour and 2.35 tons of MIBK per year from adhesive application operations

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated based upon emission testing in accordance with the requirements specified in section f)(1).

The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

e. Emission Limitation:

0.37 pounds of VOC per hour and 1.63 tons of VOC per year from cleanup materials

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated based upon emission testing in accordance with the requirements specified in section f)(1).

The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

f. Emission Limitation:

0.37 pounds of toluene per hour and 1.63 tons of toluene per year from cleanup materials

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated based upon emission testing in accordance with the requirements specified in section f)(1).

The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

g. Emission Limitation:

0.67 pounds of VOC per hour and 2.93 tons of VOC per year from embossing with heat operations associated with emissions unit P031

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated based upon emission testing in accordance with the requirements specified in section f)(1).

The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

h. Emission Limitation:

0.67 pounds of PE per hour and 2.93 tons of PE per year from embossing with heat operations associated with emissions unit P031

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated based upon emission testing in accordance with the requirements specified in section f)(1).

The annual limitation was developed by multiplying the potential lbs/hr emissions by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

i. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 5 percent opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with test Method 9 as set forth in “Appendix on Test Methods” in 40 CFR Part 60 (“Standards of Performance for New Stationary Sources”).

[OAC rule 3745-77-07(C)(1)]

j. Emission Limitation:

Organic hazardous air pollutant (HAP) emissions shall be limited to no more than 2 percent of the organic HAP applied for each month (98 percent reduction) for each month at new affected sources; or

Organic HAP emissions are limited to no more than 1.6% of coating applied for each month; or

Organic HAP emissions are limited to no more than 8% 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 shall be demonstrated based upon emission testing in accordance with the testing requirements specified in section f)(1), the compliance procedures and performance test methods specified in section f)(3), and the monitoring and recordkeeping requirements in section d)(9).

[OAC rule 3745-77-07(C)(1), PTI #P0103967, and 40 CFR Part 63, Subpart JJJJ]

(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
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.

5. Emissions Unit Group - Rotogravure Printers (2, 3, & 4): K002, K003, K004,

EU ID	Operations, Property and/or Equipment Description
K002	Printer No. 2
K003	Printer No. 3
K004	Printer No. 4

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(A)(3) (PTI #P0103967, modification of PTI #03-17438, issued 04-06-2009)	8.38 lbs of volatile organic compounds (VOC) per hour and 36.71 tons of VOC per year for coating and cleanup materials from each emissions unit individually <u>Combustion of natural gas from regenerative thermal oxidizer</u>: 2.37 tons of nitrogen oxides (NOx) per year 1.99 tons of carbon monoxide (CO) per year\ 0.18 tons of particulate emissions (PE) per year 0.13 tons of VOC per year See b)(2)a.
b.	OAC rule 3745-21-09(H)	See b)(2)b.
c.	40 CFR Part 60 Subpart FFF	See b)(2)b.
d.	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	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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	emission limitation/control measures specified in Subpart JJJJ.]	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.
e.	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 requirements of this rule also include compliance with the requirements of 40 CFR, Part 60, Subpart FFF and 40 CFR, Part 63, Subparts A and JJJJ.

b. The requirements of this rule are less stringent than the requirements in 40 CFR, Part 63, Subpart JJJJ for Paper and other Web Coating.

c) Operational Restrictions

(1) All of the VOC emissions from emissions units K002, K003, K004, P030 and P031 shall be vented to the regenerative thermal oxidizer (RTO) when one or more of these emissions units are in operation.

[OAC rule 3745-77-07(A)(1) and PTI # P0103967]

(2) The coating line shall be equipped with a permanent total enclosure (PTE)* which shall be installed and operated in accordance with 40 CFR Part 51, Appendix M, Method 204. The PTE shall meet the following criteria:

a. any "Natural Draft Opening" (NDO)* shall be at least 4 equivalent diameters from each VOC emission point;

b. the total area of all NDOs shall not exceed 5% of the surface area of the enclosure's four walls, floor and ceiling;

c. the average facial velocity (FV) of air through all NDOs shall be at least 3,600 m/hr (200 fpm) which corresponds to a pressure differential of 0.007 inch of water, and the direction of air through all NDOs shall be into the enclosure;

d. all access doors and windows whose areas are not included in paragraph (b) and are not included in the calculation in paragraph (c) shall be closed during routine operation; and

e. all VOC emissions must be captured and vented to the VOC control device.

By satisfying the above criteria for a permanent total enclosure, the VOC capture efficiency shall be assumed to be 100%.

* Definitions for PTE and NDO:

Permanent Total Enclosure (PTE) - a permanently installed enclosure that completely surrounds a source of emissions such that all VOC emissions are captured and contained for discharge through a control device.

Natural Draft Opening (NDO) - any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct to which a fan is installed.

[OAC rule 3745-77-07(A)(1) and PTI # P0103967]

(3) The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inch of water, as an hourly average (equivalent to at least 200 feet/minute airflow into the permanent total enclosure through all natural draft openings), whenever the emissions unit is in operation and all the VOCs are being vented to the RTO.

[OAC rule 3745-77-07(A)(1) and PTI # P0103967]

(4) 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

[OAC rule 3745-77-07(A)(1), PTI #P0103967, and 40 CFR Part 63, Subpart JJJJ]

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, in any 3-hour block of time when the emissions units controlled by the RTO are in operation, must not fall below 1525 degrees Fahrenheit or below the combustion temperature limit established according to section 63.3360(e)(3)(i) of 40 CFR Part 63, Subpart JJJJ.

[OAC rule 3745-77-07(C)(1), PTI #P0103967, and 40 CFR Part 63, Subpart JJJJ]

(2) The permittee shall 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. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee and prior approval by the Northwest District Office.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(3) The permittee shall collect and record the following information for each day for the control equipment:

a. a log 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 1525 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.

See 40 CFR Part 63, Subpart JJJJ (40 CFR 63.3350(e)-(f) and 40 CFR 63.3410(a)).

[OAC rule 3745-77-07(C)(1), PTI #P0103967, and 40 CFR Part 63, Subpart JJJJ]

(4) 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.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(5) 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:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

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

e. the temperature readings immediately after the corrective action was implemented; and

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

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

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(6) 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.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(7) 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.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(8) 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.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(9) 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

[OAC rule 3745-77-07(C)(1), PTI # P0103967, and 40 CFR Part 63, Subpart JJJJ]

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. all 3-hour blocks of time during which the average combustion temperature within the RTO, when the emissions unit was in operation, fell below 1525 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;

c. an identification of each incident of deviation described in "b" (above) where a prompt investigation was not conducted;

d. an identification of each incident of deviation described in "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

e. an identification of each incident of deviation described in "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.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(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.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(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.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(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, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

All quarterly reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(5) 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

[OAC rule 3745-77-07(C)(1), PTI # P0103967, and 40 CFR Part 63, Subpart JJJJ]

f) Testing Requirements

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

a. The emission testing shall be conducted within 6 months after commencing operation of this emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC and HAP.

c. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

d. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10, 40 CFR Part 60 Subpart JJJJ or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

e. The testing shall be conducted while the emissions unit is operating at or near maximum VOC loading conditions, unless otherwise specified or approved by the Northwest District Office. The operating scenario may also require the permittee to test this emissions unit at normal VOC loading conditions to demonstrate worst-case loading conditions.

f. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Northwest District Office's refusal to accept the results of the emission test(s).

g. Personnel from the Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(A)(1), PTI #P0103967, and 40 CFR Part 63, Subpart JJJJ]

(2) Compliance with the emissions limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

8.38 pounds of volatile organic compounds (VOC) per hour for coating and cleanup materials and 36.71 tons of VOC per year for coating and cleanup materials

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated based upon emission testing in accordance with the requirements specified in section f)(1). The annual limitation was developed by multiplying the potential lbs/hr emission rate by a maximum annual operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation will be assumed.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

b. 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.

c. Applicable Compliance Method:

Compliance shall be demonstrated based upon emission testing in accordance with the testing requirements specified in section f)(1), the compliance procedures and performance test methods specified in section f)(3), and the monitoring and recordkeeping requirements in section d)(9).

[OAC rule 3745-77-07(A)(1), PTI #P0103967, and 40 CFR Part 63, Subpart JJJJ]

d. Emission Limitation:

2.37 tons of nitrogen oxides (NO_x) per year

Applicable Compliance Method:

Compliance 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) with 5.4 million Btu per hour and conversion factors 1 scf/1000 Btu, 1 ton/2000 pounds and 8760 hrs/yr.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

e. Emission Limitation:

1.99 tons of carbon monoxide (CO) per year

Applicable Compliance Method:

Compliance 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) with 5.4 million Btu per hour and conversion factors 1 scf/1000 Btu, 1 ton/2000 pounds and 8760 hrs/yr.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

f. Emission Limitation:

0.18 tons of PE per year

Applicable Compliance Method:

Compliance 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) with 5.4 million Btu per hour and conversion factors 1 scf/1000 Btu, 1 ton/2000 pounds and 8760 hrs/yr.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

g. Emission Limitation:

0.13 tons of VOC per year

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the AP-42 emission factor (Section 1.4, 7/1998) of 5.5 pounds of VOC per million standard cubic foot (scf) with 5.4 million Btu per hour and conversion factors 1 scf/1000 Btu, 1 ton/2000 pounds and 8760 hrs/yr.

[OAC rule 3745-77-07(C)(1) and PTI # P0103967]

(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
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.