



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

8/26/2014

Certified Mail

Ms. Kathleen Kenyon
DuPont-Circleville
800 DuPont Road
P.O. Box 89, Route 23 South
Circleville, OH 43113-9107

Facility ID: 0165010004
Permit Number: P0083843
County: Pickaway

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

Enclosed is a final Ohio Environmental Protection Agency (EPA) Air Pollution Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. In this letter you will find the information on the following topics:

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

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Central District Office as indicated on page one of your permit.

Sincerely,



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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA DAPC, Central District Office



FINAL

**Division of Air Pollution Control
Title V Permit
for
DuPont-Circleville**

Facility ID:	0165010004
Permit Number:	P0083843
Permit Type:	Renewal
Issued:	8/26/2014
Effective:	9/16/2014
Expiration:	9/16/2019



Division of Air Pollution Control
Title V Permit
for
DuPont-Circleville

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



29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations	15
30. Submitting Documents Required by this Permit.....	16
B. Facility-Wide Terms and Conditions.....	17
C. Emissions Unit Terms and Conditions	19
1. B004, POWER BOILER #4.....	20
2. B015, Tedlar Hot Oil Heater	24
3. P001, Kapton Casting Line 1	28
4. P015, Kapton Casting Line 2	34
5. P017, SP RESIN PRODUCTION FACILITY, LINE #1 & #2	40
6. P020, Kapton Semi-Works	45
7. P024, Kapton Solvent Recovery Columns, Unit 1	48
8. P067, North and South Bio-Oxidation Ponds.....	51
9. P076, SP Resin Line 3.....	52
10. P079, SP RESIN WASTE WATER TREATMENT FACILITY	57
11. P080, Kapton Film Manufacturing Line 3	59
12. P081, Kapton Solvent Recovery Columns, Unit 2.....	63
13. P082, Kapton Plasma Treater Oven and Thermal Oxider	69
14. P084, Kapton Chemical Area	74
15. P099, Site VCL2 Air Stripper	78
16. P100, Tedlar Film Production Line	80
17. P102, Tedlar Solvent Recovery Area	85
18. P103, Tedlar Melt Filter Maintenance	88



Final Title V Permit
DuPont-Circleville
Permit Number: P0083843
Facility ID: 0165010004
Effective Date: 9/16/2014

Authorization

Facility ID: 0165010004
Facility Description:
Application Number(s): A0014266, A0014267, A0014268, A0014269, A0047793, A0049166, A0049669, A0050038
Permit Number: P0083843
Permit Description: Renewal of the Title V Permit for E.I. DuPont de Nemours & Co., Inc., a facility in Circleville, Ohio, which converts chemical intermediaries into polyimide film and polyimide resin, a portion of which are coated and/or treated for various end-use applications. The plant also extrudes polyvinyl resin into film.
Permit Type: Renewal
Issue Date: 8/26/2014
Effective Date: 9/16/2014
Expiration Date: 9/16/2019
Superseded Permit Number: P0083842

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

DuPont-Circleville
800 DuPont Road
P.O. Box 89, Route 23 South
Circleville, OH 43113-9107

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

Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049
(614)728-3778

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, Central 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 and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Director



Final Title V Permit
DuPont-Circleville
Permit Number: P0083843
Facility ID: 0165010004
Effective Date: 9/16/2014

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 For State-Only Requirements
 - (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
 - (5) Standard Term and Condition A. 30.

(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 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) 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 submitted scheduled maintenance requests, 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 submitted promptly to the Ohio EPA DAPC, Central District Office. Except as provided below, the written reports shall be submitted 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 to the Ohio EPA DAPC, Central District Office 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." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

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

- (5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Central District Office unless otherwise specified.

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

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From 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) 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 except as provided pursuant to A.16 below.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with 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 contaminant 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 Ohio EPA DAPC, Central District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

- 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 Ohio EPA DAPC, Central District Office) 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 on or before April 30th of each year during the permit term.
 - (2) Compliance certifications shall include the following:
 - a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.



- b. The permittee's current compliance status.
 - c. Whether compliance was continuous or intermittent consistent with A.13.d.2.a above.
 - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.
 - 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 Ohio EPA DAPC, Central District Office 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 Ohio EPA DAPC, Central District Office 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 Federal Register 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 is subject to 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.

Unless otherwise exempted, no emissions unit identified in this permit that has been 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 operating 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 Ohio EPA DAPC, Central District Office.
- 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 Ohio EPA DAPC, Central District Office. 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 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 For State-Only Requirements

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 Ohio EPA DAPC, Central District Office 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 Ohio EPA DAPC, Central District Office 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 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 potential to emit; or
- c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.



30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Ohio EPA DAPC, Central District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.



Final Title V Permit
DuPont-Circleville
Permit Number: P0083843
Facility ID: 0165010004
Effective Date: 9/16/2014

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) None.
2. The following insignificant emission units 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 emission unit. The insignificant emission units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP-approved versions of OAC Chapters 3745-17, 3745-18 and 3745-21:

B002 - POWER BOILER #2 Natural gas fired boiler - 36 mmBtu/hr (PBR11027)
B003 - POWER BOILER #3 Natural gas fired boiler - 43 mmBtu/hr (PBR11027)
B018 - Emergency water pump #1 - 235 HP - distillate oil (PBR10543)
B019 - Emergency water pump #2 - 235 HP - distillate oil (PBR10543)
B020 - Emergency water pump #3 - 240 HP - distillate oil (PBR10543)
P021 - SP Resin Solvent Recovery Facility (01-1266)
P101 - Film Surface Treater (P0109138)
P104 - Tedlar Flake Conveying System (P0109138)
3. Pursuant to 40 CFR Part 64, the permittee has submitted and Ohio EPA has approved a compliance assurance monitoring (CAM) plan for emissions units P084, and P100 located at this facility. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

[Authority term: 40 CFR Part 64]



Final Title V Permit
DuPont-Circleville
Permit Number: P0083843
Facility ID: 0165010004
Effective Date: 9/16/2014

C. Emissions Unit Terms and Conditions



1. B004, POWER BOILER #4

Operations, Property and/or Equipment Description:

natural gas boiler having a maximum natural gas-fired heat input of 90 mmBtu/hr - power boiler 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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 01-08752, as issued 6/12/2003)	Particulate emissions (PE) shall not exceed 0.9 lb/hr from the combustion of natural gas. Nitrogen oxides (NOX) emissions shall not exceed 9.0 lbs/hr from the combustion of natural gas. Carbon monoxide (CO) emissions shall not exceed 7.5 lbs/hr from the combustion of natural gas. Organic compound (OC) emissions shall not exceed 1.0 lb/hr from the combustion of natural gas. Sulfur dioxide (SO2) emissions shall not exceed 0.06 lb/hr from the combustion of natural gas. The requirements established pursuant to this also include compliance with the requirements of OAC rules 3745-17-07(A). See sections b)(2)a. and c)(1) below.
b.	OAC rule 3745-17-10(B)(1)	The emission limitation specified in this rule is equivalent to the emission



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
d.	OAC rule 3745-18-06(A)	See b)(2)b.

(2) Additional Terms and Conditions

- a. The short-term emission limitations were established to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop any additional monitoring, record keeping, and/or reporting requirements to ensure compliance with these emission limitations.
- b. Fuel burning equipment, stationary gas turbines, jet engine test stands and stationary internal combustion engines are exempt from paragraphs (D), (F) and (G) of this rule, OAC rule 3745-18-06(A), and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.

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

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(A)(3)]

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)]

- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[OAC rule 3745-15-03(B)(1)(a)]



f) Testing Requirements

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

a. Emission Limitation:

PE shall not exceed 0.9 lb/hr from the combustion of natural gas.

Applicable Compliance Method:

When firing natural gas, compliance with this emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (88,235 ft³/hr) by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.4-2 (7/98) for total particulates in natural gas combustion (7.6 lbs of particulates/mmft³).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

b. Emission Limitation:

NOX emissions shall not exceed 9.0 lbs/hr from the combustion of natural gas.

Applicable Compliance Method:

When firing natural gas, compliance with the applicable emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (88,235 ft³/hr) by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.4-1 (7/98) for uncontrolled NO_x in natural gas combustion (100 lbs of NO_x/mmft³).

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 or 7E.

c. Emission Limitation:

CO emissions shall not exceed 7.5 lbs/hr from the combustion of natural gas.

Applicable Compliance Method:

When firing natural gas, compliance with the applicable emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (88,235 ft³/hr) by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.4-1 (7/98) for carbon monoxide in natural gas combustion (84 lbs of CO/mmft³).

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

d. Emission Limitation:

OC emissions shall not exceed 1.0 lb/hr from the combustion of natural gas.



Applicable Compliance Method:

When firing natural gas, compliance with the applicable emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (88,235 ft³/hr) by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.4-2 (7/98) for total organic compounds (TOC) in natural gas combustion (11 lbs of TOC/mmft³).

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 or 25A.

e. **Emission Limitation:**

SO₂ emissions shall not exceed 0.06 lb/hr from the combustion of natural gas.

Applicable Compliance Method:

When firing natural gas, compliance with the applicable emission limitation may be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (88,235 ft³/hr) by the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.4-2 (7/98) for sulfur dioxide in natural gas combustion (0.6 lb of SO₂/mmft³).

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 or 6C.

f. **Emission Limitation:**

Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emissions observation performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

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

g) **Miscellaneous Requirements**

(1) None.



2. B015, Tedlar Hot Oil Heater

Operations, Property and/or Equipment Description:

Hot Oil Heater, 43.31 mmBTU/hr with low NOx burners and Flue Gas Recirculation

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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the stack shall not exceed 20% opacity as a six-minute average, except as provided by the rule.
b.	OAC rule 3745-17-10(B)(1)	PE shall not exceed 0.020 pound per million Btu of actual heat input.
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The requirements of this rule also include compliance with 3745-17-10. See b)(2)b., d., and e. below.
d.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06.	See b)(2)f.
e.	ORC 3704.03(T) and OAC rule 3745-31-05(A)(3)	Carbon Monoxide (CO) emissions shall not exceed 0.082 pound of CO per million Btu heat input. See b)(2)d. below.
f.	OAC rule 3745-18-06(A)	See b)(2)h.

(2) Additional Terms and Conditions

- a. The permittee shall burn only natural gas in this emissions unit.
- b. The permittee shall install low NOx burners in this emissions unit.
- c. Fugitive VOC emissions from this emissions unit constitute a summation of VOC emissions from pump seals, valves, and flanges, as well as from an associated expansion tank. All equipment must be maintained so as to prevent vapor leaks



from pump seals, valves, flanges, associated expansion tank, and related equipment. The permittee shall maintain this emission unit and associated equipment in order to reduce or minimize fugitive VOC emissions.

- d. This emissions unit is permitted at its potential to emit, as defined in OAC rule 3745-31-01, for all pollutants; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with the emission limitations.
- e. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.
- f. The following rule paragraph will apply once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan:

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, SO₂, NO_x, and VOC emissions from this air contaminant source since the uncontrolled potential to emit for each of these pollutants is less than 10 tons per year.
- g. For the purposes of this Permit-to-Install, all PE are considered PM₁₀.
- h. Fuel burning equipment, stationary gas turbines, jet engine test stands and stationary internal combustion engines are exempt from paragraphs (D), (F) and (G) of this rule, OAC rule 3745-18-06(A), and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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



e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)]

- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[OAC rule 3745-15-03(B)(1)(a)]

- (3) The permittee shall also submit annual reports that specify the total actual annual emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

[OAC rule 3745-78-02]

f) Testing Requirements

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

a. Emission Limitation:

Visible PE from the stack shall not exceed twenty percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 of 40 CFR Part 60, Appendix A.

b. Emission Limitation:

PE shall not exceed 0.020 pound per mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be demonstrated by using AP-42, "Compilation of Air Pollutant Emission Factors," 5th Edition, Section 1.4, Table 1.4-2 (revised 7/98) for natural gas combustion, found by using 7.6 lbs of total PM/million standard cubic feet and dividing by the heat content of natural gas (1020 Btu/standard cubic feet).



c. Emission Limitation:

CO emissions shall not exceed 0.082 pound of CO per million Btu heat input.

Applicable Compliance Method:

Compliance shall be demonstrated by using AP-42, "Compilation of Air Pollutant Emission Factors," 5th Edition, Section 1.4, Table 1.4-1 (revised 7/98) for natural gas combustion, found by using 84 lbs of CO/million standard cubic feet and dividing by the heat content of natural gas (1020 Btu/standard cubic feet).

d. Emission Limitations:

NO_x emissions shall not exceed 32 lbs of NO_x/million standard cubic feet, through the use of low NO_x burners.

Applicable Compliance Method:

The 32 lbs of NO_x/million standard cubic feet emission factor is taken from AP-42, "Compilation of Air Pollutant Emission Factors," 5th Edition, Section 1.4, Table 1.4-1 (revised 7/98) for natural gas combustion with low NO_x burners.

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

g) Miscellaneous Requirements

(1) None.



3. P001, Kapton Casting Line 1

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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 01-2071, as issued on 6/8/1995, and P0110982, as issued on 12/10/2012)	Organic compound (OC) emissions from the cooler condenser shall be reduced by at least 85%. OC emissions from the cooler condenser shall not exceed 57 lbs/hr as a 24-hour average, 28.5 lbs/hr as a rolling, 365-day average and 124.79 tons/rolling, 12-month period. OC fugitive emissions shall not exceed 25.21 tons per year on an annual basis.

(2) Additional Terms and Conditions

a. All of the captured OC emissions from this emissions unit shall be vented to the/a condenser that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

b. Daily calibrations of CERMS are not required when Kapton casting line is down during an entire day, 24 hour period, due to scheduled maintenance, production problems or lack of demand.

c. The permittee shall maintain a written quality assurance/quality control plan for the continuous VOC monitoring system, designed to ensure continuous valid and representative readings of OC emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous OC monitoring system must be kept on site and available for inspection during regular office hours.



The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

- d. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain a daily log of the down time for the capture (collection) system, control device and monitoring equipment when the associated emissions unit is in operation.

[OAC rule 3745-77-07(C)(1)]
 - (2) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous volatile organic compound (VOC) monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 6 and Performance Specification 8. The letter(s)/document(s) of certification shall be made available to the Director (Ohio EPA, Central District Office) upon request.

[OAC rule 3745-77-07(C)(1)]
 - (3) The permittee shall operate and maintain equipment to continuously monitor and record VOC from this emissions unit in units of the applicable standard(s) with the detection principle of the reference method specified in the regulation or permit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of all data obtained by the continuous VOC monitoring system including, but not limited to:

- a. emissions of VOCs in parts per million on a continuous basis;
- b. emissions of VOCs in pounds per hour and in units of the applicable standards in the appropriate averaging periods; 24-hour, 365-day, and 12-month;
- c. results of quarterly cylinder gas audits;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;



- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous VOC monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous VOC monitoring system;
- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous VOC monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)]

- (2) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous VOC monitoring system:
 - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office, documenting all instances of VOC emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
 - b. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - i. the facility name and address;



- ii. the manufacturer and model number of the continuous VOC and other associated monitors;
- iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
- iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
- v. the total VOC emissions for the calendar quarter (tons/rolling 12-month);
- vi. the total operating time (hours) of the emissions unit;
- vii. the total operating time of the continuous VOC monitoring system while the emissions unit was in operation;
- viii. results and dates of quarterly cylinder gas audits;
- ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- x. unless previously submitted, the results of any relative accuracy test audit showing the continuous VOC monitor out-of-control and the compliant results following any corrective actions;
- xi. the date, time, and duration of any/each malfunction** of the continuous VOC monitoring system, emissions unit, and/or control equipment;
- xii. the date, time, and duration of any downtime** of the continuous VOC monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

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

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit



[OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C) and OAC rule 3745-77-07(A)(3)(c)]

f) Testing Requirements

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

a. Emission Limitation:

OC emissions from the cooler condenser shall be reduced by at least 85%.

Applicable Compliance Method:

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

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance
- ii. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation for organic compound emissions
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 through 4 and Method 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.
- iv. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the Ohio EPA, Central District Office. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- v. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Central 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 Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).
- vi. Personnel from the Ohio EPA, Central 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.

vii. 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 Ohio EPA, Central 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 Ohio EPA, Central District Office.

b. **Emission Limitation:**
OC emissions from the cooler condenser shall not exceed 57 lbs/hr as a 24-hour average and 28.5 lbs/hr as a rolling, 365-day average.

Applicable Compliance Method:
Compliance shall be demonstrated based on the continuous emission monitoring data required in section d).

c. **Emission Limitation:**
OC emissions from the cooler condenser shall not exceed 124.79 tons/rolling, 12-month period.

Applicable Compliance Method:
Compliance with the annual limitation shall be assumed as long as compliance with the hourly rolling, 365-day limitation is maintained. The annual limitation was calculated by multiplying the hourly rolling, 365-day limitation by 8760 hours/year, divided by 2000 pounds/ton.

d. **Emission Limitation:**
Fugitive OC emissions shall not exceed 25.21 tons per year on an annual basis.

Applicable Compliance Method:
Compliance shall be determined by using the 2008 Kapton Line 1 pre-control stack test results and the assumption of 99% capture efficiency. The uncontrolled organic compound emission rate results (575.56 lb/hr) were multiplied by 1% and by 8760 and then dividing by 2000 pounds per ton.

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

g) **Miscellaneous Requirements**

(1) None.



4. P015, Kapton Casting Line 2

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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 01-2071, as issued on 6/8/1995, and P0110982, as issued on 12/10/2012)	Organic compound (OC) emissions from the cooler condenser shall be reduced by at least 95%. OC emissions from the cooler condenser shall not exceed 57 lbs/hr as a 24-hour average, 28.5 lbs/hr as a rolling, 365-day average and 124.79 tons/rolling, 12-month period. OC fugitive emissions shall not exceed 25.21 tons per year on an annual basis.

(2) Additional Terms and Conditions

a. All of the captured OC emissions from this emissions unit shall be vented to the/a condenser that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

b. Daily calibrations of CERMS are not required when Kapton casting line is down during an entire day, 24 hour period, due to scheduled maintenance, production problems or lack of demand.

c. The permittee shall maintain a written quality assurance/quality control plan for the continuous OC monitoring system, designed to ensure continuous valid and representative readings of OC emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous OC monitoring system must be kept on site and available for inspection during regular office hours.



The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

- d. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain a daily log of the down time for the capture (collection) system, control device and monitoring equipment when the associated emissions unit is in operation.

[OAC rule 3745-77-07(C)(1)]
 - (2) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous volatile organic compound (VOC) monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 6 and Performance Specification 8. The letter(s)/document(s) of certification shall be made available to the Director (Ohio EPA, Central District Office) upon request.

[OAC rule 3745-77-07(C)(1)]
 - (3) The permittee shall operate and maintain equipment to continuously monitor and record VOC from this emissions unit in units of the applicable standard(s) with the detection principle of the reference method specified in the regulation or permit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60. The monitor shall be installed and operated in accordance with the manufacturer's specifications at a minimum of 90% of the operating time of Kapton Line 2 during each calendar quarter.

The permittee shall maintain records of all data obtained by the continuous VOC monitoring system including, but not limited to:

- a. emissions of VOCs in parts per million on a continuous basis;
- b. emissions of VOCs in pounds per hour and in units of the applicable standards in the appropriate averaging periods; 24-hour, 365-day, and 12-month;
- c. results of quarterly cylinder gas audits;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;



- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous VOC monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous VOC monitoring system;
- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous VOC monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)]

- (2) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous VOC monitoring system:
 - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office, documenting all instances of VOC emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
 - b. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - i. the facility name and address;



- ii. the manufacturer and model number of the continuous VOC and other associated monitors;
- iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
- iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
- v. the total VOC emissions for the calendar quarter (tons/rolling 12-month);
- vi. the total operating time (hours) of the emissions unit;
- vii. the total operating time of the continuous VOC monitoring system while the emissions unit was in operation;
- viii. results and dates of quarterly cylinder gas audits;
- ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- x. unless previously submitted, the results of any relative accuracy test audit showing the continuous VOC monitor out-of-control and the compliant results following any corrective actions;
- xi. the date, time, and duration of any/each malfunction** of the continuous VOC monitoring system, emissions unit, and/or control equipment;
- xii. the date, time, and duration of any downtime** of the continuous VOC monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

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

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit.



[OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C) and OAC rule 3745-77-07(A)(3)(c)]

f) Testing Requirements

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

a. Emission Limitation:

OC emissions from the cooler condenser shall be reduced by at least 95%.

Applicable Compliance Method:

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

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance
- ii. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation for organic compound emissions
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 through 4 and Method 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.
- iv. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the Ohio EPA, Central District Office. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- v. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Central 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 Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).
- vi. Personnel from the Ohio EPA, Central 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.

vii. 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 Ohio EPA, Central 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 Ohio EPA, Central District Office.

b. **Emission Limitation:**
OC emissions from the cooler condenser shall not exceed 57 lbs/hr as a 24-hour average and 28.5 lbs/hr as a rolling, 365-day average.

Applicable Compliance Method:
Compliance shall be demonstrated based on the continuous emission monitoring data required in section d).

c. **Emission Limitation:**
OC emissions from the cooler condenser shall not exceed 124.79 tons/rolling, 12-month period.

Applicable Compliance Method:
Compliance with the annual limitation shall be assumed as long as compliance with the hourly rolling, 365-day limitation is maintained. The annual limitation was calculated by multiplying the hourly rolling, 365-day limitation by 8760 hours/year, divided by 2000 pounds/ton.

d. **Emission Limitation:**
Fugitive OC emissions shall not exceed 25.21 tons per year on an annual basis.

Applicable Compliance Method:
Compliance shall be determined by using the 2008 Kapton Line 1 pre-control stack test results and the assumption of 99% capture efficiency. The uncontrolled organic compound emission rate results (575.56 lb/hr) were multiplied by 1% and by 8760 and then dividing by 2000 pounds per ton.

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

g) **Miscellaneous Requirements**

(1) None.



5. P017, SP RESIN PRODUCTION FACILITY, LINE #1 & #2

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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (P0114199, as issued 9/4/2013)	Organic Compound (OC) emissions shall not exceed 0.85 pound per hour and 3.71 tons per year. OC shall be reduced by at least 95%. See b)(2)a. and b)(2)b.

(2) Additional Terms and Conditions

a. All of the captured OC emissions from the emissions units listed above shall be vented to a thermal oxidizer that shall meet the operational, monitoring, and record keeping requirements of this permit, when one or more of the emissions units, P017 and/or P076, are in operation.

b. The OC limit of 3.71 TPY is a combined total of 3.09 TPY stack emissions and 0.62 TPY fugitive emissions.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation contained in this permit, the acceptable combustion temperature within the thermal oxidizer, during any period of time when the emissions units controlled by the thermal oxidizer are in operation, shall not be less than 650 degrees Centigrade.

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



- (2) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal oxidizer when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Centigrade. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 2.7 degrees Centigrade, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:
- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal oxidizer was/were in operation, during which the average combustion temperature within the thermal oxidizer was more than 27.7 degrees Centigrade below the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was/were in compliance; and
 - b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring equipment, and the associated emissions unit(s).

These records shall be maintained at the facility for a period of three years.

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

- (3) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- 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.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that provide the following information for each period during which the thermal oxidizer exhaust gas temperature falls below 650 degrees Centigrade and/or during any period of time when the emissions units were in operation and the process emissions were not vented to the thermal oxidizer:
 - a. the date of the excursion;
 - b. the time interval over which the excursion occurred;
 - c. the temperature values during the excursion;
 - d. the cause(s) for the excursion; and
 - e. the corrective action which has been or will be taken to prevent similar excursions in the future.

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



[OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C) and OAC rule 3745-77-07(A)(3)(c)]

f) Testing Requirements

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

- a. Emission Limitation:
OC emissions shall not exceed 0.85 pound per hour and 3.71 tons per year.
OC shall be reduced by at least 95%.

Applicable Compliance Method:

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

- i. The emission testing shall be conducted approximately 2.5 years after permit issuance
- ii. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation for organic compound emissions
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 through 4 and Method 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.
- iv. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the Ohio EPA, Central District Office. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- v. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Central 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 Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).



- vi. Personnel from the Ohio EPA, Central 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.
- vii. 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 Ohio EPA, Central 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 Ohio EPA, Central District Office.

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

- g) Miscellaneous Requirements
 - (1) None.



6. P020, Kapton Semi-Works

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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 01-1150, as issued on 2/12/1986)	Organic compound (OC) emissions shall not exceed 80 lbs/day and 14.6 tons/yr. OC emissions shall be controlled though the use of a thermal oxidizer with a 95% destruction efficiency.

(2) Additional Terms and Conditions

a. All of the captured OC emissions from the emissions unit listed above shall be vented to a thermal oxidizer that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

c) Operational Restrictions

(1) The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1200 degrees F.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer 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.



- (2) The permittee shall collect and record the following information for each day:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was less than 1200 degrees F; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that provide the following information for each period during which the thermal oxidizer exhaust gas temperature falls below 1200 degrees F:
 - a. the date of the excursion;
 - b. the time interval over which the excursion occurred;
 - c. the temperature values during the excursion;
 - d. the cause(s) for the excursion; and
 - e. the corrective action which has been or will be taken to prevent similar excursions in the future.

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

[OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C) and OAC rule 3745-77-07(A)(3)(c)]

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
OC emissions shall not exceed 80 lbs/day.

Applicable Compliance Method:

Compliance with the daily limitation shall be demonstrated based on the following calculation using the potential to emit OC (obtained from material balance



calculations supplied by Dupont) and an estimated 95% control efficiency for the thermal oxidizer:

$$(61.7 \text{ lbs OC/hr})(1-0.95)(24 \text{ hrs/day}) = 74.1 \text{ lbs OC/day.}$$

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 or 25A to determine the hourly OC emission rate and the hourly OC emission rate shall be multiplied by 24 hrs/day.

- b. Emission Limitation:
OC emissions shall not exceed 14.6 tons/yr.

Applicable Compliance Method:

Compliance with the annual limitation shall be assumed as long as compliance with the daily limitation is maintained. The annual limitation was calculated by multiplying the daily limitation by 365 days/year, divided by 2000 pounds/ton.

- c. Emission Limitation:
OC emissions shall be controlled through the use of a thermal oxidizer with a 95% destruction efficiency.

Applicable Compliance Method:

Compliance with this limit was demonstrated by an emission test conducted on 4/8/2008. The test results were 99% destruction efficiency.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 or 25A.

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

- g) Miscellaneous Requirements

(1) None.



7. P024, Kapton Solvent Recovery Columns, Unit 1

Operations, Property and/or Equipment Description:

Distillation columns, no. 1

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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 01-1663, as issued on 4/29/2003)	Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The scrubber water flow rate shall be maintained at a value of not less than 0.25 gallon per minute at all times while this emissions unit is in operation.

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

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly operate and maintain equipment to monitor the scrubber water flow rate at all times while this emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information:

a. the scrubber water flow rate, in gallons per minute, on a continual; and

b. the downtime for the control device (wet scrubber) and monitoring equipment while this emissions unit is in operation.



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

- (2) The permittee shall maintain daily records of the hours of operation of this emissions unit.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all times during which the scrubber water flow rate fell below the rate specified in section c)(1). The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C) and OAC rule 3745-77-07(A)(3)(c)]

f) Testing Requirements

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

- a. Emission Limitation:
Organic compound (OC) emissions shall not exceed 8 lbs/hr.

Applicable Compliance Method:

Compliance may be demonstrated by summing the estimated fugitive emissions (0.28 lb of OC/hr) based on calculations established in PTI 01-08064 issued July 27, 2000, and the emission test results for emissions unit P024 conducted in December, 1991 (0.37 lb of OC/hr.)

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 to determine the hourly OC emission rate and adding the average hourly emission rate from the emission tests to the estimated hourly fugitive emission rate (0.28 lb of OC/hr).

- b. Emission Limitation:
Organic compound emissions shall not exceed 40 lbs/day.

Applicable Compliance Method:

Compliance with the daily emission limitation may be based on the summation of the estimated hourly fugitive emissions and the average hourly stack emissions



(see section f)(1)a) multiplied by the daily hours of operation recorded in section d)(2).

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

g) Miscellaneous Requirements

(1) None.



8. P067, North and South Bio-Oxidation Ponds

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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	None	

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

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

a. None.

g) Miscellaneous Requirements

(1) None.



9. P076, SP Resin Line 3

Operations, Property and/or Equipment Description:

SP Resin Facility (Line 3)

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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (P0114199, as issued 9/4/2013)	Organic Compound (OC) emissions shall not exceed 0.85 pound per hour and 3.71 tons per year. OC shall be reduced by at least 95%. See b)(2)a and b)(2)b.

(2) Additional Terms and Conditions

a. All of the captured OC emissions from the emissions units listed above shall be vented to a thermal oxidizer that shall meet the operational, monitoring, and record keeping requirements of this permit, when one or more of the emissions units, P017 and/or P076, are in operation.

b. The OC limit of 3.71 TPY is a combined total of 3.09 TPY stack emissions and 0.62 TPY fugitive emissions.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation contained in this permit, the acceptable combustion temperature within the thermal oxidizer, during any period of time when the emissions units controlled by the thermal oxidizer are in operation, shall not be less than 650 degrees Centigrade.



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

- (2) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal oxidizer when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Centigrade. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 2.7 degrees Centigrade, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:
- a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal oxidizer was/were in operation, during which the average combustion temperature within the thermal oxidizer was more than 27.7 degrees Centigrade below the average temperature measured during the most recent performance test that demonstrated the emissions units were in compliance; and
 - b. a log or record of the operating time for the capture (collection) system, thermal oxidizer, monitoring equipment, and the associated emissions units.

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

- (3) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- 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.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that provide the following information for each period during which the thermal oxidizer exhaust gas temperature falls below 650 degrees Centigrade and/or during any period of time when the emissions units were in operation and the process emissions were not vented to the thermal oxidizer:
 - a. the date of the excursion;
 - b. the time interval over which the excursion occurred;
 - c. the temperature values during the excursion;
 - d. the cause(s) for the excursion; and
 - e. the corrective action which has been or will be taken to prevent similar excursions in the future.

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



[OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C) and OAC rule 3745-77-07(A)(3)(c)]

f) Testing Requirements

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

a. Emission Limitation:

OC emissions shall not exceed 0.85 pound per hour and 3.71 tons per year.
OC shall be reduced by at least 95%.

Applicable Compliance Method:

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

- i. The emission testing shall be conducted approximately 2.5 years after issuance of the permit (following the effective date for the Title V permit) and within 6 months prior to the permit-expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation for organic compound emissions
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
Method 25 or 25A of 40 CFR Part 60, Appendix A
- iv. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- v. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- vi. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing



equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

- vii. 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 Ohio EPA Central 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 Ohio EPA Central District Office.

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

g) Miscellaneous Requirements

- (1) None.



10. P079, SP RESIN WASTE WATER TREATMENT FACILITY

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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (P0114199, as issued 9/4/2013)	Organic Compound (OC) emissions shall not exceed 0.67 pound per hour and 2.92 tons per year.

(2) Additional Terms and Conditions

a. None

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

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

a. Emission Limitation:
OC emissions shall not exceed 0.67 pound per hour and 2.92 tons per year.



Final Title V Permit
DuPont-Circleville
Permit Number: P0083843
Facility ID: 0165010004
Effective Date: 9/16/2014

Applicable Compliance Method:

Compliance with the hourly emission limit may be based on modeling of the worst case (ie the maximum potential organic emissions) scenario supplied in the permit application received 4/26/2013, using the Environmental Protection Agency's Water9 (USEPA WATER9) emission estimation model.

If required, compliance shall be demonstrated with emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 or 25A.

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

g) **Miscellaneous Requirements**

(1) None.



11. P080, Kapton Film Manufacturing Line 3

Operations, Property and/or Equipment Description:

Kapton Film Manufacturing Line 3 with thermal oxidizer

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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (P0115104, as issued 8/14/2013)	Organic compound (OC) emissions shall not exceed 2.03 lbs/hr and 7.4 tons/yr. Nitrogen oxides (NOx) emissions shall not exceed 7.12 lbs/hr and 26.0 tons/yr. Carbon monoxide (CO) emissions shall not exceed 5.56 lbs/hr and 20.3 tons/yr.

(2) Additional Terms and Conditions

a. Total OC emissions shall have a minimum 98% destruction efficiency through the use of a thermal oxidizer.

b. The hourly NOx and CO emission limitations were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop additional monitoring, record keeping and/or reporting requirements to ensure compliance with that limitation.

c. The annual OC emission limit of 7.4 TPY is a total of 0.5 TPY fugitive emissions and 6.9 TPY stack emissions.

c) Operational Restrictions

(1) The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 27.7 degrees Centigrade below 760 degrees Centigrade, temperature established during April 2003, stack test.



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

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Centigrade. 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.
- (2) The permittee shall collect and record the following information for each day:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 27.7 degrees Centigrade below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emission unit was in operation.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following for each period during which the thermal oxidizer temperature falls below the temperature limitation specified above, and/or during any period of time when the emissions units were in operation and the process emissions were not vented to the thermal oxidizer:
 - a. the date of the excursion;
 - b. the time interval over which the excursion occurred;
 - c. the temperature values during the excursion;
 - d. the cause(s) for the excursion; and
 - e. the corrective action which has been or will be taken to prevent similar excursions in the future.

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



[OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C) and OAC rule 3745-77-07(A)(3)(c)]

f) Testing Requirements

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

a. Emission Limitation:

OC emissions shall not exceed 2.03 lbs/hr.

Applicable Compliance Method:

Compliance with the short term limitation was demonstrated with a stack test, performed in April 2003. The results of the emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25A, produced an average OC emission rate of 0.04 pound per hour.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 or 25A.

b. Emission Limitation:

OC emissions shall not exceed 7.4 tons/yr.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the short term emission limitation by 8760 hours per year and dividing by 2000 pounds per ton.

c. Emission Limitations:

Total OC emissions shall have a minimum 98% destruction efficiency through the use of a thermal oxidizer.

Applicable Compliance Method:

Compliance with the control efficiency limitation was demonstrated with a stack test, performed in April 2003. The results of the emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25A, produced an average destruction efficiency of 99.56%.

If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 or 25A and Method 204.

d. Emission Limitation:

NOx emissions shall not exceed 7.12 lbs/hr.



Applicable Compliance Method:

Compliance with the short term limitation was demonstrated with a stack test, performed in April 2003. The results of the emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7, produced an average NO_x emission rate of 3.01 pounds per hour.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 or 7E.

e. Emission Limitation:

NO_x emissions shall not exceed 26.0 tons/yr.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the short term emission limitation by 8760 hours per year and dividing by 2000 pounds per ton.

f. Emission Limitation:

CO emissions shall not exceed 5.56 lbs/hr.

Applicable Compliance Method:

Compliance with the short term limitation was demonstrated with a stack test, performed in April 2003. The results of the emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10, produced an average CO emission rate of 3.06 pounds per hour.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

g. Emission Limitation:

CO emissions shall not exceed 20.3 tons/yr.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the short term emission limitation by 8760 hours per year and dividing by 2000 pounds per ton.

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

g) Miscellaneous Requirements

(1) None.



12. P081, Kapton Solvent Recovery Columns, Unit 2

Operations, Property and/or Equipment Description:

Kapton Solvent Recycle Distillation Columns unit 2 with packed scrubber

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) b)(1)b, d)(3), d)(4), d)(5), d)(6), and.e)(3).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 01-08064, as issued 7/27/2000)	Organic compound (OC) emissions shall not exceed 0.78 lb/hr, 18.72 lbs/day, and 3.36 tons/yr.
b.	ORC 3704.03(F) (Air Toxics)	See d)(3), d)(4), d)(5), d)(6), and e)(3).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The scrubber water flow rate shall be maintained at a value of not less than 0.25 gallon per minute at all times while this emissions unit is in operation.

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

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly operate and maintain equipment to monitor the scrubber water flow rate at all times while this emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information:

a. the scrubber water flow rate, in gallons per minute, on a continuous basis; and



- b. the downtime for the control device and monitoring equipment while this emissions unit is in operation.

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

- (2) The permittee shall maintain daily records of the hours of operation of this emissions unit.

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

- (3) The permit-to-install (PTI) application for this emissions unit, P081, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions unit, (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

- i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

- ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):



$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or “worst case” toxic contaminant(s):

Toxic Contaminant: Toluene

TLV (mg/m³): 188.4

Maximum Hourly Emission Rate (lbs/hr): 1.15

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 36

MAGLC (ug/m³): 4486

The permittee, has demonstrated that emissions of Toluene, from emissions unit P081, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, Option A, Engineering Guide #70]

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit, that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the “Toxic Air Contaminant Statute” will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a “modification” under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification”, the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in



greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, Option A, Engineering Guide #70]

- (5) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, Option A, Engineering Guide #70]

- (6) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration

[ORC 3704.03(F)(3)(c) and F(4), OAC rule 3745-114-01, Option A, Engineering Guide #70]

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all times during which the scrubber water flow rate fell below the rate specified in section d)(1).



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

[OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C) and OAC rule 3745-77-07(A)(3)(c)]

- (3) The permittee shall submit annual reports that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the "Toxic Air Contaminate Statute", ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:
- a. the original model input;
 - b. the updated model input;
 - c. the reason for the change(s) to the input parameter(s); and
 - d. a summary of the results of the updated modeling, including the input changes; and
 - e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.

If no changes to the emissions, emissions unit, or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[ORC 3704.03(F)(3)(c) and F(4), and Option A, Engineering Guide #70]

f) Testing Requirements

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

- a. Emission Limitations:
OC emissions shall not exceed 0.78 lb/hr, 18.72 lbs/day, and 3.36 tons/yr.

Applicable Compliance Methods:

Compliance with the hourly emission limitation may be demonstrated by summing the estimated fugitive emissions (0.28 lb of OC/hr) based on calculations established in PTI 01-08064 issued July 27, 2000, and the emission test results for emissions unit P024 conducted in December, 1991 (0.37 lb of OC/hr.)

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 to determine the hourly OC emission rate and adding the average hourly emission rate from the emission tests to the estimated hourly fugitive emission rate (0.28 lb of OC/hr).

Compliance with the daily emission limitation may be based on the summation of the estimated hourly fugitive emissions and the average hourly stack emissions



multiplied by the daily hours of operation recorded in section d)(2).

The annual emission limitation was established by multiplying the hourly emission limitation by 8760 hrs/yr and dividing by 2000 lbs/ton. Compliance with this emission limitation may be assumed provided that the permittee complies with the hourly emission limitation.

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

g) Miscellaneous Requirements

(1) None.



13. P082, Kapton Plasma Treater Oven and Thermal Oxider

Operations, Property and/or Equipment Description:

PTUTS Film - plasma treater and oven with thermal oxidizer

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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (P0112867, as issued 2/5/2013)	Organic compound (OC) stack emissions shall not exceed 0.27 pound per hour and 1.18 tons per year. Fugitive OC emissions shall not exceed 0.86 tons per year. Nitrogen oxides (NOx) emissions shall not exceed 5.43 pounds per hour and 23.79 tons per year. Carbon monoxide (CO) emissions shall not exceed 0.83 pound per hour and 3.62 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). See b)(2)a and b below.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from the thermal oxidizer stack shall not exceed 20% opacity, as a 6-minute average except as provided by rule. See b)(2)b below.

(2) Additional Terms and Conditions



- a. Total OC emissions shall be reduced by at least 99% overall destruction efficiency through the use of a thermal oxidizer.
- b. When this unit is being used for processing cured film only, there are no organic compound or particulate emissions emitted from the film. Therefore, the emission limitations, operational, monitoring, and recordkeeping requirements set forth in this permit do not apply.
- c. The emission limitations were established to reflect the potential to emit, with use of a thermal oxidizer, for this emissions unit. Therefore, it is not necessary to develop additional monitoring, record keeping and/or reporting requirements to ensure compliance with that limitation.

c) Operational Restrictions

- (1) The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 27.7 degrees Centigrade below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

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

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Centigrade. 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.

The permittee shall collect and record the following information for each day:

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 27.7 degrees Centigrade below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance; and
- b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]



- (2) The permittee shall submit quarterly deviation (excursion) reports that provide the following information for each period during which the thermal oxidizer temperature falls below the temperature limitation specified above, and/or during any period of time when the emissions units were in operation and the process emissions were not vented to the thermal oxidizer:
- a. the date of the excursion;
 - b. the time interval over which the excursion occurred;
 - c. the temperature values during the excursion;
 - d. the cause(s) for the excursion; and
 - e. the corrective action which has been or will be taken to prevent similar excursions in the future.

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

[OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C) and OAC rule 3745-77-07(A)(3)(c)]

f) Testing Requirements

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

- a. Emission Limitation:
OC emissions shall not exceed 0.27 pound per hour and 1.18 tons per year.

Applicable Compliance Method:

OC emissions will be control by a thermal oxidizer at 99%. Compliance with the hourly emission limitation will be demonstrated with the following calculation:

$$(\text{process rate})(\text{solvent loading})(1-0.99)$$

After installation, these limits were modified based on results of the stack test conducted October 2006.

Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained. The annual limitation was calculated by multiplying the hourly limitation by 8760 hours/year and dividing by 2000 pounds/ton.

- b. Emission Limitation:
Fugitive organic compound emissions shall not exceed 0.86 tons per year.



Applicable Compliance Method:

Compliance shall be determined by using the 2006 PTUTS Film pre-control stack test results and the assumption of 99% capture efficiency. The captured uncontrolled organic compound emission rate results were 17.7 lb/hr. Total assumed emissions, 17.9 lb/hr, were multiplied by 1% and by 8760 and then dividing by 2000 pounds per ton. A 10% margin of error was added to the fugitive emission limit.

c. Emission Limitation:

NOx emissions shall not exceed 5.43 pounds per hour and 23.78 tons per year.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated by summing the emissions from the film curing and from the combustion of natural gas. Emissions from the film curing shall be based on the organic compound converting to NO2 and demonstrated by the following calculation:

$$(\text{process rate})(\text{solvent loading})(1 \text{ lb. mole}/87.12 \text{ lb})(0.30 \text{ lb NO}_2 / 1 \text{ lb. OC})(46 \text{ lb NO}_2/\text{lbmole NO}_2) = 5.42 \text{ lbs NO}_x/\text{hr}$$

Emissions from the combustion of natural gas shall be demonstrated by multiplying the emission factor for natural gas combustion of 100 lbs NOx/MMCU.FT. (AP-42, 1.4, 7/98) by the maximum oven throughput of 5258 cu.ft./hr. (053 lb/hr)

After installation, these limits were modified based on results of the stack test conducted October 2006.

Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained. The annual limitation was calculated by multiplying the hourly limitation by 8760 hours/year and dividing by 2000 pounds/ton.

d. Emission Limitation:

CO emissions shall not exceed 0.83 pound per hour and 3.62 tons per year.

Applicable Compliance Method:

Based on process knowledge and design data, CO density will be 0.0194 lb/CF. Compliance with the hourly emission limitation will be demonstrated with the following calculation:

$$(\text{air flow rate})(60 \text{ min}/\text{hr})(100 \text{ ppm})(0.0194 \text{ lb}/\text{ft}^3) = 0.83 \text{ lb}/\text{hr}$$

After installation, these limits were modified based on results of the stack test conducted October 2006.

Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitation is maintained. The annual limitation was calculated by multiplying the hourly limitation by 8760 hours/year and dividing by 2000 pounds/ton.



- e. **Emission Limitation:**
Total OC emissions shall be reduced by at least 99% overall through the use of a thermal oxidizer.

Applicable Compliance Method:

If required, compliance shall be demonstrated through emissions tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 25 or 25A.

- f. **Emission Limitation:**
Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emissions observation performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

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

- g) **Miscellaneous Requirements**

- (1) None.



14. P084, Kapton Chemical Area

Operations, Property and/or Equipment Description:

Kapton Chemical Area

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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (P0110982, as issued on 12/10/2012)	Particulate emissions (PE) shall not exceed 0.02 grain per dry standard cubic feet, 0.01 pound per hour and 0.04 ton per year. See b)(2)a and b)(2)b.
b.	OAC rule 3745-17-11(B)	The particulate emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
d.	40 CFR part 64 Compliance Assurance Monitoring (CAM)	See b)(2)a, d)(1), d)(2) and e)(2).

(2) Additional Terms and Conditions

a. The captured emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

b. The best available technology (BAT) for this emissions unit was established in PTI No. 01-2071, issued June 8, 1995, under emissions unit P015. The permittee requested the limits and corresponding terms and conditions from the aforementioned permit be placed in a separate emissions unit (P084). No physical change or change in the method of operation has occurred with this emissions unit. As such, this is an administrative modification as defined under



OAC rules 3745-31-01(F) and 3745-31-01(JJJ). The BAT established under PTI No. 01-2071 will be maintained for this permit action because the modification is administrative.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks on the Restricted Room Vent Stack and Bin Vent Exhaust Stack, 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. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (2) Preventative Maintenance inspection of the baghouse filters shall be performed on a quarterly basis to provide assurance that the filters are adequate to function as intended or will be changed out if necessary.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]



e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit quarterly deviation reports that identify:

- a. all days during which any visible particulate emissions were observed from the stacks serving this emissions unit;
- b. any corrective actions taken to minimize or eliminate the visible particulate emissions; and
- c. a report discussing the findings of the Preventative Maintenance of the baghouse filters.

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

[OAC rule 3745-15-03(B)(2) and 40 CFR Part 64]

f) Testing Requirements

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

- a. Emission Limitation:
PE shall not exceed 0.02 grain per dry standard cubic feet.

Applicable Compliance Method:

Compliance with this emission limitation may be based on the bag filter manufacturer's guaranteed emission rate of 0.020 grain/dscf (from faxed letter dated 2/13/02).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

- b. Emission Limitation:
PE shall not exceed 0.01 lb/hr.

Applicable Compliance Method:

Compliance with the hourly limitation may be determined based on the following calculations for particulate emissions from the restricted room exhaust and the bin vent exhaust:



- c. The restricted room exhaust emissions are based on a maximum conveying rate of 3600 pounds per hour, 6.0% estimated spillage, 90% capture efficiency and 99.97% control efficiency.
 $(3600 \text{ lbs/hr})(0.06)(1-0.9)(1-0.9997) = 0.01 \text{ lb/hr}$

The bin vent exhaust emissions are based on a maximum conveying rate of 3600 pounds per hour, 0.20% estimated spillage, 90% capture efficiency and 99.97% control efficiency.
 $(3600 \text{ lbs/hr})(0.002)(1-0.9)(1-0.9997) < 0.001 \text{ lb/hr}$

Total calculated estimated particulate emissions are 0.01 lb/hr.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

- d. Emission Limitation:
PE shall not exceed 0.04 ton/yr.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the short-term emission limitation by 8760 hours per year and dividing by 2000 pounds per ton.

- e. Emission Limitation:
Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

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

- g) Miscellaneous Requirements

(1) None.



15. P099, Site VCL2 Air Stripper

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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 01-1102, as issued 1/2/1986)	Vinylidene chloride emissions shall not exceed 22.4 lbs/day and 4.1 tons/yr.

(2) Additional Terms and Conditions

a. The short term emission limitation and annual emission limitation were established to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop any additional monitoring, record keeping and/or reporting requirements to ensure compliance with these emission limitations.

c) Operational Restrictions

(1) Pumping of well water from well DB-2 or well DB-3 shall be stopped if the air stripper system malfunctions or is taken out of service, unless otherwise approved by the Ohio EPA.

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

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

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



- a. Emission Limitations:
Vinylidene chloride emissions shall not exceed 22.4 lbs/day and 4.1 tons/yr.

Applicable Compliance Method:

Compliance with these emission limitations may be demonstrated by multiplying the maximum amount of vinylidene chloride (VCL2) released per billion pounds of water by the maximum pounds of water stripped per day:

(2670 ppb/lb water before stripping - 5.34 ppb/lb water after stripping) (8,396,640 lb water/day) = 22.4 lbs/day

$(22.4 \text{ lbs/day})(365 \text{ days/yr}) / (\text{ton}/2000 \text{ lbs}) = 4.1 \text{ tons/year}$

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

- g) Miscellaneous Requirements

(1) None.



16. P100, Tedlar Film Production Line

Operations, Property and/or Equipment Description:

Polyvinyl fluoride film extrusion and forming 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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) and OAC rule 3745-31-05(A)(3) (P0116294, as issued 3/10/2014)	Volatile Organic Compound (VOC) emissions from the emissions unit stack shall be controlled by a wet scrubber with a minimum control efficiency of 98.98% at all times that the extruder with filter and casting machine and oven are in operation.
b.	OAC rule 3745-31-05(F)	See b)(2)a., b., and c
c.	40 CFR part 64 Compliance Assurance Monitoring (CAM)	See b)(2)a, d)(1), d)(2) d)(3) and e)(1).

(2) Additional Terms and Conditions

a. The captured emissions from this emissions unit shall be vented to a wet scrubber at all times that the extruder with filter and casting machine and oven are in operation.

b. For purposes of establishing avoidance of a major new source review modification at a current major stationary source, this emissions unit is limited to 5.83 tons per year of VOC emissions based upon a rolling, 12-month period. This limitation was established based on the use of the scrubber and the maximum potential cast production rate and maximum solvent usage rate as stated in the PTI application.

c. Fugitive VOC emissions from this emissions unit constitute a summation of VOC emissions from pump seals, valves, and flanges, as well as oven doors and seals. All equipment must be maintained so as to prevent vapor leaks from



pump seals, valves, and flanges, oven doors and seals and related equipment. The permittee shall maintain this emission unit and associated equipment in order to reduce or minimize fugitive VOC emissions.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation contained in this permit, the acceptable range for the pressure drop across the scrubber, that shall be maintained in order to demonstrate compliance, shall be between 16" to 40" H₂O (gauge).

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (2) In order to maintain compliance with the applicable emission limitations contained in this permit, the acceptable scrubber liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than 800 kg of water per hour.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in inches H₂O, gauge) and the scrubber liquid flow rate (in Kg per hour) during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber and flow rate on a continuous basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable range or limit for pressure drop across the scrubber and the liquid flow rate shall be based upon the most recent performance testing which demonstrated compliance.

Whenever the monitored value for any parameter deviates from the range(s) or minimum limit(s) established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment parameters



within the acceptable range(s), or at or above the minimum limit(s) 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 the corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop and flow rate 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.

These range(s) and/or limit(s) for the pressure drop and liquid flow rate are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA Central District Office or local air agency. The permittee may request revisions to the permitted range or limit for the pressure drop or liquid flow rate based upon information obtained during future performance tests that demonstrate compliance with the allowable VOC emission rate for this/these emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative permit modification.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (4) The permittee shall maintain monthly records of the following for emissions unit P100:
 - a. the company identification of each solvent used;
 - b. the solvent usage rate, in pounds per month;
 - c. the cast production rate, in pounds per month;
 - d. the VOC stack emissions from the emission unit, in pounds and tons per month, calculated using the engineering calculations contained in the PTI application(s) associated with this permit, and
 - e. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the VOC emissions, in tons.



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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. all exceedances of the rolling, 12-month emission limitation for VOC;
 - b. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber or the liquid flow rate was outside of the appropriate range or limit specified in d)(1) and d)(2);
 - c. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber;
 - d. each incident of deviation described in "a" or "b" (above) where a prompt investigation was not conducted;
 - e. each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the pressure drop or liquid flow rate into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - f. each incident of deviation described in "a" or "b" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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

[OAC rule 3745-15-03(B)(2) and 40 CFR Part 64]

- (3) The permittee shall also submit annual reports that specify the total actual annual VOC emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

[OAC rule 3745-78-02]



f) Testing Requirements

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

Emission Limitation:

VOC emissions from the emissions unit stack shall be controlled by a wet scrubber with a minimum control efficiency of 98.98% at all times that the extruder with filter and casting machine and oven are in operation.

Applicable Compliance Method:

Compliance was demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 25 or 25A, on July 31, 2012. The results of the emissions test reported to be an average of 99.88 percent destruction efficiency.

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

g) Miscellaneous Requirements

- (1) None.



17. P102, Tedlar Solvent Recovery Area

Operations, Property and/or Equipment Description:

Solvent Recovery Area

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) g)(1).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01. (P0116294, issued 3/10/2014)	See b)(2)a. and c.
b.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06.	See b)(2)d.

(2) Additional Terms and Conditions

a. Based on the hourly calculated fugitive potential emission rate, the unrestricted potential to emit VOC emissions from this emissions unit, based on 8,760 hours per 365 days of operation per year, is 0.22 ton per month averaged over a twelve-month period. Therefore, it is not necessary to develop record keeping and/or reporting requirements.

b. The permittee shall maintain this emission unit and associated equipment in order to reduce or minimize VOC emissions.

c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006, (Senate Bill 265 changes), such that BAT is no longer required by State regulations for emission source NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S.



EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

- d. The following rule paragraph will apply once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan:

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC is less than 10 tons per year.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) None.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall also submit annual reports that specify the total actual annual VOC emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

[OAC rule 3745-78-02]

f) Testing Requirements

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

Emissions Limitation:

VOC emissions from the emissions unit stack shall not exceed 0.22 ton per month averaged over a twelve-month period.

Applicable Compliance Method:

Based on the hourly calculated fugitive potential emission rate, the unrestricted potential to emit VOC emissions from this emissions unit, based on 8,760 hours per 365 days of operation per year divided by 12 months in a year.



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

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTI prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.



18. P103, Tedlar Melt Filter Maintenance

Operations, Property and/or Equipment Description:

Melt Filter Cleaning Operation

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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01. (P0116294, as issued 3/10/2014)	See b)(2)c. and e.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See b)(2)d.
c.	OAC rule 3745-31-05(F) (Voluntary Limitation) (P0116294, as issued 3/10/2014)	VOC emissions from the emissions unit stack shall not exceed 0.28 ton per year as a rolling, 12-month summation. See b)(2)a., b. and e.

(2) Additional Terms and Conditions

a. The captured VOC emissions from this emissions unit shall be vented to the carbon adsorber at all times the emissions unit is in operation. The rolling, 12-month emission limitation is based on the use of the carbon adsorber and the maximum potential flow rate as stated in the PTI application.

b. The rolling, 12-month VOC emissions limit was established to reflect the controlled potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this emissions limitation.

c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS



pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

- d. The following rule paragraph will apply once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan: OAC rule 3745-31-05(F)

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the potential to emit for VOC, taking into account air pollution controls installed on the source, is less than 10 tons per year.

- e. The carbon adsorption air pollution control device shall be operated at a 98%, by weight, inlet/outlet VOC emissions control efficiency or an outlet emission concentration of not greater than 20 ppmv.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The carbon adsorber shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

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

- (2) The permittee shall properly install, operate, and maintain a continuous organic monitoring device and recorder that measures and records the VOC concentrations in the exhaust gases from the carbon adsorber when the emissions unit is in operation, including periods of startup and shutdown. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 and shall be capable of accurately measuring the VOC concentration. The organic monitoring device and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee.

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

- (3) The permittee shall properly install, operate, and maintain a continuous flow monitoring device and recorder that measures and records the flow rate of the exhaust gases from the carbon adsorber when the emissions unit is in operation, including periods of startup and shutdown. The flow monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance



Specification 6. The flow monitoring device and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee.

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

- (4) The permittee shall collect and record the following information each day the emissions unit is in operation:
- a. the average VOC concentration in the exhaust gases from the adsorber, in ppmv, for the time in which the associated emission unit was in operation; and
 - b. a log of the downtime for the capture (collection) system, carbon adsorbers, and monitoring equipment when the associated emissions unit was in operation

[OAC rule 3745-31-05(F) and OAC rule 3745-77-07(A)(1)]

- (5) Whenever the monitored average VOC concentration of the exhaust gases from the carbon adsorber deviates from the limit/range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
- a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/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 VOC concentration of the exhaust gases from the carbon adsorber 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 3745-31-05(F) and OAC rule 3745-77-07(A)(1)]

- (6) The permittee shall maintain monthly records of the following information:
 - a. the VOC emission rate, in pounds or tons, for each month of operation calculated using the engineering calculations contained in the permit application; and
 - b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the VOC emissions, in tons.

[OAC rule 3745-31-05(F) and OAC rule 3745-77-07(A)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each period of time (start time and date, and end time and date) when the average VOC concentration of the exhaust gases from the carbon adsorber was above 20 ppmv;
 - b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the carbon adsorber;
 - c. each incident of deviation described in "a" or "b" (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the emissions unit into compliance and/or the VOC concentration of the exhaust gases into compliance with the acceptable limit, was determined to be necessary and not taken; and
 - e. each incident of deviation described in "a" or "b" where proper records were not maintained for the investigation and/or the corrective action(s), and
 - f. all exceedances of the rolling, 12-month rolling emission limitation for VOC.

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

[OAC rule 3745-31-05(F) and 3745-77-07(C)(1)]



- (2) The permittee shall also submit annual reports that specify the total actual annual VOC emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

[OAC rule 3745-78-02]

f) Testing Requirements

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

a. Emission Limitation:

VOC emissions from the emissions unit stack shall be controlled by a carbon adsorber with a minimum control efficiency of 98% or an outlet emission concentration of no greater than 20 ppmv.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements as specified in Section d)(4).

If required, compliance shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 25 or 25A.

b. Emissions Limitation:

VOC emissions from the emissions unit stack shall not exceed 0.28 ton as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements as specified in Section d)(6).

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

g) Miscellaneous Requirements

- (1) None.