



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

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Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

02/29/00

CERTIFIED MAIL

**RE: Preliminary Proposed Title V
Chapter 3745-77 permit**

02-43-00-0165
PET Processors, L.L.C.
Jerry K. Brady
1350 Bacon Road
Painesville, OH 44007-4718

Dear Jerry K. Brady:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 06/30/99. The comment period has ended. We are now ready to submit this permit to USEPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written or with agreed-upon changes, then you have the opportunity to schedule a meeting with us to discuss your concerns.

Please contact Jim Orlemann, Engineering Section Manager, 614-644-3592, or you can telefax your request to (614) 644-3681, within fourteen (14) days from receipt of this letter if a meeting is desired. If a request for a meeting is not received within fourteen (14) days of receipt of this letter, we will forward this proposed permit (as written, or with agreed-upon changes) to USEPA for approval.

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: Northeast District Office
Becky Castle, DAPC PMU



Ohio EPA

State of Ohio Environmental Protection Agency

PRELIMINARY PROPOSED TITLE V PERMIT

Date: 02/29/00

Effective Date:

Expiration Date:

The duration of this permit will be five years.

This document constitutes issuance to:

PET Processors, L.L.C.
1350 Bacon Road
Painesville, OH 44077-4718

of a Title V permit for Facility ID: 02-43-00-0165

Emissions Unit ID (Company ID)/

Emissions Unit Activity Description:

P010 (Dryer 1)

Rotary Vacuum Dryer 1 , Stokes Model 159-10, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P011 (Dryer 3)

Rotary Vacuum Dryer 3, Stokes Model 159-10, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P012 (Dryer 5)

Rotary Vacuum Dryer 5, Stokes Model 159-10, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P013 (Dryer 7)

Rotary Vacuum Dryer 7, Stokes Model 159-10, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P014 (Dryer 9)

Rotary Vacuum Dryer 9, Stokes Model 159-10, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized

to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P015 (Dryer 11)

Rotary Vacuum Dryer 11, Stokes Model 159-10, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P022 (Dryer 16)

Rotary Vacuum Dryer 16, Stokes Model 900-159 and Devine Model JCB 105-37, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P023 (Dryer 13)

Rotary Vacuum Dryer 13, Stehning Model 7965, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P024 (Dryer 15)

Rotary Vacuum Dryer 15, Stehning Model 7965, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P026 (Pre-Crystallizer 1)

The Pre-Crystallizer 1 consists of the Solidaire Pre-Crystallizer Model SJS 30-20, two Pre-Dryer Tanks of 500 cubic feet each, a molecular sieve dryer Conair Dehumidifier Model 80010, a Flexkleen Fabric Filter to filter the recirculating inlet air to the Dehumidifier, and two Weigh Hoppers. In this process, the amorphous (and transparent) polyester pellets are cold-crystallized during several minutes in the Solidaire to crystalline (and opaque) pellets, dried several hours in the Pre-Dryers, and then transferred to a Rotary Vacuum Dryer for further processing. In the Conair Dehumidifier one of the five beds is always in the regeneration stage which has both a separate air path of input ambient air to the stack exhaust output and separate heating to vaporize water and an organic compound to the stack exhaust.

P027 (Dryer 19)

Rotary Vacuum Dryer 19, Stehning Model 7965, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P028 (Dryer 22)

Rotary Vacuum Dryer 22, Patterson Kelly, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized. Rotary Vacuum Dryer 22 is used to solid-state polymerize polyamide 6 and then an in-line condenser, which is located before the vacuum pump and at 0.05 to 2 mm Hg vacuum, is used to collect the organic compound, which solidifies at 69 deg C. A propane-fired Steamer, rated at 0.367 MBtuh and with a separate stack, is used to melt and dissolve the solid organic compound from the condenser.

P031 (Dryer 23)

Abbe, Model RCVD-108, Rotary Vacuum Dryer 23 is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P032 (Dryer 2)

Rotary Vacuum Dryer 2, Stokes Model 159-10, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized. Converting the common Wall Stack of Dryers 1 and 2 to a common Roof Stack.

P033 (Dryer 4)

Rotary Vacuum Dryer 4, Stokes Model 159-10, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized. Converting the common Wall Stack of Dryers 3 and 4 to two (2) separate Roof Stacks for Dryer 3 and for Dryer 4.

P034 (Dryer 6)

Rotary Vacuum Dryer 6, Stokes Model 159-10, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized. Converting the common Wall Stack of Dryers 5 and 6 to two (2) separate Roof Stacks for Dryer 5 and for Dryer 6.

P035 (Dryer 8)

Rotary Vacuum Dryer 8, Stokes Model 159-10, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P036 (Dryer 10)

Rotary Vacuum Dryer 10, Stokes Model 159-10, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P037 (Dryer 12)

Rotary Vacuum Dryer 12, Stokes Model 159-10, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P038 (Dryer 18)

Rotary Vacuum Dryer 18, Devine Model JCB 105-37, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P039 (Dryer 14)

Rotary Vacuum Dryer 14, Stehning Model 7965, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

P040 (Dryer 17)

Rotary Vacuum Dryer 17, Stehning Model 7965, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas-- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. 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. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330) 425-9171

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., 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.) See B.6 below if no deviations occurred during the quarter.
 - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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

3. 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 CFR 68.215(a), the permittee shall submit either of the following:

- a. a compliance plan for meeting the requirements of 40 CFR Part 68 by the date specified in 40 CFR 68.10(a) and OAC 3745-104-05(A); or
- b. as part of the compliance certification submitted under 40 CFR 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 CFR Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

4. 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.

5. 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.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. 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.

7. 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.

8. 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.

9. 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 general terms and conditions shall apply to all operating scenarios authorized in this permit.

10. 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 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.

11. 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.

12. 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:
 - i. 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.
 - ii. 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.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be

submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. 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 appropriate Ohio EPA District Office or local air agency and to the Administrator of U.S. EPA in the following manner and with the following content:
- i. 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.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. 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.

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

15. 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.

16. 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, except that no such notice shall be required for changes that qualify as insignificant emission 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; and
- 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.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

17. Compliance Method Requirements

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

18. Title VI Provisions

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

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

B. State Only Enforceable Section

1. 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.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., 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.)

3. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

4. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

5. 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.

6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

None

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

B009 - Cleaver Brooks Boiler #1 (8.2 MMBtu)
B010 - Cleaver Brooks Boiler #2 (8.2 MMBtu)
B011 - Cleaver Brooks Boiler #3 (8.2 MMBtu)
B012 - Cleaver Brooks Boiler #4 (8.2 MMBtu)
B013 - Fulton-Thermopac Heater #1 (3.4 MMBtu)
B014 - Fulton-Thermopac Heater #2 (8.0 MMBtu)
B015 - Fulton-Thermopac Heater #3 (8.8 MMBtu)
P025 - Crystallizer 1
T001 - #2 Fuel Oil Storage Tank #1
T002 - #2 Fuel Oil Storage Tank #2
T003 - #2 Fuel Oil Storage Tank #3
Z001 - Mist Hood
Z002 - Graymills Parts Washer
Z003 - Maintenance Welding
Z004 - Heat Transfer Oil Storage Tank 4
Z005 - Heat Transfer Oil Storage Tank 5
Z006 - Sollstrand Portable Heater
Z007 - Natural Gas Fired Furnace 1
Z008 - Natural Gas Fired Furnace 2
Z009 - Natural Gas Fired Furnace 3
Z010 - Procedyne Muffle Furnace
Z011 - Walk-in Hood
Z012 - Hilco Oil Recycling Unit

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within a Permit to Install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 1 (P010)

Activity Description: Rotary Vacuum Dryer 1 , Stokes Model 159-10, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 1, Stokes Model 159-10, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. **Additional Terms and Conditions**

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 3 (P011)

Activity Description: Rotary Vacuum Dryer 3, Stokes Model 159-10, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 3, Stokes Model 159-10, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. Additional Terms and Conditions

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 5 (P012)

Activity Description: Rotary Vacuum Dryer 5, Stokes Model 159-10, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 5, Stokes Model 159-10, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. Additional Terms and Conditions

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 7 (P013)

Activity Description: Rotary Vacuum Dryer 7, Stokes Model 159-10, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 7, Stokes Model 159-10, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. Additional Terms and Conditions

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 9 (P014)

Activity Description: Rotary Vacuum Dryer 9, Stokes Model 159-10, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 9, Stokes Model 159-10, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. Additional Terms and Conditions

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 11 (P015)

Activity Description: Rotary Vacuum Dryer 11, Stokes Model 159-10, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 11, Stokes Model 159-10, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. Additional Terms and Conditions

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 16 (P022)

Activity Description: Rotary Vacuum Dryer 16, Stokes Model 900-159 and Devine Model JCB 105-37, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 16, Stokes Model 900-159, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. **Additional Terms and Conditions**

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 16, Stokes Model 900-159, used to solid-state polymerize polyesters and other polymers in the form of small pellets.	OAC rule 3745-31-05 PTI No. 02-3713	40 pounds per day of organic compound emissions.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each week for this emissions unit:
 - a. The total weight of raw materials for each batch process.
 - b. The total weight of final products for each batch process.
 - c. The total organic compound emissions from all the batch processes, in pounds per week, calculated by the material balance from the information above.
 - d. The number of days during which the emissions unit operated.
 - e. The average daily organic compound emissions, i.e., c/d.
2. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include an identification of each week during which the average organic compound emissions exceeded 40 pounds per day and the actual average organic compound emissions for each such week.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section B.I.1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:
40 pounds per day of OC

Applicable Compliance Method:
Compliance shall be based on the record keeping specified in Section B.III.1 above.

VI. Miscellaneous Requirements

1. This permit allows the use of materials specified by the permittee in the permit to install application (PTI number 02-3713) for this emissions unit.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH),";
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 13 (P023)

Activity Description: Rotary Vacuum Dryer 13, Stehning Model 7965, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 13, Stehning Model 7965, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. Additional Terms and Conditions

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 13, Stehning Model 7965, used to solid-state polymerize polyesters and other polymers in the form of small pellets.	OAC rule 3745-31-05 PTI No. 02-4449	20 pounds per day of organic compound emissions.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each week for this emissions unit:
 - a. The total weight of raw materials for each batch process.
 - b. The total weight of final products for each batch process.
 - c. The total organic compound emissions from all the batch processes, in pounds per week, calculated by the material balance from the information above.
 - d. The number of days during which the emissions unit operated.
 - e. The average daily organic compound emissions, i.e., c/d.
2. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include an identification of each week during which the average organic compound emissions exceeded 20 pounds per day and the actual average organic compound emissions for each such week.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section B.I.1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:
20 pounds per day of OC

Applicable Compliance Method:
Compliance shall be based on the record keeping specified in Section B III.1.

VI. Miscellaneous Requirements

1. This permit allows the use of materials specified by the permittee in the permit to install application (PTI number 02-4449) for this emissions unit.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH),";
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 15 (P024)

Activity Description: Rotary Vacuum Dryer 15, Stehning Model 7965, are used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 15, Stehning Model 7965, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. Additional Terms and Conditions

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 15, Stehning Model 7965, used to solid-state polymerize polyesters and other polymers in the form of small pellets.	OAC rule 3745-31-05 PTI No. 02-6503	4 pounds per hour and 20 pounds per day of organic compound emissions.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each week for this emissions unit:
 - a. The total weight of raw materials for each batch process.
 - b. The total weight of final products for each batch process.
 - c. The total organic compound emissions from all the batch processes, in pounds per week, calculated by the material balance from the information above.
 - d. The number of days during which the emissions unit operated.
 - e. The total number of hours the emissions unit operated.
 - f. The average daily organic compound emissions, i.e., c/d, in pounds per day.
 - g. The average hourly organic compound emissions, i.e., c/e, in pounds per hour.
2. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. An identification of each week during which the average hourly organic compound emissions exceeded 4 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each week during which the organic compound emissions exceeded 20 pounds per day, and the actual organic compound emissions for each such day.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section B.I.1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:

4 pounds per hour and 20 pounds per day of OC

Applicable compliance method:

Compliance shall be based on the record keeping specified in Section B.III.1.

VI. Miscellaneous Requirements

1. This permit allows the use of materials specified by the permittee in the permit to install application (PTI number 02-6503) for this emissions unit.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH);"
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Pre-Crystallizer 1 (P026)

Activity Description: The Pre-Crystallizer 1 consists of the Solidaire Pre-Crystallizer Model SJS 30-20, two Pre-Dryer Tanks of 500 cubic feet each, a molecular sieve dryer Conair Dehumidifier Model 80010, a Flexkleen Fabric Filter to filter the recirculating inlet air to the Dehumidifier, and two Weigh Hoppers. In this process, the amorphous (and transparent) polyester pellets are cold-crystallized

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
The Pre-Crystallizer 1 consists of the Solidaire Pre-Crystallizer Model SJS 30-20, two Pre-Dryer Tanks of 500 cubic feet each, a molecular sieve dryer Conair Dehumidifier Model 80010, a Flexkleen Fabric Filter to filter the recirculating inlet air to the Dehumidifier, and two Weigh Hoppers.		See additional terms and conditions A.2.a.
	OAC rule 3745-17-11	8.56 pounds per hour of particulate matter emissions.
	OAC rule 3745-17-07(A)	Except as otherwise specified in paragraphs (A)(1) to (A)(3) of OAC rule 3745-17-07, visible particulate emissions from the stack shall not exceed twenty percent opacity as a six-minute average, determined in accordance with OAC rule 3745-17-03(B)(1).

2. Additional Terms and Conditions

- OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 4 to 6 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

V. Testing Requirements

1. Emission Limitation:
8.56 pounds per hour of particulate matter

Applicable Compliance Method:

If required by the Ohio EPA, particulate matter emissions shall be determined in accordance with the following method(s): Method 5 of 40 CFR Part 60, Appendix A.

2. Emission Limitation:
20% opacity

Applicable Compliance Method:

If required by the Ohio EPA, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1), using the methods and procedures specified in U.S. EPA reference method 9.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pre-Crystallizer 1: consisting of Solidaire Pre-Crystallizer Model SJS 30-20, two Pre-Dryer Tanks of 500 cubic feet each, a molecular sieve dryer Conair Dehumidifier Model 80010, a Flexkleen Fabric Filter to filter the recirculating inlet air to the Dehumidifier, and two Weigh Hoppers.	OAC rule 3745-31-05 PTI No. 02-7589	0.01 grain per dry standard cubic foot of particulate emissions 0.52 pound per hour of organic compound emissions. See Additional Terms and Conditions B.I.2.a.

2. Additional Terms and Conditions

- 2.a Monitoring and/or record keeping requirements for organic compound emissions are not required by this permit. Using results provided by the permittee from PTI application number 02-7589, issued June 30, 1993, organic compound emissions were calculated at 0.264 pound per hour at maximum worst case conditions. Based on these calculations, the actual organic compound emissions would not exceed the allowable emission rate of 0.52 pound per hour of organic compounds.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

None

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section B.I.1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:

0.52 pound per hour of OC

Applicable Compliance Method:

If required by the Ohio EPA, organic compound emissions shall be determined in accordance with the following method(s): Method 25 or 25A of 40 CFR Part 60, Appendix A.

2. Emission Limitation:
0.01 grain per dry standard cubic foot of particulate matter

Applicable Compliance Method:

If required by the Ohio EPA, particulate matter emissions shall be determined in accordance with the following method(s): Method 5 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. This permit allows the use of materials specified by the permittee in the permit to install application (PTI number 02-7589) for this emissions unit.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH),";
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 19 (P027)

Activity Description: Rotary Vacuum Dryer 19, Stehning Model 7965, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 19, Stehning Model 7965, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. Additional Terms and Conditions

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 19, Stehning Model 7965, used to solid-state polymerize polyesters and other polymers in the form of small pellets.	OAC rule 3745-31-05 PTI No. 02-9210	3 pounds per hour and 15 pounds per day of organic compound emissions.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each week for this emissions unit:
 - a. The total weight of raw materials for each batch process.
 - b. The total weight of final products for each batch process.
 - c. The total organic compound emissions from all the batch processes, in pounds per week, calculated by the material balance from the information above.
 - d. The number of days during which the emissions unit operated.
 - e. The total number of hours the emissions unit operated.
 - f. The average daily organic compound emissions, i.e., c/d, in pounds per day.
 - g. The average hourly organic compound emissions, i.e., c/e, in pounds per hour.
2. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. An identification of each week during which the average hourly organic compound emissions exceeded 3 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each week during which the organic compound emissions exceeded 15 pounds per day, and the actual organic compound emissions for each such day

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section B.I.1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:
3 pounds per hour of OC

Applicable Compliance Method:
Compliance shall be based on the record keeping specified in Section B.III.1.

VI. Miscellaneous Requirements

1. This permit allows the use of materials specified by the permittee in the permit to install application (PTI number 02-9210) for this emissions unit.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH);"
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 22 (P028)

Activity Description: Rotary Vacuum Dryer 22, Patterson Kelly, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight -- but not melted. Some precursor pellets or flakes are dried only. Some precursor pellets are just dried and crystallized. Rotary Vacuum

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Rotary Vacuum Dryer 22, Patterson Kelly, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. **Additional Terms and Conditions**

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 22, Patterson Kelly, used to solid-state polymerize polyesters and other polymers in the form of small pellets.	OAC rule 3745-31-05 PTI No. 02-9210	3 pounds per hour and 15 pounds per day of organic compound emissions.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The average temperature of the exhaust gases from the condenser, for any 3-hour block of time, shall not be greater than 75 degrees Fahrenheit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each week for this emissions unit:
 - a. The total weight of raw materials for each batch process.
 - b. The total weight of final products for each batch process.
 - c. The total organic compound emissions from all the batch processes, in pounds per week, calculated by the material balance from the information above.
 - d. The number of days during which the emissions unit operated.
 - e. The total number of hours the emissions unit operated.
 - f. The average daily organic compound emissions, i.e., c/d, in pounds per day.
 - g. The average hourly organic compound emissions, i.e., c/e, in pounds per hour.
2. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the exhaust gases from the condenser when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within +/- 1 percent of the temperature being measured or +/- 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. The average temperature of the exhaust gases from the condenser during each of the 8 3-hour blocks of time during the day.
- b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. An identification of each week during which the average hourly organic compound emissions exceeded 3 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each week during which the organic compound emissions exceeded 15 pounds per day, and the actual organic compound emissions for each such day.
2. The permittee shall submit temperature deviation (excursion) reports that identify all 3-hour blocks of time during which the average temperature of the exhaust gases from the condenser exceeded the temperature limitation specified above.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section B.I.1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:
3 pounds per hour of OC

Applicable Compliance Method:
Compliance shall be based on the record keeping specified in Section B.III.1.

VI. Miscellaneous Requirements

1. This permit allows the use of materials specified by the permittee in the permit to install application (PTI number 02-9210) for this emissions unit.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH),";
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 23 (P031)

Activity Description: Abbe, Model RCVD-108, Rotary Vacuum Dryer 23 is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas but not melted. Some precursor pellets or flakes are dried

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 23, Abbe Model RCVD-108, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. Additional Terms and Conditions

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 23, Abbe Model RCVD-108, used to solid-state polymerize polyesters and other polymers in the form of small pellets.	OAC rule 3745-31-05 PTI No. 02-11385	8 pounds per hour and 40 pounds per day of organic compound emissions.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The scrubber water flow rate shall be continuously maintained at a value of not less than 2.5 gallons per minute at all times while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each week for this emissions unit:
 - a. The total weight of raw materials for each batch process.
 - b. The total weight of final products for each batch process.
 - c. The total organic compound emissions from all the batch processes, in pounds per week, calculated by the material balance from the information above.
 - d. The number of days during which the emissions unit operated.
 - e. The total number of hours the emissions unit operated.
 - f. The average daily organic compound emissions, i.e., c/d, in pounds per day.
 - g. The average hourly organic compound emissions, i.e., c/e, in pounds per hour.
2. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall properly install, operate and maintain equipment to continuously monitor the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. The scrubber water flow rate, in gallons per minute, on a daily basis.
- b. The operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. An identification of each week during which the average hourly organic compound emissions exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each week during which the organic compound emissions exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber water flow rate was not maintained at or above the required level.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section B.I.1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:

8 pounds per hour and 40 pounds per day of OC

Applicable Compliance Method:

Compliance shall be based on the record keeping specified in Section B.III.1.

VI. Miscellaneous Requirements

1. The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:
 - a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
 - b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
 - c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

VI. Miscellaneous Requirements (continued)

This permit allows the use of materials specified by the permittee in the permit to install application (PTI number 02-11385) for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Acetaldehyde

TLV (ug/m3): 180,000

Maximum Hourly Emission Rate (lbs/hr): 0.27

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 423.5

MAGLC (ug/m3): 4,286

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 2 (P032)

Activity Description: Rotary Vacuum Dryer 2, Stokes Model 159-10, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 2, Stokes Model 159-10, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. **Additional Terms and Conditions**

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 4 (P033)

Activity Description: Rotary Vacuum Dryer 4, Stokes Model 159-10, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 4, Stokes Model 159-10, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. Additional Terms and Conditions

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 6 (P034)

Activity Description: Rotary Vacuum Dryer 6, Stokes Model 159-10, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 6, Stokes Model 159-10, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. **Additional Terms and Conditions**

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 8 (P035)

Activity Description: Rotary Vacuum Dryer 8, Stokes Model 159-10, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 8, Stokes Model 159-10, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. **Additional Terms and Conditions**

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 10 (P036)

Activity Description: Rotary Vacuum Dryer 10, Stokes Model 159-10, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 10, Stokes Model 159-10, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. Additional Terms and Conditions

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 12 (P037)

Activity Description: Rotary Vacuum Dryer 12, Stokes Model 159-10, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 12, Stokes Model 159-10, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. Additional Terms and Conditions

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 18 (P038)

Activity Description: Rotary Vacuum Dryer 18, Devine Model JCB 105-37, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 18, Devine Model 105-37, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. Additional Terms and Conditions

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 18, Devine Model JCB 105-37 used to solid-state polymerize polyesters and other polymers in the form of small pellets.	OAC rule 3745-31-05 PTI No. 02-7278	3 pounds per hour and 15 pounds per day of organic compound emissions.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each week for this emissions unit:
 - a. The total weight of raw materials for each batch process.
 - b. The total weight of final products for each batch process.
 - c. The total organic compound emissions from all the batch processes, in pounds per week, calculated by the material balance from the information above.
 - d. The number of days during which the emissions unit operated.
 - e. The total number of hours the emissions unit operated.
 - f. The average daily organic compound emissions, i.e., c/d, in pounds per day.
 - g. The average hourly organic compound emissions, i.e., c/e, in pounds per hour.
2. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. An identification of each week during which the average hourly organic compound emissions exceeded 3 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each week during which the organic compound emissions exceeded 15 pounds per day, and the actual organic compound emissions for each such day.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section B.I.1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:

3 pounds per hour and 15 pounds per day of OC emissions

Applicable Compliance Method:

Compliance shall be based on the record keeping specified in Section B.III.1.

VI. Miscellaneous Requirements

1. This permit allows the use of materials specified by the permittee in the permit to install application (PTI number 02-7278) for this emissions unit.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH),";
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 14 (P039)

Activity Description: Rotary Vacuum Dryer 14, Stehning Model 7965, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas -- but not melted. Some precursor pellets or flakes are

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 14, Stehning Model 7965, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. **Additional Terms and Conditions**

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 14, Stehning Model 7965, used to solid-state polymerize polyesters and other polymers in the form of small pellets.	OAC rule 3745-31-05 PTI No. 02-4449	20 pounds per day of organic compound emissions.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each week for this emissions unit:
 - a. The total weight of raw materials for each batch process.
 - b. The total weight of final products for each batch process.
 - c. The total organic compound emissions from all the batch processes, in pounds per week, calculated by the material balance from the information above.
 - d. The number of days during which the emissions unit operated.
 - e. The average daily organic compound emissions, i.e., c/d.
2. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include an identification of each week during which the organic compound emissions exceeded 20 pounds per day and the actual organic compound emissions for each such day.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section B.I.1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:
20 pounds per day of OC

Applicable Compliance Method:
Compliance shall be based on the record keeping specified in Section B.III.1.

VI. Miscellaneous Requirements

1. This permit allows the use of materials specified by the permittee in the permit to install application (PTI number 02-4449) for this emissions unit.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH),";
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Dryer 17 (P040)

Activity Description: Rotary Vacuum Dryer 17, Stehning Model 7965, is used to solid-state polymerize polyesters and other condensation polymers in the form of small pellets. The pellets are dried, crystallized, and solid-state polymerized to a higher molecular weight at a high temperature and either a low vacuum or a purging with an inert gas-- but not melted. Some precursor pellets or flakes are

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 17, Stehning Model 7965, used to solid-state polymerize polyesters and other polymers in the form of small pellets.		See additional terms and conditions A.2.a.

2. **Additional Terms and Conditions**

- 2.a OAC rule 3745-21-07(G) is not applicable since liquid organic materials are not used in any process operations associated with this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Rotary Vacuum Dryer 17, Stehning Model 7965, used to solid-state polymerize polyesters and other polymers in the form of small pellets.	OAC rule 3745-31-05 PTI No. 02-6503	4 pounds per hour and 20 pounds per day of organic compound emissions.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each week for this emissions unit:
 - a. The total weight of raw materials for each batch process.
 - b. The total weight of final products for each batch process.
 - c. The total organic compound emissions from all the batch processes, in pounds per week, calculated by the material balance from the information above.
 - d. The number of days during which the emissions unit operated.
 - e. The total number of hours the emissions unit operated.
 - f. The average daily organic compound emissions, i.e., c/d, in pounds per day.
 - g. The average hourly organic compound emissions, i.e., c/e, in pounds per hour.
2. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. An identification of each week during which the average hourly organic compound emissions exceeded 4 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each week during which the organic compound emissions exceeded 20 pounds per day, and the actual organic compound emissions for each such day.

V. Testing Requirements

1. Compliance with the allowable emission limitations in Section B.I.1 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:

4 pounds per hour and 20 pounds per day of OC

Applicable Compliance Method:

Compliance shall be based on the record keeping specified in Section B.III.1.

VI. Miscellaneous Requirements

1. This permit allows the use of materials specified by the permittee in the permit to install application (PTI number 02-6503) for this emissions unit.

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH);"
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

Facility Name: **PET Processors, L.L.C.**
Facility ID: **02-43-00-0165**

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