



Environmental Protection Agency

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

9/14/2012

Joe Blitch
ADVANCED COMPOSITES INC.
1062 FOURTH AVE
Sidney, OH 45365

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0575010183
Permit Number: P0110499
Permit Type: Initial Installation
County: Shelby

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

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

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

If you have any questions, please contact Ohio EPA DAPC, Southwest District Office at (937)285-6357 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: Ohio EPA-SWDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
ADVANCED COMPOSITES INC.**

Facility ID:	0575010183
Permit Number:	P0110499
Permit Type:	Initial Installation
Issued:	9/14/2012
Effective:	9/14/2012
Expiration:	2/3/2021



Division of Air Pollution Control
Permit-to-Install and Operate
for
ADVANCED COMPOSITES INC.

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Authorization

Facility ID: 0575010183
Application Number(s): A0044625
Permit Number: P0110499
Permit Description: PTIO for pyrolysis furnace and various extrusion operations.
Permit Type: Initial Installation
Permit Fee: \$8,350.00
Issue Date: 9/14/2012
Effective Date: 9/14/2012
Expiration Date: 2/3/2021
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

ADVANCED COMPOSITES INC.
1062 FOURTH AVE
SIDNEY, OH 45365

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

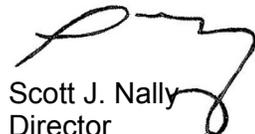
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southwest District Office
401 East Fifth Street
Dayton, OH 45402
(937)285-6357

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Scott J. Nally
Director

Authorization (continued)

Permit Number: P0110499

Permit Description: PTIO for pyrolysis furnace and various extrusion operations.

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

Emissions Unit ID:	N002
Company Equipment ID:	Pyrolysis Furnace
Superseded Permit Number:	P0088887
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P002
Company Equipment ID:	PLASTIC EXTRUDING LINE G
Superseded Permit Number:	05-9679
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P014
Company Equipment ID:	Line K
Superseded Permit Number:	05-9679
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P015
Company Equipment ID:	Line N
Superseded Permit Number:	05-9679
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P016
Company Equipment ID:	Line P
Superseded Permit Number:	05-9679
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P017
Company Equipment ID:	Line R
Superseded Permit Number:	P0088887
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P018
Company Equipment ID:	Line S
Superseded Permit Number:	P0088887
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P019
Company Equipment ID:	Line H
Superseded Permit Number:	05-9679
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P020
Company Equipment ID:	Line E
Superseded Permit Number:	P0088887
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P021
Company Equipment ID:	Line C
Superseded Permit Number:	P0088887
General Permit Category and Type:	Not Applicable

Emissions Unit ID:	P022
Company Equipment ID:	Line V
Superseded Permit Number:	P0088887
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P063
Company Equipment ID:	Line O
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P064
Company Equipment ID:	Line B
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P065
Company Equipment ID:	Extrusion Line L
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P066
Company Equipment ID:	Extrusion Line F
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P067
Company Equipment ID:	Extrusion Line J
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P068
Company Equipment ID:	P&S Mixer 1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P069
Company Equipment ID:	P&S Mixer 2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P070
Company Equipment ID:	P&M Mixer 3
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P071
Company Equipment ID:	P&S Mixer 4
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

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

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

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

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

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

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

¹ Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

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

C. Emissions Unit Terms and Conditions



1. N002, Pyrolysis Furnace

Operations, Property and/or Equipment Description:

12 MMBTU/hr Pyrolysis Furnace

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.20 lbs per 100 pounds of refuse processed.</p> <p>The emissions from natural gas and refuse combustion in this emissions unit shall not exceed the following:</p> <p>1.18 lb/hr and 5.17 tons/yr nitrogen oxides (NOx); 0.99 lb/hr and 4.34 ton/yr carbon monoxide (CO); 0.14 lb/hr and 0.61 ton/yr filterable particulate emissions (PE); 0.14 lb/hr and 0.61 ton/yr PM10; 0.01 lb/hr and 0.04 ton/yr sulfur dioxide (SO2); and 0.06 lb/hr and 0.28 ton/yr VOC</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Compliance with the requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)
b.	OAC rule 3745-17-07(A)	Visible PE emissions from this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.
c.	OAC rule 3745-17-09(B)	The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.20 lbs per 100 pounds of refuse processed.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas and/or propane as fuel in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

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

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

a. Emission Limitations:

- 1.18 lb/hr and 5.17 tons/yr nitrogen oxides (NO_x);
- 0.99 lb/hr and 4.34 ton/yr carbon monoxide (CO);
- 0.14 lb/hr and 0.61 ton/yr filterable particulate emissions (PE);
- 0.14 lb/hr and 0.61 ton/yr PM₁₀;
- 0.01 lb/hr and 0.04 ton/yr sulfur dioxide (SO₂); and
- 0.06 lb/hr and 0.28 ton/yr VOC

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable emission limitations above by multiplying the maximum hourly natural gas consumption rate by the appropriate emission factor from USEPA's AP-42 and allowable particulate emission rate of OAC rule 3745-17-09(B), for incineration of refuse.

If required, the permittee shall demonstrate compliance with the hourly allowable emission limitations above based on the results of emission testing conducted in accordance with the following Methods:

- i. for NO_x, Methods 1 - 4 and 7 of 40 CFR Part 60, Appendix A;i
- ii. for CO, Methods 1 - 4 and 10 of 40 CFR Part 60, Appendix A;
- iii. for PE, Methods 1 - 5 of 40 CFR Part 60, Appendix A;
- iv. for PM₁₀, Methods 201 and 202 of 40 CFR Part 60, Appendix A;
- v. for SO₂, Methods 1 - 4 and 10 of 40 CFR Part 60, Appendix A; and
- vi. for VOC, Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

Compliance with the annual allowable emission limitations above shall be ensured as long as compliance with the hourly allowable emission limitations is maintained (the annual allowable limitations were determined by multiplying the hourly allowable limitations by 8760, and them dividing by 2000).

b. Emission Limitation:

Visible PE from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). None.

g) Miscellaneous Requirements

(1) None.



2. P002, PLASTIC EXTRUDING LINE G

Operations, Property and/or Equipment Description:

PLASTIC EXTRUDING LINE G, FCM-57 w/ mist collector and fabric filter

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)e. and d)(3), below.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The organic compound (OC) emissions from the extrusion operation of this emissions unit shall not exceed 0.27 lbs. per hour. The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.10 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.



d.	OAC rule 3745-17-11(B)(2)	4.76 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the date and time the weekly check was made;
 - b. the visible emission record sheet;
 - c. the color of the emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

a. Emission Limitation:

0.27 lb OC/hr from extrusion operation

The above hourly emission limitation was established by the following equation:

$$\text{HER} = (\text{HPR}/2000) \times \text{EEF}$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (2,500 lbs/hr, from Advanced Composites', Calculation sheet); and

EEF = extruder emission factor, in lbs/1000 lbs processed (0.21 lbs/ton, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999").

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 2,500 pounds of material processed per hour and additive usage.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

0.09 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$\text{HER} = [(\text{HPR}/1000) \times (\text{REF} + \text{EEF} + \text{DEF})]$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (2,500 lbs/hr, from calculation sheet);

REF = raw material handling emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1);

EEF = extruder emission factor, in lbs/1000 lbs processed (0.0303 lbs/1000, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999"); and

DEF = Spin Dryer emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1).

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 2,500 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d)(1) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

c. Emission Limitation:

4.76 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (2,500 pounds per hour / 2,000 = 1.25 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d)(2) of this permit.

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d)(3) of this permit.

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

e. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



3. P014, Line K

Operations, Property and/or Equipment Description:

Extruder Line K, TEX-90

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)e. and d)(3), below.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The organic compound (OC) emissions from the extrusion operation of this emissions unit shall not exceed 0.32 lbs. per hour. The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.11 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.



d.	OAC rule 3745-17-11(B)(2)	5.38 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the date and time the weekly check was made;
 - b. the visible emission record sheet;
 - c. the color of the emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]



f) Testing Requirements

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

a. Emission Limitation:

0.32 lb OC/hr from extrusion operation

The above hourly emission limitation was established by the following equation:

$$HER = (HPR/2000) \times EEF$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (3,000 lbs/hr, from Advanced Composites', Calculation sheet); and

EEF = extruder emission factor, in lbs/1000 lbs processed (0.21 lbs/ton, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999").

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 3,000 pounds of material processed per hour and additive usage.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the material(s) or use of new material(s) that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

0.11 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$HER = [(HPR/1000) \times (REF + EEF + DEF)]$$

where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (3,000 lbs/hr, from calculation sheet);

REF = raw material handling emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1);

EEF = extruder emission factor, in lbs/1000 lbs processed (0.0303 lbs/1000, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999"); and

DEF = Spin Dryer emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1).

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 3,000 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

c. Emission Limitation:

5.38 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (3,000 pounds per hour / 2,000 = 1.5 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

e. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



4. P015, Line N

Operations, Property and/or Equipment Description:

Extruder line N, ZSK-70

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)e. and d)(3), below.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The organic compound (OC) emissions from the extrusion operation of this emissions unit shall not exceed 0.23 lbs. per hour. The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.08 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.



d.	OAC rule 3745-17-11(B)(2)	4.37 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the date and time the weekly check was made;
 - b. the visible emission record sheet;
 - c. the color of the emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

a. Emission Limitation:

0.23 lb OC/hr from extrusion operation

The above hourly emission limitation was established by the following equation:

$$\text{HER} = (\text{HPR}/2000) \times \text{EEF}$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (2,200 lbs/hr, from Advanced Composites', Calculation sheet); and

EEF = extruder emission factor, in lbs/1000 lbs processed (0.21 lbs/ton, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999").

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 2,200 pounds of material processed per hour and additive usage.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the material(s) or use of new material(s) that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

0.08 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$\text{HER} = [(\text{HPR}/1000) \times (\text{REF} + \text{EEF} + \text{DEF})]$$

where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (2,200 lbs/hr, from calculation sheet);

REF = raw material handling emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1);

EEF = extruder emission factor, in lbs/1000 lbs processed (0.0303 lbs/1000, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999"); and

DEF = Spin Dryer emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1).

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 2,200 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

c. Emission Limitation:

4.37 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (2,200 pounds per hour / 2,000 = 1.1 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

e. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



5. P016, Line P

Operations, Property and/or Equipment Description:

Extruder Line P, ZSK-92

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)e. and d)(3), below.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The organic compound (OC) emissions from the extrusion operation of this emissions unit shall not exceed 0.53 lbs. per hour. The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.19 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.



d.	OAC rule 3745-17-11(B)(2)	7.58 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the date and time the weekly check was made;
 - b. the visible emission record sheet;
 - c. the color of the emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

a. Emission Limitation:

0.53 lb OC/hr from extrusion operation

The above hourly emission limitation was established by the following equation:

$$\text{HER} = (\text{HPR}/2000) \times \text{EEF}$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (5,000 lbs/hr, from Advanced Composites', Calculation sheet); and

EEF = extruder emission factor, in lbs/1000 lbs processed (0.21 lbs/ton, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999").

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 5,000 pounds of material processed per hour and additive usage.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the material(s) or use of new material(s) that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

0.19 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$\text{HER} = [(\text{HPR}/1000) \times (\text{REF} + \text{EEF} + \text{DEF})]$$

where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (5,000 lbs/hr, from calculation sheet);

REF = raw material handling emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1);

EEF = extruder emission factor, in lbs/1000 lbs processed (0.0303 lbs/1000, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999"); and

DEF = Spin Dryer emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1).

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 5,000 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

c. Emission Limitation:

7.58 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (5,000 pounds per hour / 2,000 = 1.1 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

e. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



6. P017, Line R

Operations, Property and/or Equipment Description:

ZSK-58, extruder line w/ particulate controls

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)e. and d)(3), below.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The organic compound (OC) emissions from the extrusion operation of this emissions unit shall not exceed 0.37 lbs. per hour. The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.13 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.



d.	OAC rule 3745-17-11(B)(2)	5.97 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the date and time the weekly check was made;
 - b. the visible emission record sheet;
 - c. the color of the emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

a. Emission Limitation:

0.53 lb OC/hr from extrusion operation

The above hourly emission limitation was established by the following equation:

$$\text{HER} = (\text{HPR}/2000) \times \text{EEF}$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (3,500 lbs/hr, from Advanced Composites', Calculation sheet); and

EEF = extruder emission factor, in lbs/1000 lbs processed (0.21 lbs/ton, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999").

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 3,500 pounds of material processed per hour and additive usage.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the material(s) or use of new material(s) that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

0.13 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$\text{HER} = [(\text{HPR}/1000) \times (\text{REF} + \text{EEF} + \text{DEF})]$$

where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (3,500 lbs/hr, from calculation sheet);

REF = raw material handling emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1);

EEF = extruder emission factor, in lbs/1000 lbs processed (0.0303 lbs/1000, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999"); and

DEF = Spin Dryer emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1).

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 5,000 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

c. Emission Limitation:

5.97 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (3,500 pounds per hour / 2,000 = 1.75 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

e. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



7. P018, Line S

Operations, Property and/or Equipment Description:

ZSK-92A, extruder line w/ particulate controls

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)e. and d)(3), below.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The organic compound (OC) emissions from the extrusion operation of this emissions unit shall not exceed 0.42 lbs. per hour. The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.15 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.



d.	OAC rule 3745-17-11(B)(2)	6.52 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the date and time the weekly check was made;
 - b. the visible emission record sheet;
 - c. the color of the emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

a. Emission Limitation:

0.42 lb OC/hr from extrusion operation

The above hourly emission limitation was established by the following equation:

$$\text{HER} = (\text{HPR}/2000) \times \text{EEF}$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (4,000 lbs/hr, from Advanced Composites', Calculation sheet); and

EEF = extruder emission factor, in lbs/1000 lbs processed (0.21 lbs/ton, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999").

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 4,000 pounds of material processed per hour and additive usage.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the material(s) or use of new material(s) that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

0.15 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$\text{HER} = [(\text{HPR}/1000) \times (\text{REF} + \text{EEF} + \text{DEF})]$$

where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (4,000 lbs/hr, from calculation sheet);

REF = raw material handling emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1);

EEF = extruder emission factor, in lbs/1000 lbs processed (0.0303 lbs/1000, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999"); and

DEF = Spin Dryer emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1).

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 4,000 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

c. Emission Limitation:

6.52 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (4,000 pounds per hour / 2,000 = 2.0 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

e. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



8. P019, Line H

Operations, Property and/or Equipment Description:

Extruder line ZSK-70A

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)e. and d)(3), below.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The organic compound (OC) emissions from the extrusion operation of this emissions unit shall not exceed 0.32 lbs. per hour. The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.11 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.



d.	OAC rule 3745-17-11(B)(2)	5.38 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the date and time the weekly check was made;
 - b. the visible emission record sheet;
 - c. the color of the emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

a. Emission Limitation:

0.32 lb OC/hr from extrusion operation

The above hourly emission limitation was established by the following equation:

$$\text{HER} = (\text{HPR}/2000) \times \text{EEF}$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (3,000 lbs/hr, from Advanced Composites', Calculation sheet); and

EEF = extruder emission factor, in lbs/1000 lbs processed (0.21 lbs/ton, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999").

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 3,000 pounds of material processed per hour and additive usage.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the material(s) or use of new material(s) that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

0.11 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$\text{HER} = [(\text{HPR}/1000) \times (\text{REF} + \text{EEF} + \text{DEF})]$$

where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (3,000 lbs/hr, from calculation sheet);

REF = raw material handling emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1);

EEF = extruder emission factor, in lbs/1000 lbs processed (0.0303 lbs/1000, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999"); and

DEF = Spin Dryer emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1).

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 3,000 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

c. Emission Limitation:

5.38 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (3,000 pounds per hour / 2,000 = 1.5 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

e. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



9. P020, Line E

Operations, Property and/or Equipment Description:

KTX-73, extruder line w/ particulate controls

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)e. and d)(3), below.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The organic compound (OC) emissions from the extrusion operation of this emissions unit shall not exceed 0.46 lbs. per hour. The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.17 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.



d.	OAC rule 3745-17-11(B)(2)	6.95 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the date and time the weekly check was made;
 - b. the visible emission record sheet;
 - c. the color of the emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

a. Emission Limitation:

0.46 lb OC/hr from extrusion operation

The above hourly emission limitation was established by the following equation:

$$\text{HER} = (\text{HPR}/2000) \times \text{EEF}$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (4,400 lbs/hr, from Advanced Composites', Calculation sheet); and

EEF = extruder emission factor, in lbs/1000 lbs processed (0.21 lbs/ton, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999").

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 4,400 pounds of material processed per hour and additive usage.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the material(s) or use of new material(s) that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

0.17 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$\text{HER} = [(\text{HPR}/1000) \times (\text{REF} + \text{EEF} + \text{DEF})]$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (4,400 lbs/hr, from calculation sheet);

REF = raw material handling emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1);

EEF = extruder emission factor, in lbs/1000 lbs processed (0.0303 lbs/1000, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999"); and

DEF = Spin Dryer emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1).

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 4,400 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

c. Emission Limitation:

6.95 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (4,400 pounds per hour / 2,000 = 2.2 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

e. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



10. P021, Line C

Operations, Property and/or Equipment Description:

KTX-73A, extruder line w/ particulate controls

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)e. and d)(3), below.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The organic compound (OC) emissions from the extrusion operation of this emissions unit shall not exceed 0.63 lbs. per hour. The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.23 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.



d.	OAC rule 3745-17-11(B)(2)	8.56 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the date and time the weekly check was made;
 - b. the visible emission record sheet;
 - c. the color of the emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

a. Emission Limitation:

0.63 lb OC/hr from extrusion operation

The above hourly emission limitation was established by the following equation:

$$\text{HER} = (\text{HPR}/2000) \times \text{EEF}$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (6,000 lbs/hr, from Advanced Composites', Calculation sheet); and

EEF = extruder emission factor, in lbs/1000 lbs processed (0.21 lbs/ton, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999").

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 6,000 pounds of material processed per hour and additive usage.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

0.23 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$\text{HER} = [(\text{HPR}/1000) \times (\text{REF} + \text{EEF} + \text{DEF})]$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (2,500 lbs/hr, from calculation sheet);

REF = raw material handling emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1);

EEF = extruder emission factor, in lbs/1000 lbs processed (0.0303 lbs/1000, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999"); and

DEF = Spin Dryer emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1).

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 6,000 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

c. Emission Limitation:

8.56 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (6,000 pounds per hour / 2,000 = 3.0 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

e. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



11. P022, Line V

Operations, Property and/or Equipment Description:

ZSK-133, extruder line w/ particulate controls

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)e. and d)(3), below.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The organic compound (OC) emissions from the extrusion operation of this emissions unit shall not exceed 1.84 lbs. per hour. The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.66 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.



d.	OAC rule 3745-17-11(B)(2)	17.60 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the date and time the weekly check was made;
 - b. the visible emission record sheet;
 - c. the color of the emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

a. Emission Limitation:

1.84 lb OC/hr from extrusion operation

The above hourly emission limitation was established by the following equation:

$$\text{HER} = (\text{HPR}/2000) \times \text{EEF}$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (17,500 lbs/hr, from Advanced Composites', Calculation sheet); and

EEF = extruder emission factor, in lbs/1000 lbs processed (0.21 lbs/ton, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999").

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 17,500 pounds of material processed per hour and additive usage.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

0.66 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$\text{HER} = [(\text{HPR}/1000) \times (\text{REF} + \text{EEF} + \text{DEF})]$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (17,500 lbs/hr, from calculation sheet);

REF = raw material handling emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1);

EEF = extruder emission factor, in lbs/1000 lbs processed (0.0303 lbs/1000, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999"); and

DEF = Spin Dryer emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1).

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 17,500 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d)(1) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

c. Emission Limitation:

17.60 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (17,500 pounds per hour / 2,000 = 8.8 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

e. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



12. P063, Line O

Operations, Property and/or Equipment Description:

PLASTIC EXTRUDER LINE, Line O

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)e. and d)(3), below.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The organic compound (OC) emissions from the extrusion operation of this emissions unit shall not exceed 0.53 lbs. per hour. The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.19 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.



d.	OAC rule 3745-17-11(B)(2)	7.58 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the date and time the weekly check was made;
 - b. the visible emission record sheet;
 - c. the color of the emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

a. Emission Limitation:

0.53 lb OC/hr from extrusion operation

The above hourly emission limitation was established by the following equation:

$$\text{HER} = (\text{HPR}/2000) \times \text{EEF}$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (5,000 lbs/hr, from Advanced Composites', Calculation sheet); and

EEF = extruder emission factor, in lbs/1000 lbs processed (0.21 lbs/ton, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999").

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 5,000 pounds of material processed per hour and additive usage.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the material(s) or use of new material(s) that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

0.19 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$\text{HER} = [(\text{HPR}/1000) \times (\text{REF} + \text{EEF} + \text{DEF})]$$

where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (5,000 lbs/hr, from calculation sheet);

REF = raw material handling emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1);

EEF = extruder emission factor, in lbs/1000 lbs processed (0.0303 lbs/1000, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999"); and

DEF = Spin Dryer emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1).

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 5,000 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

c. Emission Limitation:

7.58 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (5,000 pounds per hour / 2,000 = 1.1 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

e. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



13. P064, Line B

Operations, Property and/or Equipment Description:

PLASTIC EXTRUDER LINE, Line B

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)e. and d)(3), below.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The organic compound (OC) emissions from the extrusion operation of this emissions unit shall not exceed 0.14 lbs. per hour. The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.05 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.



d.	OAC rule 3745-17-11(B)(2)	3.10 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the date and time the weekly check was made;
 - b. the visible emission record sheet;
 - c. the color of the emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

a. Emission Limitation:

0.14 lb OC/hr from extrusion operation

The above hourly emission limitation was established by the following equation:

$$\text{HER} = (\text{HPR}/2000) \times \text{EEF}$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (1,300 lbs/hr, from Advanced Composites', Calculation sheet); and

EEF = extruder emission factor, in lbs/1000 lbs processed (0.21 lbs/ton, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999").

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 1,300 pounds of material processed per hour and additive usage.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the material(s) or use of new material(s) that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

0.05 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$\text{HER} = [(\text{HPR}/1000) \times (\text{REF} + \text{EEF} + \text{DEF})]$$

where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (1,300 lbs/hr, from calculation sheet);

REF = raw material handling emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1);

EEF = extruder emission factor, in lbs/1000 lbs processed (0.0303 lbs/1000, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999"); and

DEF = Spin Dryer emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1).

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 1,300 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

c. Emission Limitation:

3.1 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (1,300 pounds per hour / 2,000 = 0.65 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

e. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



14. P065, Extrusion Line L

Operations, Property and/or Equipment Description:

Extruding machine processing polypropylene resin, Extrusion Line L

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)e. and d)(3), below.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The organic compound (OC) emissions from the extrusion operation of this emissions unit shall not exceed 0.53 lbs. per hour. The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.19 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.



d.	OAC rule 3745-17-11(B)(2)	7.58 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the date and time the weekly check was made;
 - b. the visible emission record sheet;
 - c. the color of the emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

a. Emission Limitation:

0.53 lb OC/hr from extrusion operation

The above hourly emission limitation was established by the following equation:

$$\text{HER} = (\text{HPR}/2000) \times \text{EEF}$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (5,000 lbs/hr, from Advanced Composites', Calculation sheet); and

EEF = extruder emission factor, in lbs/1000 lbs processed (0.21 lbs/ton, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999").

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 5,000 pounds of material processed per hour and additive usage.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the material(s) or use of new material(s) that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

0.19 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$\text{HER} = [(\text{HPR}/1000) \times (\text{REF} + \text{EEF} + \text{DEF})]$$

where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (5,000 lbs/hr, from calculation sheet);

REF = raw material handling emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1);

EEF = extruder emission factor, in lbs/1000 lbs processed (0.0303 lbs/1000, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999"); and

DEF = Spin Dryer emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1).

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 5,000 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

c. Emission Limitation:

7.58 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (5,000 pounds per hour / 2,000 = 1.1 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

e. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



15. P066, Extrusion Line F

Operations, Property and/or Equipment Description:

Extruding machine processing polypropylene resin, Extrusion Line F

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)e. and d)(3), below.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The organic compound (OC) emissions from the extrusion operation of this emissions unit shall not exceed 0.53 lbs. per hour. The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.19 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.



d.	OAC rule 3745-17-11(B)(2)	7.58 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the date and time the weekly check was made;
 - b. the visible emission record sheet;
 - c. the color of the emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

a. Emission Limitation:

0.53 lb OC/hr from extrusion operation

The above hourly emission limitation was established by the following equation:

$$HER = (HPR/2000) \times EEF$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (5,000 lbs/hr, from Advanced Composites', Calculation sheet); and

EEF = extruder emission factor, in lbs/1000 lbs processed (0.21 lbs/ton, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999").

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 5,000 pounds of material processed per hour and additive usage.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the material(s) or use of new material(s) that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

0.19 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$HER = [(HPR/1000) \times (REF + EEF + DEF)]$$

where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (5,000 lbs/hr, from calculation sheet);

REF = raw material handling emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1);

EEF = extruder emission factor, in lbs/1000 lbs processed (0.0303 lbs/1000, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999"); and

DEF = Spin Dryer emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1).

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 5,000 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

c. Emission Limitation:

7.58 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (5,000 pounds per hour / 2,000 = 1.1 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

e. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



16. P067, Extrusion Line J

Operations, Property and/or Equipment Description:

Extruding machine processing polypropylene resin, Extrusion Line J

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. b)(1)e. and d)(3), below.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The organic compound (OC) emissions from the extrusion operation of this emissions unit shall not exceed 0.53 lbs. per hour. The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.19 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.



d.	OAC rule 3745-17-11(B)(2)	7.58 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the date and time the weekly check was made;
 - b. the visible emission record sheet;
 - c. the color of the emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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

[ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

a. Emission Limitation:

0.53 lb OC/hr from extrusion operation

The above hourly emission limitation was established by the following equation:

$$\text{HER} = (\text{HPR}/2000) \times \text{EEF}$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (5,000 lbs/hr, from Advanced Composites', Calculation sheet); and

EEF = extruder emission factor, in lbs/1000 lbs processed (0.21 lbs/ton, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999").

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 5,000 pounds of material processed per hour and additive usage.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the material(s) or use of new material(s) that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

0.19 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$\text{HER} = [(\text{HPR}/1000) \times (\text{REF} + \text{EEF} + \text{DEF})]$$

where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (5,000 lbs/hr, from calculation sheet);

REF = raw material handling emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1);

EEF = extruder emission factor, in lbs/1000 lbs processed (0.0303 lbs/1000, Journal of Air and Waste Management "Development of Emission Factors for Polypropylene Processing, Jan. 1999"); and

DEF = Spin Dryer emission factor, in lbs/1000 lbs processed (0.0036 lbs/1000, AP-42 Table 11.26-1).

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 5,000 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

c. Emission Limitation:

7.58 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (5,000 pounds per hour / 2,000 = 1.1 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

e. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.



17. P068, P&S Mixer 1

Operations, Property and/or Equipment Description:

P&S Mixer 1

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.008 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.
d.	OAC rule 3745-17-11(B)(2)	2.4 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the date and time the weekly check was made;
- b. the visible emission record sheet;
- c. the color of the emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

- a. Emission Limitation:

0.01 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$HER = [(HPR/1000) \times (EF)]$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (900 lbs/hr, from calculation sheet); and

EF = Emission factor, in lbs/1000 lbs processed (0.009 lbs/1000, AP-42 Table 11.26-1, (packaging));

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 900 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

2.4 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (900 pounds per hour / 2,000 = 0.45 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

c. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.

18. P069, P&S Mixer 2

Operations, Property and/or Equipment Description:

P&S Mixer 2

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.008 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.
d.	OAC rule 3745-17-11(B)(2)	2.4 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the date and time the weekly check was made;
- b. the visible emission record sheet;
- c. the color of the emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

- a. Emission Limitation:

0.01 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$HER = [(HPR/1000) \times (EF)]$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (900 lbs/hr, from calculation sheet); and

EF = Emission factor, in lbs/1000 lbs processed (0.009 lbs/1000, AP-42 Table 11.26-1, (packaging));

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 900 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

2.4 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (900 pounds per hour / 2,000 = 0.45 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

c. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.



Applicable Compliance Method:

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

g) Miscellaneous Requirements

- (1) None.



19. P070, P&M Mixer 3

Operations, Property and/or Equipment Description:

P&M Mixer 3

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.005 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.
d.	OAC rule 3745-17-11(B)(2)	1.62 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the date and time the weekly check was made;
- b. the visible emission record sheet;
- c. the color of the emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

- a. Emission Limitation:

0.001 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$HER = [(HPR/1000) \times (EF)]$$

Where:

HER= Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (500 lbs/hr, from calculation sheet); and

EF = Emission factor, in lbs/1000 lbs processed (0.009 lbs/1000, AP-42 Table 11.26-1, (packaging));

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 900 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

1.62 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (500 pounds per hour / 2,000 = 0.25 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

c. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

- (1) None.



20. P071, P&S Mixer 4

Operations, Property and/or Equipment Description:

P&S Mixer 4

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	The particulate emissions (PE) and PM10 from this emissions unit shall not exceed 0.005 lbs. per hour. Visible emissions from the stacks shall not exceed 5% opacity. See b)(2)a., and b)(2)b., below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06.	See section b)(2)c., below
c.	OAC rule 3745-17-07(A)	Visible emissions from the stacks shall not exceed 20% opacity.
d.	OAC rule 3745-17-11(B)(2)	1.62 pounds of PE per hour See section f)(1)b., below.
e.	OAC rule 3745-114-01	Ohio Air Toxic Rule See section d)(3), below.

(2) Additional Terms and Conditions

- a. The hourly emission limitation specified above represents the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with this emission limitation.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC emissions is less than ten tons per year.

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

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a fabric filter system that will minimize or eliminate any particulate emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the fabric filter system shall be maintained within the range of 1 to 7 inches of water while the emissions unit is in operation.

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 in a log, the pressure drop across the baghouse on weekly basis.

- (2) The permittee shall perform weekly checks on stacks and/or vents that are involved with emissions from raw material handling. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the date and time the weekly check was made;
- b. the visible emission record sheet;
- c. the color of the emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to eliminate the visible emissions.

Applicable Compliance Method Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

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

- a. Emission Limitation:

0.001 lb PE/hr

The above hourly emission limitation was established by the following equation:

$$HER = [(HPR/1000) \times (EF)]$$

Where:

HER = Hourly Emission Rate, lbs/hr;

HPR = maximum hourly production rate, in lbs (500 lbs/hr, from calculation sheet); and

EF = Emission factor, in lbs/1000 lbs processed (0.009 lbs/1000, AP-42 Table 11.26-1, (packaging));

Applicable Compliance Method:

Compliance is assumed based on the potential operating rate of 900 pounds of material processed per hour, the use of the fabric filters and the record keeping in section d) of this permit.

The permittees shall apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause an increase in the hourly potential emissions may require the permittee to apply for and obtain a new PTIO.

b. Emission Limitation:

1.62 pounds of PE per hour

The above hourly emission limitation was established by the following equation:

$$(E) = 4.10 \times (P)^{0.67}$$

Where:

(E) = Allowable rate of particulate emissions, in pounds per hour, (from OAC rule 3745-17-11 Appendix "Table I"); and

(P) = Process Weight At Maximum Capacity, in tons per hour, (500 pounds per hour / 2,000 = 0.25 tons per hour, from calculation sheet).

Applicable Compliance Method:

Compliance is assumed based on the use of baghouse and record keeping in section d) of this permit.

c. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 5% percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance is assumed based on the record keeping in section d) of this permit.

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

d. Emission Limitation:

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.



Applicable Compliance Method:

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

g) Miscellaneous Requirements

- (1) None.