



Environmental Protection Agency

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

2/7/2011

Mr. Brian Pelan  
QUAKER CHEMICAL CORP  
3431 Yankee Road  
Middletown, OH 45044-8931

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 1409010497  
Permit Number: P0107259  
Permit Type: Renewal  
County: Butler

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
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)

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](http://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 Hamilton County Dept. of Environmental Services at (513)946-7777 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, [www.epa.ohio.gov/dapc](http://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: HCDOES





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
QUAKER CHEMICAL CORP**

Facility ID:	1409010497
Permit Number:	P0107259
Permit Type:	Renewal
Issued:	2/7/2011
Effective:	2/7/2011
Expiration:	2/7/2016





Division of Air Pollution Control
Permit-to-Install and Operate
for
QUAKER CHEMICAL CORP

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## Authorization

Facility ID: 1409010497  
Application Number(s): A0040758  
Permit Number: P0107259  
Permit Description: Renewal of PTIO 14-05890 for six blenders that are ducted to a common control device.  
Permit Type: Renewal  
Permit Fee: \$0.00  
Issue Date: 2/7/2011  
Effective Date: 2/7/2011  
Expiration Date: 2/7/2016  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

QUAKER CHEMICAL CORP  
3431 YANKEE RD.  
MIDDLETOWN, OH 45044

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

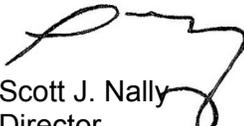
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Hamilton County Dept. of Environmental Services  
250 William Howard Taft Pkwy.  
Cincinnati, OH 45219-2660  
(513)946-7777

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: P0107259

Permit Description: Renewal of PTIO 14-05890 for six blenders that are ducted to a common control device.

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

<b>Emissions Unit ID:</b>	<b>P006</b>
Company Equipment ID:	Blender BL1
Superseded Permit Number:	14-05890
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P008</b>
Company Equipment ID:	Blender BL6
Superseded Permit Number:	14-05890
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P009</b>
Company Equipment ID:	Blender BL2
Superseded Permit Number:	14-05890
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P010</b>
Company Equipment ID:	Blender BL3
Superseded Permit Number:	14-05890
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P011</b>
Company Equipment ID:	Blender BL5
Superseded Permit Number:	14-05890
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P012</b>
Company Equipment ID:	Blender BL4
Superseded Permit Number:	14-05890
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 Hamilton County Dept. of Environmental Services 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 submitting<sup>1</sup> 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.

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<sup>1</sup> 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. P006, Blender BL1

Operations, Property and/or Equipment Description:

Blender BL1

- 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. g(1).
(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. b)(1)g., c)(1), c)(2), d)(1), e)(2), f)(1)d., f)(2).
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.

Table with 3 columns: Label, Applicable Rules/Requirements, and Applicable Emissions Limitations/Control Measures. Rows include VOC emissions limits, particulate emission rates, and other regulatory references.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	(avoid triggering prevention of significant deterioration and non attainment review and to avoid being subject to Title V permitting requirements)	<p>matter emissions 10 microns and less in diameter* (PM10) from emissions units P006, P008, P009, P010, P011 and P012 combined shall not exceed 5.75 tons per year (TPY) based on a rolling, 12-month summation.</p> <p>*for purposes of non-attainment review all particulate matter emissions 2.5 microns and less in diameter (PM2.5) are considered to be PM10.</p> <p>See c)(1) and c)(2).</p>
h.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	<p>Particulate matter emissions 10 microns and less in diameter* (PM10) from this emissions units shall not exceed 25 pounds per hour (stack and fugitive).</p> <p>The hourly PE limit is equivalent to the limit established in OAC rule 3745-17-11(B)(1).</p> <p>The annual PE and PM10 limit is equivalent to the limit established in OAC rule 3745-31-05(D).</p> <p>See b)(2)a.</p>
i.	OAC rule 3745-31-05(A)(3), as effective 12/1/2006	See b)(2)g.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 365 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

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

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

- c. Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
- d. The PE from the outlet of the scrubber controlling emissions from this emissions unit shall not exceed 14.5 pounds per hour based on Table I in OAC rule 3745-17-11(B).
- e. Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average.
- f. The fugitive dust from this emissions unit shall be controlled by the use of reasonable available control measures adequate to minimize or eliminate visible particulate emissions.
- g. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) emissions and particulate emissions 10 microns and less in diameter (PM10) from this air contaminant source since the uncontrolled potential to emit for particulate emissions is less than ten tons per year.

- h. The hourly PE limitation in b)(2)d. is based upon the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with this limitation.

c) Operational Restrictions

- (1) The emissions unit shall be operated with a Venturi wet scrubber having an overall control efficiency for particulate matter emissions of at least 81 per cent.
- (2) The total dry material usage in emissions units P006, P008, P009, P010, P011 and P012 combined shall not exceed 6,055,235 pounds per year based on a rolling 12-month summation of the dry material usages.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month:
- a. The amount, in pounds, of all dry materials employed in emissions units P006, P008, P009, P010, P011 and P012 combined.

- b. The rolling, 12-month summation of the amount, in pounds, of all dry material employed in emissions units P006, P008, P009, P010, P011 and P012 combined.
  - c. The rolling, 12-month summation of PE and PM10 emissions (the summation of the current month's emission total and the previous eleven calendar month's emission totals from emissions units P006, P008, P009, P010, P011 and P012 combined).
- (2) The permittee shall properly operate, and maintain equipment to continuously monitor the scrubber pressure drop during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the scrubber pressure drop on a daily basis.

Whenever the monitored value for the scrubber pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date the corrective action was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop reading immediately after the corrective action was implemented, and the name(s) of the personnel who performed the work. Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the scrubber shall be based upon the manufacturer's specifications until such a time as any required emissions testing is conducted.

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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.
- (2) The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the rolling, 12-month dry material usage, and the rolling 12-month emission limitation for PE and PM10. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted (i.e. postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
  
VOC emissions from this emissions unit shall not exceed 0.39 lb/hr.  
  
Applicable Compliance Method:  
  
Maximum liquid solvent capacity in this emissions unit is 6000 gallons per hour x emission factor of 6.42E-05 lb per gallon = 0.39 lb per hour.  
  
The emission factor of 6.42E-05 lb of VOC per gallon of liquid solvent used was provided by the permittee using USEPA publication "EIP Guidance Documents Volumes 1-10".

b. Emission Limitation:

VOC emissions from this emissions unit shall not exceed 0.21 ton per year.

Applicable Compliance Method:

Maximum liquid solvent capacity in this emissions unit is 6,573,950 gallons per year x emission factor of 6.42E-05 lb per gallon = 0.21 ton per year.

The emission factor of 6.42E-05 lb of VOC per gallon of liquid solvent used was provided by the permittee using USEPA publication "EIP Guidance Documents Volumes 1-10".

c. Emission Limitation:

The PE/PM10 emissions from this emissions unit shall not exceed 14.5 pounds per hour.

Particulate matter emissions 10 microns and less in diameter (PM10) from this emissions unit shall not exceed 25 pounds per hour (stack and fugitive).

Applicable Compliance Method:

Compliance with the annual limitation for PE/PM10 is determined by calculating as follows:

calculate the fugitive PE/PM10 emissions by multiplying the hourly pounds of dry throughput by the emission factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then by 10%. 10% is 100% minus the capture efficiency of 90% which represents the uncaptured or fugitive emissions;

calculate the PE/PM10 emissions from the stack of the control device by multiplying 90% of the hourly pounds of dry throughput times the emissions factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then times 10%. 10% is 100% minus the control efficiency of 90%; and

d. Emission Limitation:

The PE/PM10 emissions from this emissions unit shall not exceed 5.75 tons per year based on a rolling, 12-month summation

Applicable Compliance Method:

Compliance with the annual limitation for PE/PM10 is determined by calculating as follows:

calculate the fugitive PE/PM10 emissions by multiplying the annual tons of dry throughput by the emission factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then by 10%. 10% is 100% minus the capture efficiency of 90% which represents the uncaptured or fugitive emissions;

calculate the PE/PM10 emissions from the stack of the control device by multiplying 90% of the annual tons of dry throughput times the emissions factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then times 10%. 10% is 100% minus the control efficiency of 90%; and

add the calculated fugitive emissions to the calculated stack emissions based on a rolling, 12-month summation.

e. Emission Limitations:

The particulate emission rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.

Applicable Compliance Method:

If required, compliance with the PE limitations shall be demonstrated through an emissions source test performed in accordance with the requirements of 40 CFR Part 60, Appendix A, Methods 1-5.

f. Emission Limitation:

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

Applicable Compliance Method:

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

g. Emission Limitation:

The visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-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)(3).

- (2) Compliance with the annual production limitation in c)(2) shall be demonstrated through the record keeping required in d)(1).

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by 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 pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.



2. P008, Blender BL6

Operations, Property and/or Equipment Description:

Blender BL6

- 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. g)(1).
  - (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. b)(1)g., c)(1), c)(2), d)(1), e)(2), f)(1)d., f)(2).
- 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 11/30/2001	Volatile Organic Compound (VOC) emissions shall not exceed 0.39 lb/hr and 0.21 ton per year (TPY)  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 12/1/2006	See b)(2)b.
c.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
d.	OAC rule 3745-17-11(B)(1)	See b)(2)d.
e.	OAC rule 3745-17-07(B)(1)	See b)(2)e.
f.	OAC rule 3745-17-08(B)(3)	See b)(2)f.  The particulate emission (PE) rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.
g.	OAC rule 3745-31-05(D)	Particulate emissions (PE) and particulate

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	(avoid triggering prevention of significant deterioration and non attainment review and to avoid being subject to Title V permitting requirements)	<p>matter emissions 10 microns and less in diameter* (PM10) from emissions units P006, P008, P009, P010, P011 and P012 combined shall not exceed 5.75 tons per year (TPY) based on a rolling, 12-month summation.</p> <p>*for purposes of non-attainment review all particulate matter emissions 2.5 microns and less in diameter (PM2.5) are considered to be PM10.</p> <p>See c)(1) and c)(2).</p>
h.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	<p>Particulate matter emissions 10 microns and less in diameter* (PM10) from this emissions units shall not exceed 25 pounds per hour (stack and fugitive).</p> <p>The hourly PE limit is equivalent to the limit established in OAC rule 3745-17-11(B)(1).</p> <p>The annual PE and PM10 limit is equivalent to the limit established in OAC rule 3745-31-05(D).</p> <p>See b)(2)a.</p>
i.	OAC rule 3745-31-05(A)(3), as effective 12/1/2006	See b)(2)g.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 365 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

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

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

- c. Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
- d. The PE from the outlet of the scrubber controlling emissions in this emissions unit shall not exceed 14.5 pounds per hour based on Table I in OAC rule 3745-17-11(B).
- e. Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average.
- f. The fugitive dust from this emissions unit shall be controlled by the use of reasonable available control measures adequate to minimize or eliminate visible particulate emissions.
- g. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) emissions and particulate emissions 10 microns and less in diameter (PM10) from this air contaminant source since the uncontrolled potential to emit for particulate emissions is less than ten tons per year.

- h. The hourly PE limitation in b)(2)d. is based upon the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with this limitation.

c) Operational Restrictions

- (1) The emissions unit shall be operated with a Venturi wet scrubber having an overall control efficiency for particulate matter emissions of at least 81 per cent.
- (2) The total dry material usage in emissions units P006, P008, P009, P010, P011 and P012 combined shall not exceed 6,055,235 pounds per year based on a rolling 12-month summation of the dry material usages.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month:
- a. The amount, in pounds, of all dry materials employed in emissions units P006, P008, P009, P010, P011 and P012 combined.

- b. The rolling, 12-month summation of the amount, in pounds, of all dry material employed in emissions units P006, .P008, P009, P010, P011 and P012 combined.
  - c. The rolling, 12-month summation of PE and PM10 emissions (the summation of the current month's emission total and the previous eleven calendar month's emission totals from emissions units P006, P008, P009, P010, P011 and P012 combined).
- (2) The permittee shall properly operate, and maintain equipment to continuously monitor the scrubber pressure drop during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the scrubber pressure drop on a daily basis.

Whenever the monitored value for the scrubber pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date the corrective action was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop reading immediately after the corrective action was implemented, and the name(s) of the personnel who performed the work. Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the scrubber shall be based upon the manufacturer's specifications until such a time as any required emissions testing is conducted.

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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.
- (2) The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the rolling, 12-month dry material usage, and the rolling 12-month emission limitation for PE and PM10. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted (i.e. postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
  
VOC emissions from this emissions unit shall not exceed 0.39 lb/hr.  
  
Applicable Compliance Method:  
  
Maximum liquid solvent capacity in this emissions unit is 6000 gallons per hour x emission factor of 6.42E-05 lb per gallon = 0.39 lb per hour.  
  
The emission factor of 6.42E-05 lb of VOC per gallon of liquid solvent used was provided by the permittee using USEPA publication "EIP Guidance Documents Volumes 1-10".

b. Emission Limitation:

VOC emissions from this emissions unit shall not exceed 0.21 ton per year.

Applicable Compliance Method:

Maximum liquid solvent capacity in this emissions unit is 6,573,950 gallons per year x emission factor of 6.42E-05 lb per gallon = 0.21 ton per year.

The emission factor of 6.42E-05 lb of VOC per gallon of liquid solvent used was provided by the permittee using USEPA publication "EIP Guidance Documents Volumes 1-10".

c. Emission Limitation:

The PE/PM10 emissions from this emissions unit shall not exceed 14.5 pounds per hour.

Particulate matter emissions 10 microns and less in diameter (PM10) from this emissions unit shall not exceed 25 pounds per hour (stack and fugitive).

Applicable Compliance Method:

Compliance with the annual limitation for PE/PM10 is determined by calculating as follows:

calculate the fugitive PE/PM10 emissions by multiplying the hourly pounds of dry throughput by the emission factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then by 10%. 10% is 100% minus the capture efficiency of 90% which represents the uncaptured or fugitive emissions;

calculate the PE/PM10 emissions from the stack of the control device by multiplying 90% of the hourly pounds of dry throughput times the emissions factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then times 10%. 10% is 100% minus the control efficiency of 90%; and

d. Emission Limitation:

The PE/PM10 emissions from this emissions unit shall not exceed 5.75 tons per year based on a rolling, 12-month summation

Applicable Compliance Method:

Compliance with the annual limitation for PE/PM10 is determined by calculating as follows:

calculate the fugitive PE/PM10 emissions by multiplying the annual tons of dry throughput by the emission factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then by 10%. 10% is 100% minus the capture efficiency of 90% which represents the uncaptured or fugitive emissions;

calculate the PE/PM10 emissions from the stack of the control device by multiplying 90% of the annual tons of dry throughput times the emissions factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then times 10%. 10% is 100% minus the control efficiency of 90%; and

add the calculated fugitive emissions to the calculated stack emissions based on a rolling, 12-month summation.

e. Emission Limitations:

The particulate emission rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.

Applicable Compliance Method:

If required, compliance with the PE limitations shall be demonstrated through an emissions source test performed in accordance with the requirements of 40 CFR Part 60, Appendix A, Methods 1-5.

f. Emission Limitation:

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

Applicable Compliance Method:

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

g. Emission Limitation:

The visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-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)(3).

- (2) Compliance with the annual production limitation in c)(2) shall be demonstrated through the record keeping required in d)(1).

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by 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 pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

**3. P009, Blender BL2**

**Operations, Property and/or Equipment Description:**

Blender BL2

- 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. g)(1).
  - (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. b)(1)g., c)(1), c)(2), d)(1), e)(2), f)(1)d., f)(2).
- 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 11/30/2001	<p>Volatile Organic Compound (VOC) emissions shall not exceed 0.39 lb/hr and 0.21 ton per year (TPY)</p> <p>See b)(2)a.</p>
b.	OAC rule 3745-31-05(A)(3), as effective 12/1/2006	See b)(2)b.
c.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
d.	OAC rule 3745-17-11(B)(1)	See b)(2)d.
e.	OAC rule 3745-17-07(B)(1)	See b)(2)e.
f.	OAC rule 3745-17-08(B)(3)	<p>See b)(2)f.</p> <p>The particulate emission (PE) rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.</p>
g.	OAC rule 3745-31-05(D)	Particulate emissions (PE) and particulate



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	(avoid triggering prevention of significant deterioration and non attainment review and to avoid being subject to Title V permitting requirements)	<p>matter emissions 10 microns and less in diameter* (PM10) from emissions units P006, P008, P009, P010, P011 and P012 combined shall not exceed 5.75 tons per year (TPY) based on a rolling, 12-month summation.</p> <p>*for purposes of non-attainment review all particulate matter emissions 2.5 microns and less in diameter (PM2.5) are considered to be PM10.</p> <p>See c)(1) and c)(2).</p>
h.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	<p>Particulate matter emissions 10 microns and less in diameter* (PM10) from this emissions units shall not exceed 25 pounds per hour (stack and fugitive).</p> <p>The hourly PE limit is equivalent to the limit established in OAC rule 3745-17-11(B)(1).</p> <p>The annual PE and PM10 limit is equivalent to the limit established in OAC rule 3745-31-05(D).</p> <p>See b)(2)a.</p>
i.	OAC rule 3745-31-05(A)(3), as effective 12/1/2006	See b)(2)g.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 365 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

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

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

- c. Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
- d. The PE from the outlet of the scrubber controlling emissions from this emissions unit shall not exceed 14.5 pounds per hour based on Table I in OAC rule 3745-17-11(B).
- e. Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average.
- f. The fugitive dust from this emissions unit shall be controlled by the use of reasonable available control measures adequate to minimize or eliminate visible particulate emissions.
- g. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) emissions and particulate emissions 10 microns and less in diameter (PM10) from this air contaminant source since the uncontrolled potential to emit for particulate emissions is less than ten tons per year.

- h. The hourly PE limitation in b)(2)d. is based upon the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with this limitation.

c) Operational Restrictions

- (1) The emissions unit shall be operated with a Venturi wet scrubber having an overall control efficiency for particulate matter emissions of at least 81 per cent.

The total dry material usage in emissions units P006, P008, P009, P010, P011 and P012 combined shall not exceed 6,055,235 pounds per year based on a rolling 12-month summation of the dry material usages.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month:
- a. The amount, in pounds, of all dry materials employed in emissions units P006, P008, P009, P010, P011 and P012 combined.

- b. The rolling, 12-month summation of the amount, in pounds, of all dry material employed in emissions units P006, P008, P009, P010, P011 and P012 combined.
  - c. The rolling, 12-month summation of PE and PM10 emissions (the summation of the current month's emission total and the previous eleven calendar month's emission totals from emissions units P006, P008, P009, P010, P011 and P012 combined).
- (2) The permittee shall properly operate, and maintain equipment to continuously monitor the scrubber pressure drop during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the scrubber pressure drop on a daily basis.

Whenever the monitored value for the scrubber pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date the corrective action was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop reading immediately after the corrective action was implemented, and the name(s) of the personnel who performed the work. Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the scrubber shall be based upon the manufacturer's specifications until such a time as any required emissions testing is conducted.

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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.
- (2) The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the rolling, 12-month dry material usage and the rolling 12-month emission limitation for PE and PM10. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted (i.e. postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
  
VOC emissions from this emissions unit shall not exceed 0.39 lb/hr.  
  
Applicable Compliance Method:  
  
Maximum liquid solvent capacity in this emissions unit is 6000 gallons per hour x emission factor of 6.42E-05 lb per gallon = 0.39 lb per hour.  
  
The emission factor of 6.42E-05 lb of VOC per gallon of liquid solvent used was provided by the permittee using USEPA publication "EIP Guidance Documents Volumes 1-10".

b. Emission Limitation:

VOC emissions from this emissions unit shall not exceed 0.21 ton per year.

Applicable Compliance Method:

Maximum liquid solvent capacity in this emissions unit is 6,573,950 gallons per year x emission factor of 6.42E-05 lb per gallon = 0.21 ton per year.

The emission factor of 6.42E-05 lb of VOC per gallon of liquid solvent used was provided by the permittee using USEPA publication "EIP Guidance Documents Volumes 1-10".

c. Emission Limitation:

The PE/PM10 emissions from this emissions unit shall not exceed 14.5 pounds per hour.

Particulate matter emissions 10 microns and less in diameter (PM10) from this emissions unit shall not exceed 25 pounds per hour (stack and fugitive).

Applicable Compliance Method:

Compliance with the annual limitation for PE/PM10 is determined by calculating as follows:

calculate the fugitive PE/PM10 emissions by multiplying the hourly pounds of dry throughput by the emission factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then by 10%. 10% is 100% minus the capture efficiency of 90% which represents the uncaptured or fugitive emissions;

calculate the PE/PM10 emissions from the stack of the control device by multiplying 90% of the hourly pounds of dry throughput times the emissions factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then times 10%. 10% is 100% minus the control efficiency of 90%; and

d. Emission Limitation:

The PE/PM10 emissions from this emissions unit shall not exceed 5.75 tons per year based on a rolling, 12-month summation

Applicable Compliance Method:

Compliance with the annual limitation for PE/PM10 is determined by calculating as follows:

calculate the fugitive PE/PM10 emissions by multiplying the annual tons of dry throughput by the emission factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then by 10%. 10% is 100% minus the capture efficiency of 90% which represents the uncaptured or fugitive emissions;

calculate the PE/PM10 emissions from the stack of the control device by multiplying 90% of the annual tons of dry throughput times the emissions factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then times 10%. 10% is 100% minus the control efficiency of 90%; and

add the calculated fugitive emissions to the calculated stack emissions based on a rolling, 12-month summation.

e. Emission Limitations:

The particulate emission rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.

Applicable Compliance Method:

If required, compliance with the PE limitations shall be demonstrated through an emissions source test performed in accordance with the requirements of 40 CFR Part 60, Appendix A, Methods 1-5.

f. Emission Limitation:

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

Applicable Compliance Method:

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

g. Emission Limitation:

The visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-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)(3).

- (2) Compliance with the annual production limitation in c)(2) shall be demonstrated through the record keeping required in d)(1).

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by 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 pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.



4. P010, Blender BL3

Operations, Property and/or Equipment Description:

Blender BL3

- 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. g)(1).
  - (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. b)(1)g., c)(1), c)(2), d)(1), e)(2), f)(1)d., f)(2).
- 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 11/30/2001	Volatile Organic Compound (VOC) emissions shall not exceed 0.39 lb/hr and 0.21 ton per year (TPY)  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 12/1/2006	See b)(2)b.
c.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
d.	OAC rule 3745-17-11(B)(1)	See b)(2)d.
e.	OAC rule 3745-17-07(B)(1)	See b)(2)e.
f.	OAC rule 3745-17-08(B)(3)	See b)(2)f.  The particulate emission (PE) rate at the control device outlet shall not exceed dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.
g.	OAC rule 3745-31-05(D) (avoid triggering prevention of	Particulate emissions (PE) and particulate matter emissions 10 microns and less in



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	significant deterioration and non attainment review and to avoid being subject to Title V permitting requirements)	diameter* (PM10) from emissions units P006, P008, P009, P010, P011 and P012 combined shall not exceed 5.75 tons per year (TPY) based on a rolling, 12-month summation.  *for purposes of non-attainment review all particulate matter emissions 2.5 microns and less in diameter (PM2.5) are considered to be PM10.  See c)(1) and c)(2).
h.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	Particulate matter emissions 10 microns and less in diameter* (PM10) from this emissions units shall not exceed 25 pounds per hour (stack and fugitive).  The hourly PE limit is equivalent to the limit established in OAC rule 3745-17-11(B)(1).  The annual PE and PM10 limit is equivalent to the limit established in OAC rule 3745-31-05(D).  See b)(2)a.
i.	OAC rule 3745-31-05(A)(3), as effective 12/1/2006	See b)(2)g.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 365 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

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

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

- c. Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
- d. The PE from the outlet of the scrubber controlling emissions in this emissions unit shall not exceed 14.5 pounds per hour based on Table I in OAC rule 3745-17-11(B).
- e. Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average.
- f. The fugitive dust from this emissions unit shall be controlled by the use of reasonable available control measures adequate to minimize or eliminate visible particulate emissions.
- g. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) emissions and particulate emissions 10 microns and less in diameter (PM10) from this air contaminant source since the uncontrolled potential to emit for particulate emissions is less than ten tons per year.

- h. The hourly PE limitation in b)(2)d. is based upon the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with this limitation.

c) Operational Restrictions

- (1) The emissions unit shall be operated with a Venturi wet scrubber having an overall control efficiency for particulate matter emissions of at least 81 per cent.
- (2) The total dry material usage in emissions units P006, P008, P009, P010, P011 and P012 combined shall not exceed 6,055,235 pounds per year based on a rolling 12-month summation of the dry material usages.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month:
- a. The amount, in pounds, of all dry materials employed in emissions units P006, P008, P009, P010, P011 and P012 combined.

- b. The rolling, 12-month summation of the amount, in pounds, of all dry material employed in emissions units P006, P008, P009, P010, P011 and P012 combined.
  - c. The rolling, 12-month summation of PE and PM10 emissions (the summation of the current month's emission total and the previous eleven calendar month's emission totals from emissions units P006, P008, P009, P010, P011 and P012 combined).
- (2) The permittee shall properly operate, and maintain equipment to continuously monitor the scrubber pressure drop during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the scrubber pressure drop on a daily basis.

Whenever the monitored value for the scrubber pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date the corrective action was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop reading immediately after the corrective action was implemented, and the name(s) of the personnel who performed the work. Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the scrubber shall be based upon the manufacturer's specifications until such a time as any required emissions testing is conducted.

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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.
- (2) The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the rolling, 12-month dry material usage and the rolling 12-month emission limitation for PE and PM10. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted (i.e. postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
  
VOC emissions from this emissions unit shall not exceed 0.39 lb/hr.  
  
Applicable Compliance Method:  
  
Maximum liquid solvent capacity in this emissions unit is 6000 gallons per hour x emission factor of 6.42E-05 lb per gallon = 0.39 lb per hour.  
  
The emission factor of 6.42E-05 lb of VOC per gallon of liquid solvent used was provided by the permittee using USEPA publication "EIP Guidance Documents Volumes 1-10".

b. Emission Limitation:

VOC emissions from this emissions unit shall not exceed 0.21 ton per year.

Applicable Compliance Method:

Maximum liquid solvent capacity in this emissions unit is 6,573,950 gallons per year x emission factor of 6.42E-05 lb per gallon = 0.21 ton per year.

The emission factor of 6.42E-05 lb of VOC per gallon of liquid solvent used was provided by the permittee using USEPA publication "EIP Guidance Documents Volumes 1-10".

c. Emission Limitation:

The PE/PM10 emissions from this emissions unit shall not exceed 14.5 pounds per hour.

Particulate matter emissions 10 microns and less in diameter (PM10) from this emissions unit shall not exceed 25 pounds per hour (stack and fugitive).

Applicable Compliance Method:

Compliance with the annual limitation for PE/PM10 is determined by calculating as follows:

calculate the fugitive PE/PM10 emissions by multiplying the hourly pounds of dry throughput by the emission factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then by 10%. 10% is 100% minus the capture efficiency of 90% which represents the uncaptured or fugitive emissions;

calculate the PE/PM10 emissions from the stack of the control device by multiplying 90% of the hourly pounds of dry throughput times the emissions factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then times 10%. 10% is 100% minus the control efficiency of 90%; and

d. Emission Limitation:

The PE/PM10 emissions from this emissions unit shall not exceed 5.75 tons per year based on a rolling, 12-month summation

Applicable Compliance Method:

Compliance with the annual limitation for PE/PM10 is determined by calculating as follows:

calculate the fugitive PE/PM10 emissions by multiplying the annual tons of dry throughput by the emission factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then by 10%. 10% is 100% minus the capture efficiency of 90% which represents the uncaptured or fugitive emissions;

calculate the PE/PM10 emissions from the stack of the control device by multiplying 90% of the annual tons of dry throughput times the emissions factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then times 10%. 10% is 100% minus the control efficiency of 90%; and

add the calculated fugitive emissions to the calculated stack emissions based on a rolling, 12-month summation.

e. Emission Limitations:

The particulate emission rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.

Applicable Compliance Method:

If required, compliance with the PE limitations shall be demonstrated through an emissions source test performed in accordance with the requirements of 40 CFR Part 60, Appendix A, Methods 1-5.

f. Emission Limitation:

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

Applicable Compliance Method:

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

g. Emission Limitation:

The visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-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)(3).

Compliance with the annual production limitation in c)(2) shall be demonstrated through the record keeping required in d)(1).

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by 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 pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.



5. P011, Blender BL5

Operations, Property and/or Equipment Description:

Blender BL5

- 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. g)(1).
  - (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. b)(1)g., c)(1), c)(2), d)(1), e)(2), f)(1)d., f)(2).
- 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 11/30/2001	<p>Volatile Organic Compound (VOC) emissions shall not exceed 0.58 lb/hr and 0.32 ton per year (TPY)</p> <p>See b)(2)a.</p>
b.	OAC rule 3745-31-05(A)(3), as effective 12/1/2006	See b)(2)b.
c.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
d.	OAC rule 3745-17-11(B)(1)	See b)(2)d.
e.	OAC rule 3745-17-07(B)(1)	See b)(2)e.
f.	OAC rule 3745-17-08(B)(3)	<p>See b)(2)f.</p> <p>The particulate emission (PE) rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.</p>
g.	OAC rule 3745-31-05(D)	Particulate emissions (PE) and particulate

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	(avoid triggering prevention of significant deterioration and non attainment review and to avoid being subject to Title V permitting requirements)	<p>matter emissions 10 microns and less in diameter* (PM10) from emissions units P006, P008, P009, P010, P011 and P012 combined shall not exceed 5.75 tons per year (TPY) based on a rolling, 12-month summation.</p> <p>*for purposes of non-attainment review all particulate matter emissions 2.5 microns and less in diameter (PM2.5) are considered to be PM10.</p> <p>See c)(1) and c)(2).</p>
h.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	<p>Particulate emissions (PE) and particulate matter emissions 10 microns and less in diameter* (PM10) from this emissions units shall not exceed 38 pounds per hour and 5.75 TPY.</p> <p>See b)(2)a.</p>
i.	OAC rule 3745-31-05(A)(3), as effective 12/1/2006	See b)(2)g.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 365 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of OAC rule 3745-31-05 as part of the State Implementation Plan.

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

- c. Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
- d. The PE from the outlet of the scrubber controlling emissions in this emissions unit shall not exceed 14.5 pounds per hour based on Table I in OAC rule 3745-17-11(B).
- e. Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average.
- f. The fugitive dust from this emissions unit shall be controlled by the use of reasonable available control measures adequate to minimize or eliminate visible particulate emissions.
- g. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) emissions and particulate emissions 10 microns and less in diameter (PM10) from this air contaminant source since the uncontrolled potential to emit for particulate emissions is less than ten tons per year.

- h. The hourly PE limitation in b)(2)d. is based upon the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with this limitation.
- c) Operational Restrictions
- (1) The emissions unit shall be operated with a Venturi wet scrubber having an overall control efficiency for particulate matter emissions of at least 81 per cent.
  - (2) The total dry material usage in emissions units P006, P008, P009, P010, P011 and P012 combined shall not exceed 6,055,235 pounds per year based on a rolling 12-month summation of the dry material usages.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information each month:
    - a. The amount, in pounds, of all dry materials employed in emissions units P006, P008, P009, P010, P011 and P012 combined.
    - b. The rolling, 12-month summation of the amount, in pounds, of all dry material employed in emissions units P006, P008, P009, P010, P011 and P012 combined.

- c. The rolling, 12-month summation of PE and PM10 emissions (the summation of the current month's emission total and the previous eleven calendar month's emission totals from emissions units P006, P008, P009, P010, P011 and P012 combined).
- (2) The permittee shall properly operate, and maintain equipment to continuously monitor the scrubber pressure drop during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the scrubber pressure drop on a daily basis.

Whenever the monitored value for the scrubber pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date the corrective action was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop reading immediately after the corrective action was implemented, and the name(s) of the personnel who performed the work. Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the scrubber shall be based upon the manufacturer's specifications until such a time as any required emissions testing is conducted.

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and

- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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.
- (2) The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the rolling, 12-month dry material usage and the rolling, 12-month emission limitation for PE and PM10. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted (i.e. postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
- VOC emissions from this emissions unit shall not exceed 0.39 lb/hr.
- Applicable Compliance Method:
- Maximum liquid solvent capacity in this emissions unit is 6000 gallons per hour x emission factor of 6.42E-05 lb per gallon = 0.39 lb per hour.
- The emission factor of 6.42E-05 lb of VOC per gallon of liquid solvent used was provided by the permittee using USEPA publication "EIP Guidance Documents Volumes 1-10".
- b. Emission Limitation:
- VOC emissions from this emissions unit shall not exceed 0.21 ton per year.
- Applicable Compliance Method:

Maximum liquid solvent capacity in this emissions unit is 6,573,950 gallons per year x emission factor of 6.42E-05 lb per gallon = 0.21 ton per year.

The emission factor of 6.42E-05 lb of VOC per gallon of liquid solvent used was provided by the permittee using USEPA publication "EIP Guidance Documents Volumes 1-10".

c. Emission Limitation:

The PE/PM10 emissions from this emissions unit shall not exceed 14.5 pounds per hour.

Particulate matter emissions 10 microns and less in diameter (PM10) from this emissions unit shall not exceed 25 pounds per hour (stack and fugitive).

Applicable Compliance Method:

Compliance with the annual limitation for PE/PM10 is determined by calculating as follows:

calculate the fugitive PE/PM10 emissions by multiplying the hourly pounds of dry throughput by the emission factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then by 10%. 10% is 100% minus the capture efficiency of 90% which represents the uncaptured or fugitive emissions;

calculate the PE/PM10 emissions from the stack of the control device by multiplying 90% of the hourly pounds of dry throughput times the emissions factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then times 10%. 10% is 100% minus the control efficiency of 90%; and

d. Emission Limitation:

The PE/PM10 emissions from this emissions unit shall not exceed 5.75 tons per year based on a rolling, 12-month summation

Applicable Compliance Method:

Compliance with the annual limitation for PE/PM10 is determined by calculating as follows:

calculate the fugitive PE/PM10 emissions by multiplying the annual tons of dry throughput by the emission factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then by 10%. 10% is 100% minus the capture efficiency of 90% which represents the uncaptured or fugitive emissions;

calculate the PE/PM10 emissions from the stack of the control device by multiplying 90% of the annual tons of dry throughput times the emissions factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then times 10%. 10% is 100% minus the control efficiency of 90%; and

add the calculated fugitive emissions to the calculated stack emissions based on a rolling, 12-month summation.

e. Emission Limitations:

The particulate emission rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.

Applicable Compliance Method:

If required, compliance with the PE limitations shall be demonstrated through an emissions source test performed in accordance with the requirements of 40 CFR Part 60, Appendix A, Methods 1-5.

f. Emission Limitation:

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

Applicable Compliance Method:

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

g. Emission Limitation:

The visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-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)(3).

(2) Compliance with the annual production limitation in term and condition c)(2) shall be demonstrated through the record keeping required in term and condition d)(1).

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by 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 pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

**6. P012, Blender BL4**

**Operations, Property and/or Equipment Description:**

Blender BL4

- 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. g)(1).
  - (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. b)(1)g., c)(1), c)(2), d)(1), e)(2), f)(1)d., f)(2).
- 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 11/30/2001	Volatile Organic Compound (VOC) emissions shall not exceed 0.10 lb/hr and 0.05 ton per year (TPY)  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 12/1/2006	See b)(2)b.
c.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
d.	OAC rule 3745-17-11(B)(1)	See b)(2)d.
e.	OAC rule 3745-17-07(B)(1)	See b)(2)e.
f.	OAC rule 3745-17-08(B)(3)	See b)(2)f.  The particulate emission (PE) rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.
g.	OAC rule 3745-31-05(D)	Particulate emissions (PE) and particulate

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	(avoid triggering prevention of significant deterioration and non attainment review and to avoid being subject to Title V permitting requirements)	<p>matter emissions 10 microns and less in diameter* (PM10) from emissions units P006, P008, P009, P010, P011 and P012 combined shall not exceed 5.75 tons per year (TPY) based on a rolling, 12-month summation.</p> <p>*for purposes of non-attainment review all particulate matter emissions 2.5 microns and less in diameter (PM2.5) are considered to be PM10.</p> <p>See c)(1) and c)(2).</p>
h.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	<p>Particulate matter emissions 10 microns and less in diameter* (PM10) from this emissions units shall not exceed 25 pounds per hour (stack and fugitive).</p> <p>The hourly PE limit is equivalent to the limit established in OAC rule 3745-17-11(B)(1).</p> <p>The annual PE and PM10 limit is equivalent to the limit established in OAC rule 3745-31-05(D).</p> <p>See b)(2)a.</p>
i.	OAC rule 3745-31-05(A)(3), as effective 12/1/2006	See b)(2)g.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 365 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

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

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

- c. Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
- d. The PE from the outlet of the scrubber controlling emissions in this emissions unit shall not exceed 14.5 pounds per hour based on Table I in OAC rule 3745-17-11(B).
- e. Visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average.
- f. The fugitive dust from this emissions unit shall be controlled by the use of reasonable available control measures adequate to minimize or eliminate visible particulate emissions.
- g. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) emissions and particulate emissions 10 microns and less in diameter (PM10) from this air contaminant source since the uncontrolled potential to emit for particulate emissions is less than ten tons per year.

- h. The hourly PE limitation in b)(2)d. is based upon the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with this limitation.

c) Operational Restrictions

- (1) The emissions unit shall be operated with a Venturi wet scrubber having an overall control efficiency for particulate matter emissions of at least 81 per cent.
- (2) The total dry material usage in emissions units P006, P008, P009, P010, P011 and P012 combined shall not exceed 6,055,235 pounds per year based on a rolling 12-month summation of the dry material usages.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month:
- a. The amount, in pounds, of all dry materials employed in emissions units P006, P008, P009, P010, P011 and P012 combined.

- b. The rolling, 12-month summation of the amount, in pounds, of all dry material employed in emissions units P006, P008, P009, P010, P011 and P012 combined.
  - c. The rolling, 12-month summation of PE and PM10 emissions (the summation of the current month's emission total and the previous eleven calendar month's emission totals from emissions units P006, P008, P009, P010, P011 and P012 combined).
- (2) The permittee shall properly operate, and maintain equipment to continuously monitor the scrubber pressure drop during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the scrubber pressure drop on a daily basis.

Whenever the monitored value for the scrubber pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date the corrective action was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop reading immediately after the corrective action was implemented, and the name(s) of the personnel who performed the work. Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the scrubber shall be based upon the manufacturer's specifications until such a time as any required emissions testing is conducted.

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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.

The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the rolling, 12-month dry material usage and the rolling, 12-month emission limitation for PE and PM10. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted (i.e. postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

f) Testing Requirements

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

- a. Emission Limitation:

VOC emissions from this emissions unit shall not exceed 0.39 lb/hr.

Applicable Compliance Method:

Maximum liquid solvent capacity in this emissions unit is 6000 gallons per hour x emission factor of 6.42E-05 lb per gallon = 0.39 lb per hour.

The emission factor of 6.42E-05 lb of VOC per gallon of liquid solvent used was provided by the permittee using USEPA publication "EIP Guidance Documents Volumes 1-10".

## b. Emission Limitation:

VOC emissions from this emissions unit shall not exceed 0.21 ton per year.

Applicable Compliance Method:

Maximum liquid solvent capacity in this emissions unit is 6,573,950 gallons per year x emission factor of 6.42E-05 lb per gallon = 0.21 ton per year.

The emission factor of 6.42E-05 lb of VOC per gallon of liquid solvent used was provided by the permittee using USEPA publication "EIP Guidance Documents Volumes 1-10".

## c. Emission Limitation:

The PE/PM10 emissions from this emissions unit shall not exceed 14.5 pounds per hour.

Particulate matter emissions 10 microns and less in diameter (PM10) from this emissions unit shall not exceed 25 pounds per hour (stack and fugitive).

Applicable Compliance Method:

Compliance with the annual limitation for PE/PM10 is determined by calculating as follows:

calculate the fugitive PE/PM10 emissions by multiplying the hourly pounds of dry throughput by the emission factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then by 10%. 10% is 100% minus the capture efficiency of 90% which represents the uncaptured or fugitive emissions;

calculate the PE/PM10 emissions from the stack of the control device by multiplying 90% of the hourly pounds of dry throughput times the emissions factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then times 10%. 10% is 100% minus the control efficiency of 90%; and

## d. Emission Limitation:

The PE/PM10 emissions from this emissions unit shall not exceed 5.75 tons per year based on a rolling, 12-month summation

Applicable Compliance Method:

Compliance with the annual limitation for PE/PM10 is determined by calculating as follows:

calculate the fugitive PE/PM10 emissions by multiplying the annual tons of dry throughput by the emission factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then by 10%. 10% is 100% minus the capture efficiency of 90% which represents the uncaptured or fugitive emissions;

calculate the PE/PM10 emissions from the stack of the control device by multiplying 90% of the annual tons of dry throughput times the emissions factor of 20 pounds per ton (from AP42 Table 6.4-1, 1/95) and then times 10%. 10% is 100% minus the control efficiency of 90%; and

add the calculated fugitive emissions to the calculated stack emissions based on a rolling, 12-month summation.

e. Emission Limitations:

The particulate emission rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.

Applicable Compliance Method:

If required, compliance with the PE limitations shall be demonstrated through an emissions source test performed in accordance with the requirements of 40 CFR Part 60, Appendix A, Methods 1-5.

f. Emission Limitation:

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

Applicable Compliance Method:

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

g. Emission Limitation:

The visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-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)(3).

- (2) Compliance with the annual production limitation in c)(2) shall be demonstrated through the record keeping required in d)(1).

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by 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 pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.