☒ **Synthetic Minor Determination and/or** ☐ **Netting Determination**

Permit To Install **14-05539**

A. Source Description

This company is a flavoring facility that provides flavors to the customer specification. A consent decree was issued requiring the facility to apply for permits with federally enforceable terms and conditions requiring the use of control equipment. Most of these sources will also be required to comply with BAT. The facility has several blending and batch rooms as well as several large spray dryers. The flavoring is fed into the spray dryer through the batch rooms. The batch rooms contain particulate emissions that are vented to a packed bed scrubber. The flavoring is then spray dried which results in VOC and particulate emissions. The emissions from the spray dryers are vented first to a scrubber and then through a regenerative thermal oxidizer (Spray Dryer #7 is vented only to a scrubber). The flavoring is then pumped to a blend room where it is blended to the customers specification. Emissions from the blending operation include particulates that are vented to a packed bed scrubber. The VOCs from the entire operation are accounted for in the application of the spray dryers.

B. Facility Emissions and Attainment Status

The potential to emit for the VOC emissions are 12.59 TPY. The potential to emit for the PM emissions are 37.53 TPY. Givaudan is requesting federally enforceable limits through a synthetic minor permit and accepting control equipment requirements to fulfill a consent decree signed into agreement in October of 2003 . The facility is located in Hamilton County which is non-attainment for ozone and nitrogen oxides and attainment for all other pollutants.

C. Source Emissions

The allowable VOC emissions for sources P001 and P004 will each be 0.19 pounds per hour and 0.84 TPY. The allowable particulate emissions for sources P001 and P004 will each be 0.12 pounds per hour and 0.53 TPY. The allowable VOC emissions for source P005 will be 1.6 pounds per hour and 7.01 TPY. The allowable particulate emissions for source P005 will be 0.45 pounds per hour and 1.97 TPY. The allowable VOC emissions for source P021 will be 0.30 pounds per hour and 1.31 TPY. The allowable particulate emissions for source P021 will be 0.21 pounds per hour and 0.92 TPY. The allowable VOC emissions for source P022 will be 0.59 pounds per hour and 2.59 TPY. The allowable particulate emissions for source P022 will be 0.36 pounds per hour and 1.58 TPY. The allowable particulate emissions for sources P027 and P028 will each be 0.20 pounds per hour and 0.88 TPY. The allowable particulate emissions for source P029 will be 1.2 pounds per hour and 5.26 TPY. The allowable particulate emissions for source P030 will be 1.0 pound per hour and 4.38 TPY. The allowable particulate emissions for source P031 will be 0.35 pounds per hour and 1.53 TPY. The allowable particulate emissions for source P032 will be 0.60 pounds per hour and 2.63 TPY. The allowable particulate emissions for source P033 will be 1.43 pounds per hour and 6.26 TPY. The allowable particulate emissions for source P034 will be 0.33 pounds per hour and 1.46 TPY. The allowable particulate emissions for source P035 will be 0.53 pounds per hour and 2.34 TPY. The allowable particulate emissions for source P036 will be 1.17 pounds per hour and 5.11 TPY. The allowable particulate emissions for source P037 will be 0.29 pounds per hour and 1.27 TPY.

D. Conclusion

The facility will demonstrate compliance with permit limits by continuously monitoring the thermal oxidizer temperature and the scrubber water flow rate as well as conducting stack testing on each emissions unit within 180 days of permit issuance. The facility will also submit quarterly exceedance reports. The issuance of this permit to install will make the use of the scrubber and thermal oxidizer federally enforceable.

Street Address:
Lazarus Gov. Center

State of Ohio Environmental Protection Agency
TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:
Lazarus Gov.
Center

RE: DRAFT PERMIT TO INSTALL **CERTIFIED MAIL**
HAMILTON COUNTY
Application No: 14-05539
DATE: 7/13/2004

Givaudan Flavors Corp
Eric Barnes
110 E 70th Street
Cincinnati, OH 45216

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **$4100** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA HCDES Ohio-Kentucky-Indiana Reg Council of Governments KY IN

HAMILTON COUNTY

PUBLIC NOTICE
ISSUANCE OF DRAFT PERMIT TO INSTALL **14-05539** FOR AN AIR CONTAMINANT SOURCE FOR
GIVAUDAN FLAVORS CORP

On 7/13/2004 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Givaudan Flavors Corp**, located at **110 E 70th Street, Cincinnati**, Ohio.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 14-05539:

PTI for Spray Dryers Numbers 2 (P001), 6 (P004), 7 (P005), 10 (P021), 11(P022); Batch operations for Spray Dryers 2, 6, 8, 9, 10, 11; and Dry Blenders A, B, C, D, E.

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Brad Miller, Hamilton County Department of Environmental Services, 250 William Howart Taft Pkwy, Cincinnati, OH 45219-2660 [(513)946-7777]

DRAFT PERMIT TO INSTALL 14-05539

Application Number:	14-05539
APS Premise Number:	1431070914
Permit Fee:	**To be entered upon final issuance**
Name of Facility:	Givaudan Flavors Corp
Person to Contact:	Eric Barnes
Address:	110 E 70th Street Cincinnati, OH 45216

Location of proposed air contaminant source(s) [emissions unit(s)]:
110 E 70th Street
Cincinnati, **Ohio**

Description of proposed emissions unit(s):
PTI for Spray Dryers Numbers 2 (P001), 6 (P004), 7 (P005), 10 (P021), 11(P022); Batch operations for Spray Dryers 2, 6, 8, 9, 10, 11; and Dry Blenders A, B, C, D, E.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

_____
Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any

information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may

lead to such sanctions

and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete

Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
PM	37.53
PM10	29.66
VOC	12.59

Emissions Unit ID: **P001**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements
	OAC rule 3745-21-07(G)
P001 - Spray Dryer No. 2	OAC rule 3745-31-02(A)(2)
	OAC rule 3745-17-07(A)(1)
	OAC rule 3745-17-11(B)

Applicable Emissions Limitations/Control Measures
Volatile organic compound (VOC) emissions from the spray dryer shall not exceed 0.19 pound per hour and 0.84 tons per year.
Particulate emissions* (PE) from the spray dryer shall not exceed 0.12 pound per hour and 0.53 tons per year. * PE = PM10
The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-02(A)(2) shall be demonstrated by the use of a scrubber with at least a 97% control efficiency for particulate emissions and a thermal oxidizer with at least a 97% control efficiency for organic compound emissions.

B. Operational Restrictions

1. The average combustion temperature within the regenerative thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

2. The scrubber water flow rate for the cyclonic scrubber shall be continuously maintained at a value of not less than 15 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

   a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor the scrubber water flow rate for the cyclonic scrubber while the emissions unit is in operation. The

monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

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

a. The scrubber water flow rate, in gallons per minute, once each day.

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1 The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified in term B.1.

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the cyclonic scrubber were not maintained at the required levels outlined in term B.2.

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

0.12 lb/hr PE/PM10
0.53 TPY PE/PM10

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (200 lb/hr) by the loss factor (0.02) then by the control efficiency of the scrubber (1-0.97). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004.

b. Emission Limitation:

0.19 lb/hr VOC
0.84 TPY VOC

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the emission rate, 6.14 lbs/hr, by the control efficiency of the thermal oxidizer (1-0.97). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions rates were provided in PTI application 14-05539 submitted February 12, 2004.

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

b. The emission testing shall be conducted to demonstrate compliance with the organic compound and particulate emission limits and the overall control efficiency for organic compounds (See term F.1).

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for organic compounds Method 25 of 40 CFR Part 60, Appendix A - if applicable; for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. The overall control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) for organic compounds shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol (e.g., "the mass balance protocol approved 10/25/95").

Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since emissions units P001, P004, P021, P022 and P026 have a combined stack, the allowable emission rates during performance tests will be determined by adding together the hourly allowable emission rates for the above mentioned emissions units.

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
		OAC rule 3745-21-07(G)
P004 - Spray Dryer No. 6	OAC rule 3745-31-02(A)(2)	
	OAC rule 3745-17-07(A)(1)	
	OAC rule 3745-17-11(B)	

Applicable Emissions Limitations/Control Measures
Volatile organic compound (VOC) emissions from the spray dryer shall not exceed 0.19 pound per hour and 0.84 tons per year. Particulate emissions* (PE) from the spray dryer shall not exceed 0.12 pound per hour and 0.53 tons per year. * PE = PM10 The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1). Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2). The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to

demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-02(A)(2) shall be demonstrated by the use of a scrubber with at least a 97% control efficiency for particulate emissions and a thermal oxidizer with at least a 97% control efficiency for organic compound emissions.

B. Operational Restrictions

1. The average combustion temperature within the regenerative thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

2. The scrubber water flow rate for the cyclonic scrubber shall be continuously maintained at a value of not less than 15 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

   a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

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

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

a. The scrubber water flow rate, in gallons per minute, once each day.

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1 The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified in term B.1.

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the cyclonic scrubber were not maintained at the required levels outlined in term B.2.

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

0.12 lb/hr PE/PM10
0.53 TPY PE/PM10

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (6.14 lb/hr) by the loss factor (0.02) then by the control efficiency of the scrubber (1-0.97). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004.

b. Emission Limitation:

0.19 lb/hr VOC
0.84 TPY VOC

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the emission rate, 200 lbs/hr, by the control efficiency of the thermal oxidizer (1-0.97). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions rates were provided in PTI application 14-05539 submitted February 12, 2004.

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

   b. The emission testing shall be conducted to demonstrate compliance with the organic compound and particulate emission limits and the overall control efficiency for organic compounds (See term F.1).

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for organic compounds Method 25 of 40 CFR Part 60, Appendix A - if applicable; for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   e. The overall control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) for organic compounds shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol (e.g., "the mass balance protocol approved 10/25/95").

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

   The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since emissions units P001, P004, P021, P022 and P026 have a combined stack, the allowable emission rates during performance tests will be determined by adding together the hourly allowable emission rates for the above mentioned emission units.

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	OAC rule 3745-21-07(G)
P005 - Spray Dryer No. 7	OAC rule 3745-31-02(A)(2)	
	OAC rule 3745-17-07(A)(1)	
	OAC rule 3745-17-11(B)	

Applicable Emissions Limitations/Control Measures
Volatile organic compound (VOC) emissions from the spray dryer shall not exceed 1.6 pounds per hour and 7.01 tons per year.
Particulate emissions* (PE) from the spray dryer shall not exceed 0.45 pound per hour and 1.97 tons per year.
* PE = PM10
The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-02(A)(2) shall be demonstrated by the use of a scrubber with at least a 90% control efficiency for particulate emissions and at least a 50% control efficiency for organic compound emissions.

B. Operational Restrictions

1. The scrubber water flow rate for the packed bed scrubber shall be continuously maintained at a value of not less than 40 gallons per minute at all times while the emissions unit is in operation.

2. The scrubber water for the packed bed scrubber shall be continuously maintained at an oxidation reduction potential of not less than 600 mV at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

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

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

   a. The scrubber water flow rate, in gallons per minute, once each day.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor the oxidation reduction potential for the packed bed scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

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

   a. The oxidation reduction potential, in millivolts, once each day.

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the packed bed scrubber was not maintained at the required levels outlined in term B.1.

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the oxidation reduction potential for the packed bed scrubber was not maintained at the required levels outlined in term B.2.

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

0.45 lb/hr PE/PM10
1.97 TPY PE/PM10

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (lb/hr) by the loss factor (0.05) then by the control efficiency of the scrubber (1-0.90). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004.

b. Emission Limitation:

1.6 lbs/hr VOC
7.01 TPY VOC

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the emission rate, 3.20 lbs/hr, by the control efficiency of the wet scrubber (1-0.50). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions rates were provided in PTI application 14-05539 submitted February 12, 2004.

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

   b. The emission testing shall be conducted to demonstrate compliance with the organic compound and particulate emission limits and the overall control efficiency for organic compounds (See term F.1).

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for organic compounds Method 25 of 40 CFR Part 60, Appendix A - if applicable; for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   e. The overall control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) for organic compounds shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol (e.g., "the mass balance protocol approved 10/25/95").

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

   The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

   Failure to submit such notification for review and approval prior to the test(s) may result in the

Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
P021 - Spray Dryer No. 10	OAC rule 3745-31-05(A)(3)	OAC rule 3745-21-07(G)
	OAC rule 3745-17-07(A)(1)	
	OAC rule 3745-17-11(B)	

Applicable Emissions Limitations/Control Measures
Volatile organic compound (VOC) emissions from the spray dryer shall not exceed 0.30 pound per hour and 1.31 tons per year.
Particulate emissions* (PE) from the spray dryer shall not exceed 0.21 pound per hour and 0.92 tons per year. * PE = PM10
The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a scrubber with at least a 97% control efficiency for particulate emissions and a thermal oxidizer with at least a 97% control efficiency for organic compound emissions.

B. Operational Restrictions

1. The average combustion temperature within the regenerative thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

2. The scrubber water flow rate for the cyclonic scrubber shall be continuously maintained at a value of not less than 20 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

   a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor the scrubber water flow rate for the cyclonic scrubber while the emissions unit is in operation. The

monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

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

a. The scrubber water flow rate, in gallons per minute, once each day.

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

3. The permit to install for emissions units P021, P022 and P026 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Acetic Acid
TLV (ug/m^3): 25,000
Maximum Hourly Emission Rate (lbs/hr): 1.47
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m^3): 33
MAGLC (ug/m^3): 595

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied with the above changes, the Ohio EPA will not consider the change(s)to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is(are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.
The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the Air Toxic Policy:"

a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. Documentation of it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. When the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1 The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified in term B.1.

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the cyclonic scrubber were not maintained at the required levels outlined in term B.2.

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

E. Testing Requirements

Emissions Unit ID: **P021**

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

   0.21 lb/hr PE/PM10
   0.92 TPY PE/PM10

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (350 lb/hr) by the loss factor (0.02) then by the control efficiency of the scrubber (1-0.97). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004.

b. Emission Limitation:

0.30 lb/hr VOC
1.31 TPY VOC

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the emission rate, 10.11 lbs/hr, by the control efficiency of the thermal oxidizer (1-0.97). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions rates were provided in PTI application 14-05539 submitted February 12, 2004.

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

b. The emission testing shall be conducted to demonstrate compliance with the organic compound and particulate emission limits and the overall control efficiency for organic compounds (See term F.1).

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for organic compounds Method 25 of 40 CFR Part 60, Appendix A - if applicable; for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District

Office or local air agency.

e. The overall control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) for organic compounds shall be determined in accordance

with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol (e.g., "the mass balance protocol approved 10/25/95").

Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since emissions units P001, P004, P021, P022 and P026 have a combined stack, the allowable emission rates during performance tests will be determined by adding together the hourly allowable emission rates for the above mentioned emission units.

2. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emissions unit contained in permit to install 14-04579 as issued on April 5, 2001.

3. The following terms and conditions of this permit are federally enforceable: A, B, C.1, C.2, D and E.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
P022 - Spray Dryer No. 11	OAC rule 3745-31-05(A)(3)	OAC rule 3745-21-07(G)
	OAC rule 3745-17-07(A)(1)	
	OAC rule 3745-17-11(B)	

Applicable Emissions Limitations/Control Measures
Volatile organic compound (VOC) emissions from the spray dryer shall not exceed 0.59 pound per hour and 2.59 tons per year.
Particulate emissions* (PE) from the spray dryer shall not exceed 0.36 pound per hour and 1.58 tons per year.
* PE = PM10
The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a scrubber with at least a 97% control efficiency for particulate emissions and a thermal oxidizer with at least a 97% control efficiency for organic compound emissions.

B. Operational Restrictions

1. The average combustion temperature within the regenerative thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

2. The scrubber water flow rate for the cyclonic scrubber shall be continuously maintained at a value of not less than 40 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

   a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor the scrubber water flow rate for the cyclonic scrubber while the emissions unit is in operation. The

monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

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

a. The scrubber water flow rate, in gallons per minute, once each day.

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

3. The permit to install for emissions units P021, P022 and P026 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Acetic Acid
TLV (ug/m^3): 25,000
Maximum Hourly Emission Rate (lbs/hr): 1.47
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m^3): 33
MAGLC (ug/m^3): 595

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists

(ACGIH)," than the lowest TLV value previously modeled;

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied with the above changes, the Ohio EPA will not consider the change(s)to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is(are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.
The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the Air Toxic Policy:"

a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. Documentation of it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. When the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1 The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified in term B.1.

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the cyclonic scrubber was not maintained at the required levels outlined in term B.2.

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

      0.36 lb/hr PE/PM10
      1.58 TPY PE/PM10

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (lb/hr) by the loss factor (0.02) then by the control efficiency of the scrubber (1-0.97). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004.

b. Emission Limitation:

0.59 lb/hr VOC
2.59 TPY VOC

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the emission rate, 19.53 lbs/hr, by the control efficiency of the thermal oxidizer (1-0.97). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions rates were provided in PTI application 14-05539 submitted February 12, 2004.

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

b. The emission testing shall be conducted to demonstrate compliance with the organic compound and particulate emission limits and the overall control efficiency for organic compounds (See term F.1).

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for organic compounds Method 25 of 40 CFR Part 60, Appendix A - if applicable; for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District

Office or local air agency.

e. The overall control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) for organic compounds shall be determined in accordance

with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol (e.g., "the mass balance protocol approved 10/25/95").

Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since emissions units P001, P004, P021, P022 and P026 have a combined stack, the allowable emission rates during performance tests will be determined by adding together the hourly allowable emission rates for the above mentioned emission units.

2. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emissions unit contained in permit to install 14-04579 as issued on April 5, 2001.

3. The following terms and conditions of this permit are federally enforceable: A, B, C.1, C.2, D and E.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P027 - Batch System for Spray Dryer No. 2	OAC rule 3745-31-02(A)(2)	0.20 lb/hour PE/PM10 0.88 TPY PE/PM10 The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-02(A)(2) shall be demonstrated by the use of a

scrubber with at least a 90% control efficiency for particulate emissions.

B. Operational Restrictions

1. The scrubber water flow rate for the packed bed scrubber shall be continuously maintained at a value of not less than 250 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

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

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

   a. The scrubber water flow rate, in gallons per minute, once each day.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the packed bed scrubber was not maintained at the required levels outlined in term B.1.

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

      0.20 lb/hr PE/PM10
      0.88 TPY PE/PM10

      Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (lb/hr) by the loss factor (0.01) then by the control efficiency of the scrubber (1-0.90). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours

per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004.

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

   b. The emission testing shall be conducted to demonstrate compliance with the particulate emission limits (See term F.1).

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since emissions units P027, P028, P029, P030 and P031 have a combined stack, the allowable emission rates during performance tests will be determined by adding together the hourly allowable emission rates for the above mentioned emission units.

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P028 - Batch System for Spray Dryer No. 6	OAC rule 3745-31-02(A)(2)	0.20 lb/hour PE/PM10 0.88 TPY PE/PM10 The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-02(A)(2) shall be demonstrated by the use of a

scrubber with at least a 90% control efficiency for particulate emissions.

B. Operational Restrictions

1. The scrubber water flow rate for the packed bed scrubber shall be continuously maintained at a value of not less than 250 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

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

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

   a. The scrubber water flow rate, in gallons per minute, once each day.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the packed bed scrubber was not maintained at the required levels outlined in term B.1.

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

      0.20 lb/hr PE/PM10
      0.88 TPY PE/PM10

      Applicable Compliance Method:

Emissions Unit ID: **P028**

Compliance with the emission limitation shall be determined by multiplying the production rate (lb/hr) by the loss factor (0.01) then by the control efficiency of the scrubber (1-0.90).

Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004.

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

   b. The emission testing shall be conducted to demonstrate compliance with the particulate emission limits (See term F.1).

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

   The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

   Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since emissions units P027, P028, P029, P030 and P031 have a combined stack, the allowable emission rates during performance tests will be determined by adding together the hourly allowable emission rates for the above mentioned emission units.

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P029 - Batch System for Spray Dryer No. 8	OAC rule 3745-31-05(A)(3)	1.2 lbs/hour PE 5.26 TPY PE 0.68 lb/hour PM10 2.99 TPY PM10 The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a scrubber with at least a 90% control efficiency for particulate emissions.

B. Operational Restrictions

1. The scrubber water flow rate for the packed bed scrubber shall be continuously maintained at a value of not less than 250 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

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

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

   a. The scrubber water flow rate, in gallons per minute, once each day.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the packed bed scrubber was not maintained at the required levels outlined in terms B.1.

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

      1.2 lbs/hr PE
      5.26 TPY PE
      0.68 lb/hr PM10
      2.99 TPY PM10

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (lb/hr) by the loss factor (0.01) then by the control efficiency of the scrubber (1-0.90). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004. The PM 10 emissions are based on AP-42 Table 11.26-2 (56.8% PM10).

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

   b. The emission testing shall be conducted to demonstrate compliance with the particulate emission limits (See term F.1).

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for organic compounds Method 25 of 40 CFR Part 60, Appendix A - if applicable; for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or

local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since emissions units P027, P028, P029, P030 and P031 have a combined stack, the allowable emission rates during performance tests will be determined by adding together the hourly allowable emission rates for the above mentioned emission units.

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P030 - Batch System for Spray Dryer No. 9	OAC rule 3745-31-05(A)(3)	1.0 lb/hour PE 4.38 TPY PE 0.57 lb/hour PM10 2.49 TPY PM10 The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a scrubber with at least a 90% control efficiency for particulate emissions.

B. Operational Restrictions

1. The scrubber water flow rate for the packed bed scrubber shall be continuously maintained at a value of not less than 250 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

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

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

   a. The scrubber water flow rate, in gallons per minute, once each day.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the packed bed scrubber was not maintained at the required levels outlined in terms B.1.

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

      1.0 lb/hr PE
      4.38 TPY PE
      0.57 lb/hr PM10
      2.49 TPY PM10

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (lb/hr) by the loss factor (0.01) then by the control efficiency of the scrubber (1-0.90). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004. The PM 10 emissions are based on AP-42 Table 11.26-2 (56.8% PM10).

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

   b. The emission testing shall be conducted to demonstrate compliance with the particulate emission limits (See term F.1).

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

   The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

   Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

   Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to

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

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

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since emissions units P027, P028, P029, P030 and P031 have a combined stack, the allowable emission rates during performance tests will be determined by adding together the hourly allowable emission rates for the above mentioned emission units.

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P031 - Batch System for Spray Dryer No. 10	OAC rule 3745-31-05(A)(3)	0.35 lb/hour PE/PM10 1.53 TPY PE/PM10 The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a

scrubber with at least a 90% control efficiency for particulate emissions.

B. Operational Restrictions

1. The scrubber water flow rate for the packed bed scrubber shall be continuously maintained at a value of not less than 250 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

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

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

   a. The scrubber water flow rate, in gallons per minute, once each day.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the packed bed scrubber was not maintained at the required levels outlined in term B.1.

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

   0.35 lb/hr PE/PM10
   1.53 TPY PE/PM10

   Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (lb/hr) by the loss factor (0.01) then by the control efficiency of the scrubber (1-0.90). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004.

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

   b. The emission testing shall be conducted to demonstrate compliance with the particulate emission limits (See term F.1).

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

   The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

   Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since emissions units P027, P028, P029, P030 and P031 have a combined stack, the allowable emission rates during performance tests will be determined by adding together the hourly allowable emission rates for the above mentioned emission units.

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

Emissions Unit ID: **P032**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P032 - Batch System for Spray Dryer No. 11	OAC rule 3745-31-05(A)(3)	0.60 lb/hour PE/PM10 2.63 TPY PE/PM10 The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a scrubber with at least a 90% control efficiency for particulate emissions.

Givaudan Flavors Corp **Facility ID: 1431070914**
PTI Application: 14-05539
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Emissions Unit ID: **P032**

B. Operational Restrictions

1. The scrubber water flow rate for the packed bed scrubber shall be continuously maintained at a value of not less than 250 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

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

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

   a. The scrubber water flow rate, in gallons per minute, once each day.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the packed bed scrubber was not maintained at the required levels outlined in terms B.1.

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

      0.60 lb/hr PE/PM10
      2.63 TPY PE/PM10

      Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (lb/hr) by the loss factor (0.01) then by the control efficiency of the scrubber (1-0.90).

Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004.

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

   b. The emission testing shall be conducted to demonstrate compliance with the particulate emission limits (See term F.1).

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

   The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

   Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

   A comprehensive written report on the results of the emissions test(s) shall be signed by the

person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since emissions units P032 and P037 have a combined stack, the allowable emission rates during performance tests will be determined by adding together the hourly allowable emission rates for the above mentioned emission units.

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P033 - Blending Operation A	OAC rule 3745-31-05(A)(3)	1.43 lbs/hour PE 6.26 TPY PE 0.82 lb/hour PM10 3.56 TPY PM10 The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a scrubber with at least a 90% control efficiency for particulate emissions.

B. Operational Restrictions

1. The scrubber water flow rate for the packed bed scrubber shall be continuously maintained at a value of not less than 500 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

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

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

   a. The scrubber water flow rate, in gallons per minute, once each day.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the packed bed scrubber was not maintained at the required levels outlined in term B.1.

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

   1.43 lb/hr PE
   6.26 TPY PE
   0.82 lb/hr PM10
   3.56 TPY PM10

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (lb/hr) by the loss factor (0.01) then by the control efficiency of the scrubber (1-0.90). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004. The PM 10 emissions are based on AP-42 Table 11.26-2 (56.8% PM10).

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

   b. The emission testing shall be conducted to demonstrate compliance with the particulate emission limits (See term F.1).

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

   The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

   Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

   Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to

ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or performance of the control equipment.

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

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since emissions units P033, P034, P035 and P036 have a combined stack, the allowable emission rates during performance tests will be determined by adding together the hourly allowable emission rates for the above mentioned emission units.

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

Emissions Unit ID: **P034**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P034 - Blending Operation B	OAC rule 3745-31-05(A)(3)	0.33 lb/hour PE/PM10 1.46 TPY PE/PM10 The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a scrubber with at least a 90% control efficiency for particulate emissions.

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PTI A Emissions Unit ID: **P034**
Issued: To be entered upon final issuance

B. Operational Restrictions

1. The scrubber water flow rate for the packed bed scrubber shall be continuously maintained at a value of not less than 500 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

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

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

   a. The scrubber water flow rate, in gallons per minute, once each day.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the packed bed scrubber was not maintained at the required levels outlined in term B.1.

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

      0.33 lb/hr PE/PM10
      1.46 TPY PE/PM10

      Applicable Compliance Method:

Emissions Unit ID: **P034**

Compliance with the emission limitation shall be determined by multiplying the production rate (lb/hr) by the loss factor (0.01) then by the control efficiency of the scrubber (1-0.90).

Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004.

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

   b. The emission testing shall be conducted to demonstrate compliance with the particulate emission limits (See term F.1).

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

   The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

   Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since emissions units P033, P034, P035 and P036 have a combined stack, the allowable emission rates during performance tests will be determined by adding together the hourly allowable emission rates for the above mentioned emission units.

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P035 - Blending Operation C	OAC rule 3745-31-05(A)(3)	0.53 lb/hour PE 2.34 TPY PE 0.30 lb/hour PM10 1.33 TPY PM10 The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a scrubber with at least a 90% control efficiency for particulate emissions.

B. Operational Restrictions

1. The scrubber water flow rate for the packed bed scrubber shall be continuously maintained at a value of not less than 500 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

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

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

   a. The scrubber water flow rate, in gallons per minute, once each day.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the packed bed scrubber was not maintained at the required levels outlined in term B.1.

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

   0.53 lb/hr PE
   2.34 TPY PE
   0.30 lb/hr PM10
   1.33 TPY PM10

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (lb/hr) by the loss factor (0.01) then by the control efficiency of the scrubber (1-0.90). Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004. The PM 10 emissions are based on AP-42 Table 11.26-2 (56.8% PM10).

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

   b. The emission testing shall be conducted to demonstrate compliance with the particulate emission limits (See term F.1).

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

   The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

   Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

   Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to

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

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

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since emissions units P033, P034, P035 and P036 have a combined stack, the allowable emission rates during performance tests will be determined by adding together the hourly allowable emission rates for the above mentioned emission units.

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P036 - Blending Operation D	OAC rule 3745-31-05(A)(3)	1.17 lbs/hour PE/PM10 5.11 TPY PE/PM10 The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a

scrubber with at least a 90% control efficiency for particulate emissions.

B. Operational Restrictions

1. The scrubber water flow rate for the packed bed scrubber shall be continuously maintained at a value of not less than 500 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

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

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

   a. The scrubber water flow rate, in gallons per minute, once each day.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the packed bed scrubber was not maintained at the required levels outlined in term B.1.

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

      1.17 lbs/hr PE/PM10
      5.11 TPY PE/PM10

      Applicable Compliance Method:

Emissions Unit ID: **P036**

Compliance with the emission limitation shall be determined by multiplying the production rate (lb/hr) by the loss factor (0.01) then by the control efficiency of the scrubber (1-0.90).

Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004.

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

   b. The emission testing shall be conducted to demonstrate compliance with the particulate emission limits (See term F.1).

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

   The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

   Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

   A comprehensive written report on the results of the emissions test(s) shall be signed by the

person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since emissions units P033, P034, P035 and P036 have a combined stack, the allowable emission rates during performance tests will be determined by adding together the hourly allowable emission rates for the above mentioned emission units.

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P037 - Blending Operation E	OAC rule 3745-31-05(A)(3)	0.29 lb/hour PE/PM10 1.27 TPY PE/PM10 The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these limits.

2.b Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a scrubber with at least a 90% control efficiency for particulate emissions.

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PTI A Emissions Unit ID: **P037**
Issued: To be entered upon final issuance

B. Operational Restrictions

1. The scrubber water flow rate for the packed bed scrubber shall be continuously maintained at a value of not less than 500 gallons per minute at all times while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

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

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

   a. The scrubber water flow rate, in gallons per minute, once each day.

   b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber flow rate for the packed bed scrubber was not maintained at the required levels outlined in term B.1.

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

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

      0.29 lb/hr PE/PM10
      1.27 TPY PE/PM10

      Applicable Compliance Method:

Compliance with the emission limitation shall be determined by multiplying the production rate (lb/hr) by the loss factor (0.01) then by the control efficiency of the scrubber (1-0.90).

Annual emissions shall be determined by multiplying the hourly emissions by 8760 hours per year and dividing by 2000 lbs/ton. The emissions factors were provided in PTI application 14-05539 submitted February 12, 2004.

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.

   b. The emission testing shall be conducted to demonstrate compliance with the particulate emission limits (See term F.1).

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate emissions Method 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

   The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

   Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

3. Compliance with the visible particulate emission limitation established in OAC rule 3745-17-07(A)(1) stated in term A.1 shall be determined by the methods specified in 40 CFR Part 60 Appendix A, Method 9.

F. Miscellaneous Requirements

1. Since emissions units P032 and P037 have a combined stack, the allowable emission rates during performance tests will be determined by adding together the hourly allowable emission rates for the above mentioned emission units.

2. The following terms and conditions of this permit are federally enforceable: A, B, C, D and E.