



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
HAMILTON COUNTY**

**CERTIFIED MAIL**

Street Address:

50 West Town Street, Suite 700

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 14-05900**

**Fac ID: 1431423764**

**DATE: 7/26/2007**

Cargill Flavor Systems  
Deron Denton  
10311 Chester Road  
Cincinnati, OH 45215-1224

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

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.

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

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

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

HCDES



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Permit To Install  
Terms and Conditions

Issue Date: 7/26/2007  
Effective Date: 7/26/2007

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**FINAL PERMIT TO INSTALL 14-05900**

Application Number: 14-05900  
Facility ID: 1431423764  
Permit Fee: **\$600**  
Name of Facility: Cargill Flavor Systems  
Person to Contact: Deron Denton  
Address: 10311 Chester Road  
Cincinnati, OH 45215-1224

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**10261 Chester Road**  
**Cincinnati, Ohio**

Description of proposed emissions unit(s):  
**Modifying emissions limitations for existing sources, due to emissions re-calculation. Will supersede PTI 14-3824 and PTI 14-05407.**

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

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Chris Korleski  
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 (i.e., postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

#### **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

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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)**

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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.

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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This 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 emissions unit(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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE/PM10	0.04
VOC	4.26

Emissions Unit ID: P002

**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 -(P002) - Liquid Flavor Compounding Room - Modification**

<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
OAC rule 3745-31-05(C)	See term and condition A.2.a.
ORC 3704.03(T)(4)	See term and condition A.2.b.
OAC rule 3745-17-07(A)(1)	See term and condition A.2.c.
OAC rule 3745-17-07(B)(1)	See term and condition A.2.d.
OAC rule 3745-17-08(B)(3)	See term and condition A.2.e.
OAC rule 3745-17-11(B)	See term and condition A.2.f.
OAC rule 3745-21-07(G)(2)	Exempt, due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held July 18, 2002.

**2. Additional Terms and Conditions**

- 2.a Permit to Install 14-05900 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):
  - i. for Particulate Emissions (PE) and Particulate Matter emissions 10 microns and less in diameter (PM10): the permittee shall install, operate, and maintain a cyclone and wet scrubber on this emission unit.
- 2.b The best available technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compounds (VOC) emissions from this air contaminant source since the potential to emit for VOC is less than 10.0 TPY.
- 2.c The visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

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- 2.d** The visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average.
- 2.e** The particulate emission rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.
- 2.f** The PE from the outlet of the scrubber controlling this emissions unit shall not exceed 1.98 pounds per hour based on Table I in OAC rule 3745-17-11(B).
- 2.g** The fugitive dust from this emissions unit shall be controlled by the use of reasonably available control measures adequate to minimize or eliminate visible particulate emissions.

**B. Operational Restrictions**

None

**C. Monitoring and/or Recordkeeping Requirements**

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the

Emissions Unit ID: P002

observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the scrubber pressure drop during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the scrubber pressure drop on daily basis.

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

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

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

#### **D. Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during

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which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate emissions and/or visible fugitive dust emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month periods.

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
  - a. each period of time when the pressure drop across the scrubber was outside of the range specified by the manufacturer;
  - b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter. If no exceedances occurred, the permittee shall state so in the report.

## **E. Testing Requirements**

1. Compliance with the emissions limitations in terms and conditions A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
The PE from the outlet of the wet scrubber controlling emission unit P002 shall not exceed 1.98 pounds per hour.

Emissions Unit ID: **P002****Applicable Compliance Method:**

The hourly PE rate limitation is based on Table 1 in OAC rule 3745-17-11. The actual emissions shall be calculated by: [(actual dust loading as a percentage of maximum dust loading) x (19.71 pounds per hour maximum dust loading) x (40% of emissions produced by P002) x ((1 - 95%) control efficiency of primary collector) x ((1 - 99%) control efficiency of secondary collector)].

**b. Emission Limitation:**

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

**Applicable Compliance Method:**

If required, compliance shall be determined through particulate emissions stack testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 5, or through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(7).

**c. Emission Limitation:**

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as provided by the rule.

**Applicable Compliance Method:**

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

**d. Emission Limitation:**

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

**Applicable Compliance Method:**

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(3).

**e. Emission Limitation:**

The controlled potential to emit for PE and PM10 is less than ten tons per year.

**Applicable Compliance Method:**

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The annual PE-PM10 emission rate is based on this emission unit's controlled potential to emit. The annual PE-PM10 emission rate is calculated by: [(actual dust loading as a percentage of maximum dust loading) x (19.71 pounds per hour maximum dust loading) x (40% of emissions produced by emission unit P002) x ((1 - 95%) control efficiency of primary collector) x ((1 - 99%) control efficiency of secondary collector)] x 8760 hours per year / 2000 pounds per ton.

- f. Emission Limitation:  
Volatile Organic Compound (VOC) emissions from this emissions unit is less than ten tons per year.

Applicable Compliance Method:

The hourly VOC emission rate is based on the emissions unit's potential to emit. The potential to emit was calculated by: [(763,590 pounds of ethanol used per year (is actual 2005 usage data doubled)) x (0.67% ethanol losses (including spills)) / (60% percentage of total VOC emissions that are ethanol) x (50% ethanol emissions attributed to emission unit P002)] / 2000 pounds per ton.

## **F. Miscellaneous Requirements**

1. The terms and conditions of this permit to install shall supersede the terms and conditions of permit to install 14-03824 issued on 8/16/1995.

Emissions Unit ID: P003

**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 -(P003) - Liquid Flavor Emulsion Room #2 - Modification**

<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
OAC rule 3745-31-05(C)	See term and condition A.2.a.
ORC 3704.03(T)(4)	See term and condition A.2.b.
OAC rule 3745-17-07(A)(1)	See term and condition A.2.c.
OAC rule 3745-17-07(B)(1)	See term and condition A.2.d.
OAC rule 3745-17-08(B)(3)	See term and condition A.2.e.
OAC rule 3745-17-11(B)	See term and condition A.2.f.
OAC rule 3745-21-07(G)(2)	Exempt, due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held July 18, 2002.

**2. Additional Terms and Conditions**

- 2.a Permit to Install 14-05900 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):
  - i. for Particulate Emissions (PE) and Particulate Matter emissions 10 microns and less in diameter (PM10): the permittee shall install, operate, and maintain a cyclone and wet scrubber on this emission unit.
- 2.b The best available technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compounds (VOC) emissions from this air contaminant source since the potential to emit for VOC is less than 10.0 TPY.
- 2.c The visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

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- 2.d** The visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average.
- 2.e** The particulate emission rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.
- 2.f** The PE from the outlet of the scrubber controlling this emissions unit shall not exceed 1.98 pounds per hour based on Table I in OAC rule 3745-17-11(B).
- 2.g** The fugitive dust from this emissions unit shall be controlled by the use of reasonably available control measures adequate to minimize or eliminate visible particulate emissions.

**B. Operational Restrictions**

None

**C. Monitoring and/or Recordkeeping Requirements**

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the

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observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the scrubber pressure drop during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the scrubber pressure drop on daily basis.

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

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

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

## **D. Reporting Requirements**

Emissions Unit ID: **P003**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate emissions and/or visible fugitive dust emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month periods.
  
2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
  - a. each period of time when the pressure drop across the scrubber was outside of the range specified by the manufacturer;
  - b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter. If no exceedances occurred, the permittee shall state so in the report.

## **E. Testing Requirements**

1. Compliance with the emissions limitations in terms and conditions A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
The PE from the outlet of the wet scrubber controlling emission unit P003 shall not exceed 1.98 pounds per hour.

Emissions Unit ID: P003

## Applicable Compliance Method:

The hourly PE rate limitation is based on Table 1 in OAC rule 3745-17-11. The actual emissions shall be calculated by: [(actual dust loading as a percentage of maximum dust loading) x (19.71 pounds per hour maximum dust loading) x (40% of emissions produced by emission unit P003) x ((1 - 95%) control efficiency of primary collector) x ((1 - 99%) control efficiency of secondary collector)].

## b. Emission Limitation:

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

## Applicable Compliance Method:

If required, compliance shall be determined through particulate emissions stack testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 5, or through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(7).

## c. Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as provided by the rule.

## Applicable Compliance Method:

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

## d. Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

## Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(3).

## e. Emission Limitation:

The controlled potential to emit for PE and PM10 is less than ten tons per year.

## Applicable Compliance Method:

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The annual PE-PM10 emission rate is based on this emission unit's controlled potential to emit. The annual PE-PM10 emission rate is calculated by: [(actual dust loading as a percentage of maximum dust loading) x (19.71 pounds per hour maximum dust loading) x (40% of emissions produced by emission unit P003) x ((1 - 95%) control efficiency of primary collector) x ((1 - 99%) control efficiency of secondary collector)] x 8760 hours per year / 2000 pounds per ton.

- f. Emission Limitation:  
Volatile Organic Compound (VOC) emissions from this emissions unit is less than ten tons per year.

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**Applicable Compliance Method:**

The hourly VOC emission rate is based on the emissions unit's potential to emit. The potential to emit was calculated by: [(763,590 pounds of ethanol used per year (is actual 2005 usage data doubled)) x (0.67% ethanol losses (including spills)) / (60% percentage of total VOC emissions that are ethanol) x (25% ethanol emissions attributed to emission unit P003)] / 2000 pounds per ton.

**F. Miscellaneous Requirements**

1. The terms and conditions of this permit to install shall supersede the terms and conditions of permit to install 14-03824 issued on 8/16/1995.

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**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 -(P004) - Liquid Flavor Emulsion Room #1 - Modification**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	See term and condition A.2.a.
ORC 3704.03(T)(4)	See term and condition A.2.b.
OAC rule 3745-17-07(A)(1)	See term and condition A.2.c.
OAC rule 3745-17-07(B)(1)	See term and condition A.2.d.
OAC rule 3745-17-08(B)(3)	See term and condition A.2.e.
OAC rule 3745-17-11(B)	See term and condition A.2.f.
OAC rule 3745-21-07(G)(2)	Exempt, due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held July 18, 2002.

**2. Additional Terms and Conditions**

- 2.a Permit to Install 14-05900 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):
  - i. for Particulate Emissions (PE) and Particulate Matter emissions 10 microns and less in diameter (PM10): the permittee shall install, operate, and maintain a cyclone and wet scrubber on this emission unit.
- 2.b The best available technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compounds (VOC) emissions from this air contaminant source since the potential to emit for VOC is less than 10.0 TPY.

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- 2.c** The visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
- 2.d** The visible particulate emissions from any fugitive dust source shall not exceed 20 percent opacity, as a three-minute average.
- 2.e** The particulate emission rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.
- 2.f** The PE from the outlet of the scrubber controlling this emissions unit shall not exceed 1.98 pounds per hour based on Table I in OAC rule 3745-17-11(B).
- 2.g** The fugitive dust from this emissions unit shall be controlled by the use of reasonably available control measures adequate to minimize or eliminate visible particulate emissions.

**B. Operational Restrictions**

None

**C. Monitoring and/or Recordkeeping Requirements**

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission

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incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the scrubber pressure drop during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the scrubber pressure drop on daily basis.

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

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

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

**D. Reporting Requirements**

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate emissions and/or visible fugitive dust emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month periods.
2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
  - a. each period of time when the pressure drop across the scrubber was outside of the range specified by the manufacturer;
  - b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter. If no exceedances occurred, the permittee shall state so in the report.

**E. Testing Requirements**

1. Compliance with the emissions limitations in terms and conditions A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
The PE from the outlet of the wet scrubber controlling emission unit P004 shall

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not exceed 1.98 pounds per hour.

**Applicable Compliance Method:**

The hourly PE rate limitation is based on Table 1 in OAC rule 3745-17-11. The actual emissions shall be calculated by: [(actual dust loading as a percentage of maximum dust loading) x (19.71 pounds per hour maximum dust loading) x (40% of emissions produced by emission unit P004) x ((1 - 95%) control efficiency of primary collector) x ((1 - 99%) control efficiency of secondary collector)].

**b. Emission Limitation:**

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

**Applicable Compliance Method:**

If required, compliance shall be determined through particulate emissions stack testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 5, or through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(7).

**c. Emission Limitation:**

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as provided by the rule.

**Applicable Compliance Method:**

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

**d. Emission Limitation:**

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

**Applicable Compliance Method:**

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(3).

**e. Emission Limitation:**

Emissions Unit ID: **P004**

The controlled potential to emit for PE and PM10 is less than ten tons per year.

Applicable Compliance Method:

The annual PE-PM10 emission rate is based on this emission unit's controlled potential to emit. The annual PE-PM10 emission rate is calculated by: [(actual dust loading as a percentage of maximum dust loading) x (19.71 pounds per hour maximum dust loading) x (40% of emissions produced by emission unit P004) x ((1 - 95%) control efficiency of primary collector) x ((1 - 99%) control efficiency of secondary collector)] x 8760 hours per year / 2000 pounds per ton.

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- f. Emission Limitation:  
Volatile Organic Compound (VOC) emissions from this emissions unit is less than ten tons per year.

Applicable Compliance Method:

The hourly VOC emission rate is based on the emissions unit's potential to emit. The potential to emit was calculated by: [(763,590 pounds of ethanol used per year (is actual 2005 usage data doubled)) x (0.67% ethanol losses (including spills)) / (60% percentage of total VOC emissions that are ethanol) x (25% ethanol emissions attributed to emission unit P004)] / 2000 pounds per ton.

**F. Miscellaneous Requirements**

- 1. The terms and conditions of this permit to install shall supersede the terms and conditions of permit to install 14-05407 issued on 4/22/2003.