



State of Ohio Environmental Protection Agency

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

**CERTIFIED MAIL**

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 03-16096**

**Fac ID: 0369000037**

**DATE: 11/2/2004**

Iams Company  
Robert Hall  
3700 State Route 65 North  
Leipsic, OH 458560087

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 by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. 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, Ohio 43215

Sincerely,

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

cc: USEPA

NWDO



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**Permit To Install  
Terms and Conditions**

**Issue Date: 11/2/2004  
Effective Date: 11/2/2004**

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**FINAL PERMIT TO INSTALL 03-16096**

Application Number: 03-16096  
Facility ID: 0369000037  
Permit Fee: **\$11625**  
Name of Facility: Iams Company  
Person to Contact: Robert Hall  
Address: 3700 State Route 65 North  
Leipsic, OH 458560087

Location of proposed air contaminant source(s) [emissions unit(s)]:

**3700 St Rt 65  
Leipsic, Ohio**

Description of proposed emissions unit(s):

**Administrative modification to correct pressure drop ranges, remove inconsistencies and errors in permits and include VOC emission data.**

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

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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**

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.

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#### 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	50.33*
PM <sub>10</sub>	38.29**
VOC	43.08
CO	39.24
NO <sub>x</sub>	24.72

\* Fugitive PE emissions account for 6.75 tons of total.

\*\* Fugitive PM10 emissions account for 1.71 tons of total.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Ingredient receiving distributor with air return spouts (Company ID for this emissions unit is E3)	OAC rule 3745-31-05(A)(3)	0.15 pounds particulate emissions (PE) per hour; 0.66 tons PE per year*  Control requirements (see A.2.a)
This is an administrative modification to PTI #03-13843 issued on August 12, 2003 to correct the pressure drop range		Visible particulate emissions shall not exceed 0% opacity as a six-minute average
	OAC rule 3745-17-07(A)	see A.2.b
	OAC rule 3745-17-11(B)	see A.2.b
	OAC rule 3745-31-05(C)	see A.2.c

\* All PE is assumed to be particulate matter 10 microns in diameter or less (PM<sub>10</sub>)

### 2. Additional Terms and Conditions

- 2.a Best Available Technology (BAT) control requirements for this emissions unit has been determined to be the use of a baghouse control system with a maximum outlet concentration of 0.01 grains per dry standard cubic foot (gr/dscf).

BAT requirements also include compliance with the terms and conditions of this permit.

- 2.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.c This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by a baghouse system to a maximum outlet concentration of 0.01 gr/dscf and a maximum mass emission rate of 0.15 pounds per hour.

**B. Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.

**C. Monitoring and/or Record keeping Requirements**

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

**D. Reporting Requirements**

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

The deviation 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 limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:  
0.01 gr/dscf from baghouse

Applicable Compliance Method:  
The emission limitation was established in accordance with the manufacturer's guaranteed

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Emissions Unit ID: P001

outlet grain loading for the baghouse. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emission Limitation:  
0.15 pounds PE per hour & 0.66 tons PE per year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the maximum outlet concentration of 0.01 gr/dscf by a maximum volumetric air flow rate of 1,800 acfm, 60 minutes/hour, and 1 pound/7000 grains. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons/yr was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

c. Emission Limitation:

Visible particulate emissions shall not exceed 0% opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9.

**F. Miscellaneous Requirements**

1. This permit supercedes the terms and conditions contained in PTI #03-13843 issued on August 12, 2003 for this emissions unit.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P009 - Ration hammermill grinder and separation plenum (Company ID for this emissions unit is E12)  This is an administrative modification to PTI #03-13843 issued on August 12, 2003 to change the pressure drop range	OAC rule 3745-31-05(A)(3)	0.39 pounds PE per hour; 1.71 tons PE per year*
		Control requirements (see A.2.a)
		Visible particulate emissions shall not exceed 0% opacity as a six-minute average
	OAC rule 3745-17-07(A)	see A.2.b
	OAC rule 3745-17-11(B)	see A.2.b
	OAC rule 3745-31-05(C)	see A.2.c

\* All PE is assumed to be particulate matter 10 microns in diameter or less (PM<sub>10</sub>)

**2. Additional Terms and Conditions**

- 2.a Best Available Technology (BAT) control requirements for this emissions unit has been determined to be the use of a baghouse control system with a maximum outlet concentration of 0.01 gr/dscf.

BAT requirements also include compliance with the terms and conditions of this permit.

- 2.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.c This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by a baghouse system to a maximum outlet concentration of 0.01 gr/dscf and a maximum mass emission rate of 0.39 pounds per hour.

#### **B. Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.

#### **C. Monitoring and/or Record keeping Requirements**

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

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

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

The deviation 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 limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
0.01 gr/dscf from baghouse

Applicable Compliance Method:

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The emission limitation was established in accordance with the manufacturer's guaranteed outlet grain loading for the baghouse. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emission Limitation:  
0.39 pounds PE per hour & 1.71 tons PE per year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the maximum outlet concentration of 0.01 gr/dscf by a maximum volumetric air flow rate of 4,500 acfm, 60 minutes/hour, and 1 pound/7000 grains. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons/yr was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

c. Emission Limitation:

Visible particulate emissions shall not exceed 0% opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9.

**F. Miscellaneous Requirements**

1. This permit supercedes the terms and conditions contained in PTI #03-13843 issued on August 12, 2003 for this emissions unit.

**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 3745-31-05(C)
P010 - Process Line #1 extruding, drying, cooling and material handling (Company ID for this emissions unit is E14)	OAC rule 3745-31-05(A)(3)	
This is an administrative modification to PTI #03-13280 issued on December 15, 1999 to change the pressure drop range, include OC, CO, and NO <sub>x</sub> emissions from the four burners in the drying chambers (each rated at 3.5 MMBtu/hr) and pet food processing, drying, and cooling operations, and indicate a PM <sub>10</sub> emission rate for this emissions unit.	OAC rule 3745-17-07(A)	
	OAC rule 3745-17-11(B)	

Applicable Emissions  
Limitations/Control Measures

0.81 pounds PE per hour; 3.55 tons  
PE per year

0.41 pounds particulate matter 10  
microns in diameter or less (PM<sub>10</sub>)  
per hour; 1.80 tons PM<sub>10</sub> per year

2.24 pounds carbon monoxide  
(CO) per hour; 9.81 tons CO per  
year

1.41 pounds nitrogen oxide (NO<sub>x</sub>)  
per hour; 6.18 tons NO<sub>x</sub> per year

2.46 pounds organic compounds  
(OC) per hour; 10.77 tons OC per  
year

Control requirements (see A.2.a)

Visible particulate emissions shall  
not exceed 5% opacity as a  
six-minute average

see A.2.b

see A.2.b

see A.2.c

## 2. Additional Terms and Conditions

- 2.a** The "Best Available Technology" (BAT) control requirements for this emissions unit has been determined to be the use of three cyclones that control emissions from the dryer and the cooler. BAT requirements also include compliance with the terms and conditions of this permit.
- 2.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.c** This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by cyclones to a maximum mass emission rate of 0.81 pounds per hour.

## B. Operational Restrictions

1. The pressure drop across the cyclones shall be maintained within the range of 3 to 7 inches of water while the emissions unit is in operation.
2. The permittee shall burn only natural gas in this emissions unit.

## C. Monitoring and/or Record keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the cyclones while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the cyclone on a daily basis.
2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of the fuel burned in this emissions unit.
3. The permittee shall collect and record the following information each month for this emissions unit:
  - a. the amount of material produced, in tons, through this emissions unit;
  - b. the annual, year to date material produced, in tons (sum of C.3.a. for each calendar month to date from January to December).

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**Iams C**

**PTI A**

**Issued: 11/2/2004**

Emissions Unit ID: **P010**

#### D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the cyclones did not comply with the allowable range specified above.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit annual reports which identifies the amount of material, in tons, produced in emissions unit P010. This report shall be submitted by January 31 of each year and shall cover the previous calendar year.

#### E. Testing Requirements

1. Compliance with the emission limitations in section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emissions Limitation:  
0.81 pounds PE per hour and 3.55 tons per year of PE

Applicable Compliance Method:

PE from this emissions unit is generated from an extruded air lift system and a dryer which are exhausted through a common stack. PE from the extruded air lift is controlled by a cyclone and PE from the dryer will be controlled by cyclones. The combined emissions will be 0.81 lb PE/hr and compliance shall be determined in accordance with the following:

The combined flow rate from the air lift system and the dryer is 6,400 dscf/min + 40,500 dscf/min = 46,900 dscf/min. The outlet concentration was developed based on a stack test of this emission unit on March 1, 2000.

$$PE = 46,900 \text{ dscf/min} \times 2.02^{-03} \text{ gr/dscf} \times 60 \text{ min/hr} \times 1 \text{ lb/7000 gr} = 0.81 \text{ lb/hr}$$

If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance

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will also be shown with the annual limitation.

- b. Emissions Limitation:  
0.41 pounds PM<sub>10</sub> per hour and 1.80 tons per year of PM<sub>10</sub>

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the hourly PE rate by a factor of 0.5 [stated in the footnote of AP-42's Table 9.9.1-2 for Animal Feed Mill Pellet Coolers (03/2003)]. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in Method 201 or 201A of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA, Northwest District Office.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- c. Emissions Limitation:  
2.24 pounds CO/hour and 9.81 tons CO/year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying a manufacturer's emission factor of 0.160 pounds CO per MMBtu with the maximum heat input capacity of 14 MMBtu per hour. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- d. Emissions Limitation:  
1.41 pounds NO<sub>x</sub>/hour and 6.18 tons NO<sub>x</sub>/year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying a manufacturer's emission factor of 0.101 pounds NO<sub>x</sub> per MMBtu with the maximum heat input capacity of 14 MMBtu per hour. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-4 and 7.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- e. Emissions Limitation:  
2.46 pounds OC/hour and 10.77 tons OC/year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying an emission factor derived from the stack testing of 0.154 pounds of OC per ton of product with the maximum product capacity of 16 tons per hour. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-4, 18, 25 or 25A as applicable.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- f. Emissions Limitation:  
Visible particulate emissions from the stack shall not exceed 5 percent opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined in accordance with the test methods and procedures specified in US EPA Method 9 of 40 CFR Part 60, Appendix A.

## F. Miscellaneous Requirements

1. This permit supercedes the terms and conditions contained in PTI #03-13280 issued on December 15, 1999 for this emissions unit.



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**Iams C**

**PTI A**

**Issued: 11/2/2004**

Emissions Unit ID: **P011**

## **2. Additional Terms and Conditions**

- 2.a** The "Best Available Technology" (BAT) control requirements for this emissions unit has been determined to be the use of three cyclones that control emissions from the dryer and the cooler. BAT requirements also include compliance with the terms and conditions of this permit.
- 2.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.c** This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by cyclones to a maximum mass emission rate of 0.81 pounds per hour.

## **B. Operational Restrictions**

- 1. The pressure drop across the cyclones shall be maintained within the range of 3 to 7 inches of water while the emissions unit is in operation.
- 2. The permittee shall burn only natural gas in this emissions unit.

## **C. Monitoring and/or Record keeping Requirements**

- 1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the cyclones while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the cyclone on a daily basis.
- 2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of the fuel burned in this emissions unit.
- 3. The permittee shall collect and record the following information each month for this emissions unit:
  - a. the amount of material produced, in tons, through this emissions unit;
  - b. the annual, year to date material produced, in tons (sum of C.3.a. for each calendar month to date from January to December).

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**Iams C**

**PTI A**

**Issued: 11/2/2004**

Emissions Unit ID: **P011**

#### D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the cyclones did not comply with the allowable range specified above.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit annual reports which identifies the amount of material, in tons, produced in emissions unit P011. This report shall be submitted by January 31 of each year and shall cover the previous calendar year.

#### E. Testing Requirements

1. Compliance with the emission limitations in section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emissions Limitation:  
0.81 pounds PE per hour and 3.55 tons per year of PE

Applicable Compliance Method:

PE from this emissions unit is generated from an extruded air lift system and a dryer which are exhausted through a common stack. PE from the extruded air lift is controlled by a cyclone and PE from the dryer will be controlled by cyclones. The combined emissions will be 0.81 lb PE/hr and compliance shall be determined in accordance with the following:

The combined flow rate from the air lift system and the dryer is 6,400 dscf/min + 40,500 dscf/min = 46,900 dscf/min. The outlet concentration was developed based on a stack test of emissions unit P010 on March 1, 2000.

$$PE = 46,900 \text{ dscf/min} \times 2.02^{-03} \text{ gr/dscf} \times 60 \text{ min/hr} \times 1 \text{ lb/7000 gr} = 0.81 \text{ lb/hr}$$

If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance

will also be shown with the annual limitation.

- b. Emissions Limitation:  
0.41 pounds PM<sub>10</sub> per hour and 1.80 tons per year of PM<sub>10</sub>

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the hourly PE rate by a factor of 0.5 [stated in the footnote of AP-42's Table 9.9.1-2 for Animal Feed Mill Pellet Coolers (03/2003)]. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in Method 201 or 201A of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA, Northwest District Office.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- c. Emissions Limitation:  
2.24 pounds CO/hour and 9.81 tons CO/year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying a manufacturer's emission factor of 0.160 pounds CO per MMBtu with the maximum heat input capacity of 14 MMBtu per hour. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- d. Emissions Limitation:  
1.41 pounds NO<sub>x</sub>/hour and 6.18 tons NO<sub>x</sub>/year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying a manufacturer's emission factor of 0.101 pounds NO<sub>x</sub> per MMBtu with the maximum heat input capacity of 14 MMBtu per hour. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR

Part 60, Appendix A, Methods 1-4 and 7.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- e. Emissions Limitation:  
2.46 pounds OC/hour and 10.77 tons OC/year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying an emission factor derived from the stack testing of 0.154 pounds of OC per ton of product with the maximum product capacity of 16 tons per hour. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-4, 18, 25 or 25A as applicable.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- f. Emissions Limitation:  
Visible particulate emissions from the stack shall not exceed 5 percent opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined in accordance with the test methods and procedures specified in US EPA Method 9 of 40 CFR Part 60, Appendix A.

**F. Miscellaneous Requirements**

1. This permit supercedes the terms and conditions contained in PTI #03-13280 issued on December 15, 1999 for this emissions unit.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P014 - Product bin storage with an aeration system (Company ID for this emissions unit is E18A)	OAC rule 3745-31-05(A)(3)	0.74 pounds PE per hour; 3.24 tons PE per year*
This is an administrative modification to PTI #03-13378 issued on February 16, 2000 to separate this emissions unit into two units (other emissions unit is P026)	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 0% opacity as a six-minute average
	OAC rule 3745-17-11(B)	see A.2.a
		see A.2.b
		see A.2.b

\* All PE is assumed to be particulate matter 10 microns in diameter or less (PM<sub>10</sub>)

### 2. Additional Terms and Conditions

- 2.a BAT requirements include compliance with the terms and conditions of this permit.
- 2.b The emissions limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

### B. Operational Restrictions

None

**C. Monitoring and/or Record keeping Requirements**

None

**D. Reporting Requirements**

None

**E. Testing Requirements**

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

- a. Emission Limitation:  
0.74 pounds PE per hour & 3.24 tons PE per year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation based upon a company supplied outlet emission concentration of 0.008 gr/dscf (derived from a stack test of a similar source) by a maximum volumetric air flow rate of 10,800 acfm, 60 minutes/hour, and 1 pound/7000 grains from all sixteen product storage bins. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons/yr was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- b. Emission Limitation:  
Visible particulate emissions shall not exceed 0% opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9.

**F. Miscellaneous Requirements**

1. This permit supercedes the terms and conditions contained in PTI #03-13378 issued on February

**Iams Company**  
**PTI Application: 03 16006**  
**Issued**

**Facility ID: 0369000037**

Emissions Unit ID: **P014**

16, 2000 for this emissions unit.

Iams (C)  
 PTI A  
 Issued: 11/2/2004

Emissions Unit ID: P015

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

### A. Applicable Emissions Limitations and/or Control Requirements

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	OAC rule 3745-31-05(C)
<p>P015 - Process Line #3 extruding, drying, cooling and material handling (Company ID for this emissions unit is E16)</p>	<p>OAC rule 3745-31-05(A)(3)</p>	
<p>This is an administrative modification to PTI #03-13378 issued on February 16, 2000 to change the pressure drop range, include OC, CO, and NO<sub>x</sub> emissions from the four burners in the drying chambers (each rated at 3.5 MMBtu/hr) and pet food processing, drying and cooling operations, and indicate a PM<sub>10</sub> emission rate for this emissions unit.</p>	<p>OAC rule 3745-17-07(A)</p>	
	<p>OAC rule 3745-17-11(B)</p>	

Applicable Emissions  
Limitations/Control Measures

0.81 pounds PE per hour; 3.55 tons  
PE per year

0.41 pounds particulate matter 10  
microns in diameter or less (PM<sub>10</sub>)  
per hour; 1.80 tons PM<sub>10</sub> per year

2.24 pounds carbon monoxide  
(CO) per hour; 9.81 tons CO per  
year

1.41 pounds nitrogen oxide (NO<sub>x</sub>)  
per hour; 6.18 tons NO<sub>x</sub> per year

2.46 pounds organic compounds  
(OC) per hour; 10.77 tons OC per  
year

Control requirements (see A.2.a)

Visible particulate emissions shall  
not exceed 5% opacity as a  
six-minute average

see A.2.b

see A.2.b

see A.2.c

## 2. Additional Terms and Conditions

- 2.a The "Best Available Technology" (BAT) control requirements for this emissions unit has been determined to be the use of three cyclones that control emissions from the dryer and the cooler. BAT requirements also include compliance with the terms and conditions of this permit.
- 2.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.c This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by cyclones to a maximum mass emission rate of 0.81 pounds per hour.

## B. Operational Restrictions

- 1. The pressure drop across the cyclones shall be maintained within the range of 3 to 7 inches of water while the emissions unit is in operation.
- 2. The permittee shall burn only natural gas in this emissions unit.

## C. Monitoring and/or Record keeping Requirements

- 1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the cyclones while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the cyclone on a daily basis.
- 2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of the fuel burned in this emissions unit.
- 3. The permittee shall collect and record the following information each month for this emissions unit:
  - a. the amount of material produced, in tons, through this emissions unit;
  - b. the annual, year to date material produced, in tons (sum of C.3.a. for each calendar month

**Iams Company**  
**PTI Application: 02 16006**  
**Issued**

**Facility ID: 0369000037**

Emissions Unit ID: **P015**

to date from January to December).

#### D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the cyclones did not comply with the allowable range specified above.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit annual reports which identifies the amount of material, in tons, produced in emissions unit P015. This report shall be submitted by January 31 of each year and shall cover the previous calendar year.

#### E. Testing Requirements

1. Compliance with the emission limitations in section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emissions Limitation:  
0.81 pounds PE per hour and 3.55 tons per year of PE

Applicable Compliance Method:

PE from this emissions unit is generated from an extruded air lift system and a dryer which are exhausted through a common stack. PE from the extruded air lift is controlled by a cyclone and PE from the dryer will be controlled by cyclones. The combined emissions will be 0.81 lb PE/hr and compliance shall be determined in accordance with the following:

The combined flow rate from the air lift system and the dryer is 6,400 dscf/min + 40,500 dscf/min = 46,900 dscf/min. The outlet concentration was developed based on a stack test of emissions unit P010 on March 1, 2000.

$$PE = 46,900 \text{ dscf/min} \times 2.02^{-03} \text{ gr/dscf} \times 60 \text{ min/hr} \times 1 \text{ lb/7000 gr} = 0.81 \text{ lb/hr}$$

If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance

will also be shown with the annual limitation.

- b. Emissions Limitation:  
0.41 pounds PM<sub>10</sub> per hour and 1.80 tons per year of PM<sub>10</sub>

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the hourly PE rate by 0.5 as stated in the footnote of AP-42's Table 9.9.1-2 for Animal Feed Mill Pellet Coolers (03/2003). If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in Method 201 or 201A of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA, Northwest District Office.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- c. Emissions Limitation:  
2.24 pounds CO/hour and 9.81 tons CO/year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying a manufacturer's emission factor of 0.160 pounds CO per MMBtu with the maximum heat input capacity of 14 MMBtu per hour. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- d. Emissions Limitation:  
1.41 pounds NO<sub>x</sub>/hour and 6.18 tons NO<sub>x</sub>/year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying a manufacturer's emission factor of 0.101 pounds NO<sub>x</sub> per MMBtu with the maximum heat input capacity of 14 MMBtu per hour. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-4 and 7.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- e. Emissions Limitation:  
2.46 pounds OC/hour and 10.77 tons OC/year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying an emission factor derived from the stack testing of 0.154 pounds of OC per ton of product with the maximum product capacity of 16 tons per hour. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-4, 18, 25 or 25A as applicable.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- f. Emissions Limitation:  
Visible particulate emissions from the stack shall not exceed 5 percent opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined in accordance with the test methods and procedures specified in US EPA Method 9 of 40 CFR Part 60, Appendix A.

## F. Miscellaneous Requirements

1. This permit supercedes the terms and conditions contained in PTI #03-13378 issued on February 16, 2000 for this emissions unit.

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

**A. Applicable Emissions Limitations and/or Control Requirements**

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	OAC rule 3745-31-05(C)
P016 - Process Line #4 extruding, drying, cooling and material handling (Company ID for this emissions unit is E17)	OAC rule 3745-31-05(A)(3)	
This is an administrative modification to PTI #03-13378 issued on February 16, 2000 to change the pressure drop range, include OC, CO, and NO <sub>x</sub> emissions from the four burners in the drying chambers (each rated at 3.5 MMBtu/hr) and pet food processing, drying and cooling operations, and indicate a PM <sub>10</sub> emission rate for this emissions unit.	OAC rule 3745-17-07(A)  OAC rule 3745-17-11(B)	

Applicable Emissions  
Limitations/Control Measures

0.81 pounds PE per hour; 3.55 tons  
PE per year

0.41 pounds particulate matter 10  
microns in diameter or less (PM<sub>10</sub>)  
per hour; 1.80 tons PM<sub>10</sub> per year

2.24 pounds carbon monoxide  
(CO) per hour; 9.81 tons CO per  
year

1.41 pounds nitrogen oxide (NO<sub>x</sub>)  
per hour; 6.18 tons NO<sub>x</sub> per year

2.46 pounds organic compounds  
(OC) per hour; 10.77 tons OC per  
year

Control requirements (see A.2.a)

Visible particulate emissions shall  
not exceed 5% opacity as a  
six-minute average

see A.2.b

see A.2.b

see A.2.c

## 2. Additional Terms and Conditions

- 2.a The "Best Available Technology" (BAT) control requirements for this emissions unit has been determined to be the use of three cyclones that control emissions from the dryer and the cooler. BAT requirements also include compliance with the terms and conditions of this permit.
- 2.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.c This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by cyclones to a maximum mass emission rate of 0.81 pounds per hour.

## B. Operational Restrictions

- 1. The pressure drop across the cyclones shall be maintained within the range of 3 to 7 inches of water while the emissions unit is in operation.
- 2. The permittee shall burn only natural gas in this emissions unit.

## C. Monitoring and/or Record keeping Requirements

- 1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the cyclones while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the cyclone on a daily basis.
- 2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of the fuel burned in this emissions unit.
- 3. The permittee shall collect and record the following information each month for this emissions unit:
  - a. the amount of material produced, in tons, through this emissions unit;
  - b. the annual, year to date material produced, in tons (sum of C.3.a. for each calendar month to date from January to December).

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**Iams Company**

**PTI Application: 03 16006**

**Issued**

**Facility ID: 0369000037**

**Emissions Unit ID: P016**

#### D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the cyclones did not comply with the allowable range specified above.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit annual reports which identifies the amount of material, in tons, produced in emissions unit P016. This report shall be submitted by January 31 of each year and shall cover the previous calendar year.

#### E. Testing Requirements

1. Compliance with the emission limitations in section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emissions Limitation:  
0.81 pounds PE per hour and 3.55 tons per year of PE

Applicable Compliance Method:

PE from this emissions unit is generated from an extruded air lift system and a dryer which are exhausted through a common stack. PE from the extruded air lift is controlled by a cyclone and PE from the dryer will be controlled by cyclones. The combined emissions will be 0.81 lb PE/hr and compliance shall be determined in accordance with the following:

The combined flow rate from the air lift system and the dryer is 6,400 dscf/min + 40,500 dscf/min = 46,900 dscf/min. The outlet concentration was developed based on a stack test of emissions unit P010 on March 1, 2000.

$$PE = 46,900 \text{ dscf/min} \times 2.02^{-03} \text{ gr/dscf} \times 60 \text{ min/hr} \times 1 \text{ lb/7000 gr} = 0.81 \text{ lb/hr}$$

If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance

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**Iams C**

**PTI A**

**Issued: 11/2/2004**

Emissions Unit ID: **P016**

will also be shown with the annual limitation.

- b. Emissions Limitation:  
0.41 pounds PM<sub>10</sub> per hour and 1.80 tons per year of PM<sub>10</sub>

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the hourly PE rate by 0.5 as stated in the footnote of AP-42's Table 9.9.1-2 for Animal Feed Mill Pellet Coolers (03/2003). If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in Method 201 or 201A of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA, Northwest District Office.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- c. Emissions Limitation:  
2.24 pounds CO/hour and 9.81 tons CO/year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying a manufacturer's emission factor of 0.160 pounds CO per MMBtu with the maximum heat input capacity of 14 MMBtu per hour. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- d. Emissions Limitation:  
1.41 pounds NO<sub>x</sub>/hour and 6.18 tons NO<sub>x</sub>/year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying a manufacturer's emission factor of 0.101 pounds NO<sub>x</sub> per MMBtu with the maximum heat input capacity of 14 MMBtu per hour. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR

Part 60, Appendix A, Methods 1-4 and 7.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- e. Emissions Limitation:  
2.46 pounds OC/hour and 10.77 tons OC/year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying an emission factor derived from the stack testing of 0.154 pounds of OC per ton of product with the maximum product capacity of 16 tons per hour. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-4, 18, 25 or 25A as applicable.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- f. Emissions Limitation:  
Visible particulate emissions from the stack shall not exceed 5 percent opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined in accordance with the test methods and procedures specified in US EPA Method 9 of 40 CFR Part 60, Appendix A.

## F. Miscellaneous Requirements

1. This permit supercedes the terms and conditions contained in PTI #03-13378 issued on February 16, 2000 for this emissions unit.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P018 - Hammermill grinders and separation plenum (Company ID for this emissions unit is E6A)  This is an administrative modification to PTI #03-13843 issued on August 12, 2003 to change the pressure drop range	OAC rule 3745-31-05(A)(3)        OAC rule 3745-17-07(A)  OAC rule 3745-17-11(B)  OAC rule 3745-31-05(C)	0.54 pounds PE per hour; 2.37 tons PE per year*  Control requirements (see A.2.a)  Visible particulate emissions shall not exceed 0% opacity as a six-minute average  see A.2.b  see A.2.b  see A.2.c

\* All PE is assumed to be particulate matter 10 microns in diameter or less (PM<sub>10</sub>)

### 2. Additional Terms and Conditions

- 2.a Best Available Technology (BAT) control requirements for this emissions unit has been determined to be the use of a baghouse control system with a maximum outlet concentration of 0.01 gr/dscf.

BAT requirements also include compliance with the terms and conditions of this permit.

- 2.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.c This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by a baghouse system to a maximum outlet concentration of 0.01 gr/dscf and a maximum mass emission rate of 0.54 pounds per hour.

## B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.

## C. Monitoring and/or Record keeping Requirements

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

## D. Reporting Requirements

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

The deviation 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 limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:  
0.01 gr/dscf from baghouse

Applicable Compliance Method:

The emission limitation was established in accordance with the manufacturer's guaranteed

outlet grain loading for the baghouse. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emission Limitation:  
0.54 pounds PE per hour & 2.37 tons PE per year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the maximum outlet concentration of 0.01 gr/dscf by a maximum volumetric air flow rate of 6,240 acfm, 60 minutes/hour, and 1 pound/7000 grains. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons/yr was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

c. Emission Limitation:

Visible particulate emissions shall not exceed 0% opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9.

**F. Miscellaneous Requirements**

1. The modification of this emissions unit will result in a baghouse stack height of 65.5 feet above ground level which was used in air dispersion modeling to demonstrate compliance with Ohio EPA's acceptable incremental impact.
2. This permit supercedes the terms and conditions contained in PTI #03-13843 issued on August 12, 2003 for this emissions unit.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P019 - Hammermill grinders and separation plenum (Company ID for this emissions unit is E6B)	OAC rule 3745-31-05(A)(3)	0.54 pounds PE per hour; 2.37 tons PE per year*
This is an administrative modification to PTI #03-13843 issued on August 12, 2003 to change the pressure drop range		Control requirements (see A.2.a)
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 0% opacity as a six-minute average
	OAC rule 3745-17-11(B)	see A.2.b
	OAC rule 3745-31-05(C)	see A.2.b
		see A.2.c

\* All PE is assumed to be particulate matter 10 microns in diameter or less (PM<sub>10</sub>)

### 2. Additional Terms and Conditions

- 2.a Best Available Technology (BAT) for this emissions unit has been determined to be the use of a baghouse control system with a maximum outlet concentration of 0.01 gr/dscf.

BAT requirements also include compliance with the terms and conditions of this permit.

- 2.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.c This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by a baghouse system to a maximum outlet concentration of 0.01 gr/dscf and a maximum mass emission rate of 0.54 pounds per hour.

**B. Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.

**C. Monitoring and/or Record keeping Requirements**

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

**D. Reporting Requirements**

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

The deviation 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 limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:  
0.01 gr/dscf from baghouse

Applicable Compliance Method:

The emission limitation was established in accordance with the manufacturer's guaranteed outlet grain loading for the baghouse. If required, compliance with this emission limitation

shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emission Limitation:  
0.54 pounds PE per hour & 2.37 tons PE per year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the maximum outlet concentration of 0.01 gr/dscf by a maximum volumetric air flow rate of 6,240 acfm, 60 minutes/hour, and 1 pound/7000 grains. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons/yr was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

c. Emission Limitation:

Visible particulate emissions shall not exceed 0% opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9.

**F. Miscellaneous Requirements**

1. The modification of this emissions unit will result in a baghouse stack height of 65.5 feet above ground level which was used in air dispersion modeling to demonstrate compliance with Ohio EPA's acceptable incremental impact.
2. This permit supercedes the terms and conditions contained in PTI #03-13843 issued on August 12, 2003 for this emissions unit.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P020 - Filter receivers above ground grain distributor (Company ID for this emissions unit is E8A)	OAC rule 3745-31-05(A)(3)	0.11 pounds PE per hour; 0.48 ton PE per year*
This is an administrative modification to PTI #03-13843 issued on August 12, 2003 to change the pressure drop range		Control requirements (see A.2.a)
		Visible particulate emissions shall not exceed 0% opacity as a six-minute average
	OAC rule 3745-17-07(A)	see A.2.b
	OAC rule 3745-17-11(B)	see A.2.b
	OAC rule 3745-31-05(C)	see A.2.c

\* All PE is assumed to be particulate matter 10 microns in diameter or less (PM<sub>10</sub>)

### 2. Additional Terms and Conditions

- 2.a Best Available Technology (BAT) control requirements for this emissions unit has been determined to be the use of a baghouse control system with a maximum outlet concentration of 0.01 gr/dscf.

BAT requirements also include compliance with the terms and conditions of this permit.

- 2.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.c This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by a baghouse system to a maximum outlet concentration of 0.01 gr/dscf and a maximum mass emission rate of 0.11 pounds per hour.

## B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.

## C. Monitoring and/or Record keeping Requirements

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

## D. Reporting Requirements

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

The deviation 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 limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
0.01 gr/dscf from baghouse

Applicable Compliance Method:

The emission limitation was established in accordance with the manufacturer's guaranteed

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outlet grain loading for the baghouse. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emission Limitation:  
0.11 pounds PE per hour & 0.48 ton PE per year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the maximum outlet concentration of 0.01 gr/dscf by a maximum volumetric air flow rate of 1,250 acfm, 60 minutes/hour, and 1 pound/7000 grains. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons/yr was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

c. Emission Limitation:

Visible particulate emissions shall not exceed 0% opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9.

**F. Miscellaneous Requirements**

1. This permit supercedes the terms and conditions contained in PTI #03-13843 issued on August 12, 2003 for this emissions unit.

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

### A. Applicable Emissions Limitations and/or Control Requirements

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P021 - Filter receivers above ground grain distributor (Company ID for this emissions unit is E8B)	OAC rule 3745-31-05(A)(3)	0.11 pounds PE per hour; 0.48 ton PE per year*
This is an administrative modification to PTI #03-13843 issued on August 12, 2003 to change the pressure drop range		Control requirements (see A.2.a)
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 0% opacity as a six-minute average
	OAC rule 3745-17-11(B)	see A.2.b
	OAC rule 3745-31-05(C)	see A.2.c

\* All PE is assumed to be particulate matter 10 microns in diameter or less (PM<sub>10</sub>)

### 2. Additional Terms and Conditions

- Best Available Technology (BAT) control requirements for this emissions unit has been determined to be the use of a baghouse control system with a maximum outlet concentration of 0.01 gr/dscf.

BAT requirements also include compliance with the terms and conditions of this permit.

- 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.c This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by a baghouse system to a maximum outlet concentration of 0.01 gr/dscf and a maximum mass emission rate of 0.11 pounds per hour.

#### **B. Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.

#### **C. Monitoring and/or Record keeping Requirements**

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

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

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

The deviation 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 limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
0.01 gr/dscf from baghouse

Applicable Compliance Method:

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The emission limitation was established in accordance with the manufacturer's guaranteed outlet grain loading for the baghouse. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emission Limitation:  
0.11 pounds PE per hour & 0.48 ton PE per year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the maximum outlet concentration of 0.01 gr/dscf by a maximum volumetric air flow rate of 1,250 acfm, 60 minutes/hour, and 1 pound/7000 grains. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons/yr was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

c. Emission Limitation:

Visible particulate emissions shall not exceed 0% opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9.

**F. Miscellaneous Requirements**

1. This permit supercedes the terms and conditions contained in PTI #03-13843 issued on August 12, 2003 for this emissions unit.

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

### A. Applicable Emissions Limitations and/or Control Requirements

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P022 - Filter receiver above ground rice distributor (Company ID for this emissions unit is E9A)	OAC rule 3745-31-05(A)(3)	0.62 pounds PE per hour; 2.72 tons PE per year*
This is an administrative modification to PTI #03-13843 issued on August 12, 2003 to change the pressure drop range		Control requirements (see A.2.a)
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 0% opacity as a six-minute average
	OAC rule 3745-17-11(B)	see A.2.b
	OAC rule 3745-31-05(C)	see A.2.c

\* All PE is assumed to be particulate matter 10 microns in diameter or less (PM<sub>10</sub>)

### 2. Additional Terms and Conditions

- Best Available Technology (BAT) control requirements for this emissions unit has been determined to be the use of a baghouse control system with a maximum outlet concentration of 0.01 gr/dscf.

BAT requirements also include compliance with the terms and conditions of this permit.

- 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.c This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by a baghouse system to a maximum outlet concentration of 0.01 gr/dscf and a maximum mass emission rate of 0.62 pounds per hour.

## B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.

## C. Monitoring and/or Record keeping Requirements

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

## D. Reporting Requirements

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

The deviation 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 limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:  
0.01 gr/dscf from baghouse

Applicable Compliance Method:

The emission limitation was established in accordance with the manufacturer's guaranteed

outlet grain loading for the baghouse. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emission Limitation:  
0.62 pounds PE per hour & 2.72 tons PE per year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the maximum outlet concentration of 0.01 gr/dscf by a maximum volumetric air flow rate of 7,275 acfm, 60 minutes/hour, and 1 pound/7000 grains. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons/yr was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

c. Emission Limitation:

Visible particulate emissions shall not exceed 0% opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9.

**F. Miscellaneous Requirements**

1. This permit supercedes the terms and conditions contained in PTI #03-13843 issued on August 12, 2003 for this emissions unit.

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

### A. Applicable Emissions Limitations and/or Control Requirements

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P023 - Filter receiver above ground rice distributor (Company ID for this emissions unit is E9B)	OAC rule 3745-31-05(A)(3)	0.62 pounds PE per hour; 2.72 tons PE per year*
This is an administrative modification to PTI #03-13843 issued on August 12, 2003 to change the pressure drop range		Control requirements (see A.2.a)
		Visible particulate emissions shall not exceed 0% opacity as a six-minute average
	OAC rule 3745-17-07(A)	see A.2.b
	OAC rule 3745-17-11(B)	see A.2.b
	OAC rule 3745-31-05(C)	see A.2.c

\* All PE is assumed to be particulate matter 10 microns in diameter or less (PM<sub>10</sub>)

### 2. Additional Terms and Conditions

- Best Available Technology (BAT) control requirements for this emissions unit has been determined to be the use of a baghouse control system with a maximum outlet concentration of 0.01 gr/dscf.

BAT requirements also include compliance with the terms and conditions of this permit.

- 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.c This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by a baghouse system to a maximum outlet concentration of 0.01 gr/dscf and a maximum mass emission rate of 0.62 pounds per hour.

## B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.

## C. Monitoring and/or Record keeping Requirements

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

## D. Reporting Requirements

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

The deviation 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 limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:  
0.01 gr/dscf from baghouse

Applicable Compliance Method:

The emission limitation was established in accordance with the manufacturer's guaranteed

outlet grain loading for the baghouse. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emission Limitation:  
0.62 pounds PE per hour & 2.72 tons PE per year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the maximum outlet concentration of 0.01 gr/dscf by a maximum volumetric air flow rate of 7,275 acfm, 60 minutes/hour, and 1 pound/7000 grains. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons/yr was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

c. Emission Limitation:

Visible particulate emissions shall not exceed 0% opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9.

**F. Miscellaneous Requirements**

1. This permit supercedes the terms and conditions contained in PTI #03-13843 issued on August 12, 2003 for this emissions unit.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P024 - Hammermill grinder and separation plenum (Company ID for this emissions unit is E10)	OAC rule 3745-31-05(A)(3)	0.39 pounds PE per hour; 1.71 tons PE per year*
This is an administrative modification to PTI #03-13843 issued on August 12, 2003 to change the pressure drop range		Control requirements (see A.2.a)
		Visible particulate emissions shall not exceed 0% opacity as a six-minute average
	OAC rule 3745-17-07(A)	see A.2.b
	OAC rule 3745-17-11(B)	see A.2.b
	OAC rule 3745-31-05(C)	see A.2.c

\* All PE is assumed to be particulate matter 10 microns in diameter or less (PM<sub>10</sub>)

### 2. Additional Terms and Conditions

- 2.a Best Available Technology (BAT) control requirements for this emissions unit has been determined to be the use of a baghouse control system with a maximum outlet concentration of 0.01 gr/dscf.

BAT requirements also include compliance with the terms and conditions of this permit.

- 2.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.c This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by a baghouse system to a maximum outlet concentration of 0.01 gr/dscf and a maximum mass emission rate of 0.39 pounds per hour.

**B. Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.

**C. Monitoring and/or Record keeping Requirements**

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

**D. Reporting Requirements**

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

The deviation 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 limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:  
0.01 gr/dscf from baghouse

Applicable Compliance Method:  
The emission limitation was established in accordance with the manufacturer's guaranteed

outlet grain loading for the baghouse. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emission Limitation:  
0.39 pounds PE per hour & 1.71 tons PE per year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the maximum outlet concentration of 0.01 gr/dscf by a maximum volumetric air flow rate of 4,500 acfm, 60 minutes/hour, and 1 pound/7000 grains. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons/yr was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

c. Emission Limitation:

Visible particulate emissions shall not exceed 0% opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9.

**F. Miscellaneous Requirements**

1. The modification of this emissions unit will result in a baghouse stack height of 44 feet, 11 inches above ground level which was used in air dispersion modeling to demonstrate compliance with Ohio EPA's acceptable incremental impact.
2. This permit supercedes the terms and conditions contained in PTI #03-13843 issued on August 12, 2003 for this emissions unit.

Iams C  
PTI A  
Issued: 11/2/2004

Emissions Unit ID: P026

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P026 - Product bin storage with an aeration system (Company ID for this emissions unit is E18B)	OAC rule 3745-31-05(A)(3)	0.74 pounds PE per hour; 3.24 tons PE per year*
This is an administrative modification to PTI #03-13378 issued on February 16, 2000 to separate emissions unit P014 into two separate emission units		Visible particulate emissions shall not exceed 0% opacity as a six-minute average
	OAC rule 3745-17-07(A)	see A.2.a
	OAC rule 3745-17-11(B)	see A.2.b

\* All PE is assumed to be particulate matter 10 microns in diameter or less (PM<sub>10</sub>)

### 2. Additional Terms and Conditions

- 2.a BAT requirements include compliance with the terms and conditions of this permit.
- 2.b The emissions limitations and control requirements established by OAC rule 3745-17-11(B) and OAC rule 3745-17-07(A) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

### B. Operational Restrictions

None

**C. Monitoring and/or Record keeping Requirements**

None

**D. Reporting Requirements**

None

**E. Testing Requirements**

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

- a. Emission Limitation:  
0.74 pounds PE per hour & 3.24 tons PE per year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation based upon a company supplied outlet emission concentration of 0.008 gr/dscf (derived from a stack test of a similar source) by a maximum volumetric air flow rate of 10,800 acfm, 60 minutes/hour, and 1 pound/7000 grains from all sixteen product storage bins. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons/yr was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- b. Emission Limitation:  
Visible particulate emissions shall not exceed 0% opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9.

**F. Miscellaneous Requirements**

1. This permit supercedes the terms and conditions contained in PTI #03-13378 issued on February

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**Iams Company**

**PTI Application: 03 16006**

**Issued**

**Facility ID: 0369000037**

**Emissions Unit ID: P026**

16, 2000 for this emissions unit.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P901 - Grain unloading (truck and railcar), handling and storage area; (Company ID for this emissions unit is E1) (modification of PTI #03-13793, issued on 10/30/2003)  This is an administrative modification to PTI #03-13793 issued on October 30, 2003 to change the pressure drop range and establish a PM <sub>10</sub> fugitive emission limitation.	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-07(B)  OAC rule 3745-31-05(C)
	OAC rule 3745-17-11(B)  OAC rule 3745-17-07(A)  OAC rule 3745-17-08(B)	

Applicable Emissions  
Limitations/Control Measures

stack emissions:

0.81 pounds PE per hour; 3.55 tons PE/yr\*

Visible particulate emissions shall not exceed 0% opacity, as a six-minute average from the baghouse stack

see A.2.a

fugitive emissions:

1.49 tons PE/yr

0.22 tons particulate matter 10 microns in diameter or less (PM<sub>10</sub>)/yr

Visible fugitive PE shall not exceed 5% opacity, as a three-minute average from grain receiving operations

see A.2.b

see A.2.b

none (see A.2.c)

none (see A.2.d)

see A.2.e

\* All PE is assumed to be particulate matter 10 microns in diameter or less (PM<sub>10</sub>)

**2. Additional Terms and Conditions**

- 2.a** The "Best Available Technology" (BAT) control requirements for emissions unit P901 have been determined to be the following:
- i. use of a drive-through tunnel (building) with closed overhead door for truck/railcar unloading;
  - ii. use of appropriate sized grain receiving system to facilitate choke-feed condition for truck/railcar unloading; and
  - iii. use of an aspiration system vented to a baghouse serving the transferring and conveying of grain. The baghouse shall achieve a maximum outlet concentration of 0.01 gr/dscf.
- 2.b** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3475-31-05 (A)(3).
- 2.c** The Iams Company Facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements.
- 2.d** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.e** This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by a baghouse system to a maximum outlet concentration of 0.01 gr/dscf and a maximum mass emission rate of 0.81 pounds per hour.

## **B. Operational Restrictions**

1. The permittee shall keep the overhead door of the drive-through tunnel (building) closed at all times while unloading grain.
2. The permittee shall perform all unloading operations in a manner to maintain a choke-feed condition.
3. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of

water while the emissions unit is in operation.

4. The permittee shall not operate the aspiration system for the whole grain storage silos during grain unloading operations.

### **C. Monitoring and/or Record keeping Requirements**

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the drive-through tunnel for truck/railcar unloading. 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 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 eliminate the abnormal visible emissions.

### **D. Reporting Requirements**

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. These deviations reports shall be submitted in accordance with the General Terms and Conditions of this permit.
2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the drive-through tunnel for truck/railcar unloading and (b) describe any corrective actions taken to eliminate the abnormal visible

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particulate emissions. These reports shall be submitted to the Director (the Ohio EPA's Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

## E. Testing Requirements

1. Compliance with the emission limitations specified in section A.1. and A.2. of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitation:  
0.01 gr/dscf from baghouse

Applicable Compliance Method:

The emission limitation was established in accordance with the manufacturer's guaranteed outlet grain loading for the baghouse. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emission Limitation:  
0.81 pounds PE per hour and 3.55 tons PE/yr from stack

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying a maximum grain loading of 0.01 gr/dscf by the maximum volumetric air flow (9500 dscfm), using the appropriate conversion factors of 7000 grains/pound and 60 minutes/hour. Compliance shall be demonstrated by the monitoring, record keeping, and reporting requirements for the baghouse. If required, the permittee shall demonstrate compliance in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The permittee shall demonstrate compliance with the annual emission limitation by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hrs/yr and 2000 lbs/ton. Therefore, provided compliance is shown with the annual throughput limitation, compliance will also be shown with the annual limitation.

- c. Emission Limitation:  
1.49 tons PE/yr (fugitive)

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by multiplying the appropriate emission factors from AP-42 Chapter 9.9.1, Table 9.9.1-2 (3/2003) (0.017 lb PE/ton handled) by the maximum throughput (3,504,000 tons/yr\*), dividing by 2000 lbs/ton and applying a 95% control efficiency for controls applied.

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\* The maximum annual throughput is based on the maximum production rate of 400 tons per hour.

- d. Emission Limitation:  
0.22 tons PM<sub>10</sub>/yr (fugitive)

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by multiplying the appropriate emission factors from AP-42 Chapter 9.9.1, Table 9.9.1-2 (3/2003) (0.0025 lb PM<sub>10</sub>/ton handled) by the maximum throughput (3,504,000 tons/yr\*), dividing by 2000 lbs/ton and applying a 95% control efficiency for controls applied.

\* The maximum annual throughput is based on the maximum production rate of 400 tons per hour.

- e. Emission Limitation:  
Visible fugitive PE shall not exceed 5% opacity, as a three-minute average

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9 and the modifications indicated in OAC rule 3745-17-03(B)(3).

- f. Emission Limitation:  
Visible particulate emissions shall not exceed 0% opacity, as a six-minute average from the baghouse stack

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Method 9 of 40 CFR Part 60, Appendix A.

## F. Miscellaneous Requirements

1. This permit supercedes the terms and conditions of PTI #03-13793, issued on October 30, 2003, for emissions unit P901 only.
2. The modification of this emissions unit will result in a baghouse stack height of 44 feet, 11 inches above ground level which was used in air dispersion modeling to demonstrate compliance with Ohio EPA's acceptable incremental impact.

Iams C  
 PTI A  
 Issued: 11/2/2004

Emissions Unit ID: P902

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

### A. Applicable Emissions Limitations and/or Control Requirements

- 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	OAC rule 3745-31-05(C)
P902 - Receiving whole grains, meatmeals, and ingredients by hopper bottom trucks (Company ID for this emissions unit is E2)	OAC rule 3745-31-05(A)(3)	
This is an administrative modification to PTI #03-13843 issued on August 12, 2003 to change the pressure drop range and establish a PM <sub>10</sub> fugitive emission limitation.	OAC rule 3745-17-07(A)	
	OAC rule 3745-17-11(B)	
	OAC rule 3745-17-07(B)	
	OAC rule 3745-17-08(B)	

Applicable Emissions  
Limitations/Control Measures

Stack emissions:

0.84 pound PE per hour; 3.68 tons  
PE per year\*

Visible PE shall not exceed 0%  
opacity, as a six-minute average  
from the baghouse stack

Fugitive emissions:

1.49 tons PE/yr

0.22 tons PM<sub>10</sub>/yr

Visible fugitive PE shall not exceed  
5% opacity, as a three-minute  
average

Control requirements (see A.2.a)

see A.2.b

see A.2.b

see A.2.c

see A.2.d

see A.2.e

\* All PE is assumed to be particulate matter 10 microns in diameter or less (PM<sub>10</sub>)

**2. Additional Terms and Conditions**

**2.a** The "Best Available Technology" (BAT) control requirements for emissions unit P902 have been determined to be the following:

- i. use of a drive-through tunnel (building) with closed overhead door for truck unloading; and
- ii. use of appropriate sized grain receiving system to facilitate choke-feed condition for truck unloading.

BAT requirements also include compliance with the terms and conditions of this permit.

- 2.b** The emission limitation specified by this rule is less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).
- 2.c** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.d** The Iams Company is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements.
- 2.e** This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by a baghouse system to a maximum outlet concentration of 0.01 gr/dscf and a maximum mass emission rate of 0.84 pounds per hour.

## **B. Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.
2. The permittee shall keep the overhead door of the drive-through tunnel (building) closed at all times while unloading meatmeal/ingredients.
3. The permittee shall not operate the aspiration system for the meatmeal /ingredient storage bins while receiving new shipments of meatmeal/ingredient.
4. The permittee shall perform all unloading operations in a manner to maintain a choke-feed condition.

### C. Monitoring and/or Record keeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the drive-through tunnel for truck/railcar unloading. The presence or absence of any visible fugitive 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 abnormal visible emissions.

### D. Reporting Requirements

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

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

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the drive-through tunnel for truck/railcar unloading and (b) describe any corrective actions taken to minimize or eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Director (Ohio EPA's Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

## E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. and A.2. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:  
0.01 gr/dscf from baghouse

Applicable Compliance Method:

The emission limitation was established in accordance with the manufacturer's guaranteed outlet grain loading. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emission Limitation:  
0.84 pound PE per hour & 3.68 tons PE per year

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the maximum outlet concentration of 0.01 gr/dscf by a maximum volumetric air flow rate of 9800 acfm, 60 minutes/hour, and 1 pound/7000 grains. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons/yr was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- c. Emission Limitation:  
1.49 tons PE per year (fugitive)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the annual emission limit by multiplying an AP-42 emission factor (Section 9.9.1, Table 9.9.1-2, 3/2003) of 0.017 lbs of PE/ton of grain handled with the maximum annual throughput of 3,504,000 tons of grain handled, 1 ton/2000 lbs, and a 95% control efficiency for using a drive-through tunnel (building) that is a three-sided enclosure.

- d. Emission Limitation:

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0.22 tons PM<sub>10</sub> per year (fugitive)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the annual emission limit by multiplying an AP-42 emission factor (Section 9.9.1, Table 9.9.1-2, 3/2003) of 0.0025 lbs of PM<sub>10</sub>/ton of grain handled with the maximum annual throughput of 3,504,000 tons of grain handled, 1 ton/2000 lbs, and a 95% control efficiency for using a drive-through tunnel (building) that is a three-sided enclosure.

e. Emission Limitation:

Visible PE shall not exceed 0% as a six-minute average from the baghouse

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9.

f. Emission Limitation:

Visible fugitive PE shall not exceed 5% as a three-minute average

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9 and the modifications indicated in OAC rule 3745-17-03(B)(3).

**F. Miscellaneous Requirements**

1. The modification of this emissions unit, along with emissions unit P901, will result in a baghouse stack height of 44 feet, 11 inches above ground level which was used in air dispersion modeling to demonstrate compliance with Ohio EPA's acceptable incremental impact.
2. This permit supercedes the terms and conditions in PTI #03-13843 issued on August 12, 2003 for this emissions unit.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	OAC rule 3745-31-05(C)
P903 - Raw material shipping by hopper bottom truck and railcar (Company ID for this emissions unit is E20)	OAC rule 3745-31-05(A)(3)	
This is an Administrative Modification to PTI #03-13378 issued on February 16, 2000 to change the pressure drop range and establish a PM <sub>10</sub> fugitive emission limitation.	OAC rule 3745-17-11(B)	
	OAC rule 3745-17-07(A)	
	OAC rule 3745-17-07(B)	
	OAC rule 3745-17-08(B)	

Applicable Emissions  
Limitations/Control Measures

stack emissions:

0.10 pounds PE/hr, 0.45 tons  
PE/yr\*

Visible PE shall not exceed 0%  
opacity as a six-minute average  
from the baghouse stack

fugitive emissions:

3.77 tons PE/yr

1.27 tons PM<sub>10</sub>/yr

Visible fugitive PE shall not exceed  
5% opacity as a three-minute  
average from grain/meal loading  
operations

control requirements (see A.2.a)

see A.2.b

see A.2.b

none (see A.2.c)

none (see A.2.d)

see A.2.e

\* All PE is assumed to be particulate matter 10 microns in diameter or less (PM<sub>10</sub>)

**2. Additional Terms and Conditions**

- 2.a** The "Best Available Technology" (BAT) control requirements for emissions unit P903 have been determined to be the following:
- i. use of a three-sided enclosure for truck/railcar loading;
  - ii. use of an aspiration system vented to a baghouse serving the transferring and conveying of grain/meal; and
  - iii. use of telescoping chute for truck/railcar loading.
- 2.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.c** The Iams Company Facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements.
- 2.d** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e)
- 2.e** This permit establishes a federally enforceable limitation on particulate emissions for the purpose of having the controlled particulate emission rate represent the potential to emit of the emissions unit. This limitation shall be established through OAC rule 3745-31-05(A)(3), by establishing the requirement to have particulate emissions controlled by a baghouse system to a maximum outlet concentration of 0.01 gr/dscf and a maximum mass emission rate of 0.10 pounds per hour.

## **B. Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation.

## **C. Monitoring and/or Record keeping Requirements**

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

Emissions Unit ID: P903

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any abnormal visible fugitive particulate emissions from the truck/railcar loading operations. The presence or absence of any visible fugitive 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 abnormal visible emissions.

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

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

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

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the truck/railcar loading operations and (b) describe any corrective actions taken to minimize or eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Director (Ohio EPA's Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

#### **E. Testing Requirements**

1. Compliance with the emission limitations in section A.1 and A.2 of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
0.01 gr/dscf from baghouse

Applicable Compliance Method:

The limitation was determined in accordance with the manufacturers guaranteed outlet grain loading for the baghouse. If required, the permittee shall demonstrate compliance by testing in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emission Limitation:  
0.10 lb PE/hr, and 0.45 tons PE/yr from baghouse

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the maximum outlet concentration of 0.01 gr/dscf by a maximum volumetric air flow rate of 1,200 acfm, 60 minutes/hour, 1 scf/1 acf, and 1 pound/7000 grains. If required, compliance with this emission limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons per year limitation was developed by multiplying the lb/hr allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- c. Emission Limitation:  
3.77 tons PE/yr from fugitive emissions

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by using AP-42, Chapter 9.9.1, Table 9.9.1-1 (3/2003) emission factor of 0.086 lb PE/ton handled, the annual grain throughput for this emissions source and a control efficiency of 95% obtained from the use of a 3-sided control structure and the use of a telescoping spout. Compliance shall be demonstrated by the monitoring and record keeping specified in section C.2.

- d. Emission Limitation:  
1.27 tons PM<sub>10</sub>/yr from fugitive emissions

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by multiplying the appropriate emission factors from AP-42's Chapter 9.9.1, Table 9.9.1-1 (3/2003) (0.029 lb PM<sub>10</sub>/ton handled) by the maximum throughput (1,752,000 tons/yr\*), dividing by 2000 lbs/ton and applying a 95% control efficiency for controls applied.

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\* The maximum annual throughput is based on the maximum production rate of 200 tons per hour.

- e. Emission Limitation:  
Visible particulate emissions shall not exceed 0% as a six-minute average from the baghouse

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9.

- f. Emission Limitation:  
Visible fugitive PE shall not exceed 5% opacity, as a three-minute average

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be determined in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Method 9 and the modifications indicated in OAC rule 3745-17-03(B)(3).

## **F. Miscellaneous Requirements**

1. This permit supercedes the terms and conditions of this emissions unit in PTI #03-13378 issued on February 16, 2000.