

Synthetic Minor Determination and/or  Netting Determination

Permit To Install: **01-01304**

**A. Source Description**

Mars Petcare US, Inc (fka: Doane Pet Care) in Washington Court House, Fayette County, produces dry pet foods and biscuits. On September 10, 1998, DPC was issued a permit to install (PTI #01-7310) for the facility's boiler (B001) and dryers (P001 & P002). Prior to submittal of this PTI application, the facility conducted a thorough environmental audit and determined that there are several additional operations that may require permitting. During this audit, an emissions inventory was prepared and it was determined that the facility had the potential to emit over 100 tons of particulate matter per year. Actual emissions are below the 100 tpy threshold.

Based on the above info, Mars Petcare has decided to submit a synthetic minor PTI application which includes the existing permitted boiler and additional units.

**B. Facility Emissions and Attainment Status**

Mars Petcare is located in Washington Courthouse in Fayette County. Fayette County is in attainment for all criteria pollutants therefore the 100 TPY threshold for Title V and 250 TPY threshold for PSD would be used to determine whether or not Mars Petcare is a Major source. Table 1 below identifies the potential emissions of all of the applicable sources at the facility. The results of Table 1 demonstrate that the total potential to emit for particulate exceeds the 100 TPY Title V threshold and that the potential to emit for all pollutants remains below the PSD threshold of 250 TPY. Table 2 identifies the potential to emit after including the synthetic minor restrictions contained within this PTI.

**C. Source Emissions**

**Table 1. Synthetic Minor Comparison by Emission Unit (TPY)**

Emissions Unit @ PTE	PE	NO <sub>x</sub>	SO <sub>2</sub>	CO	OC
B001	0.40	10.9	0.86	4.42	0.58
<u>F001</u>	39.42	-	-	-	-
<u>F002</u>	4.03	-	-	-	-
<u>F003</u>	39.42	-	-	-	-
<u>F004</u>	1.66	-	-	-	-
<u>N001 (process)</u>	5.91	-	-	-	-
<u>N002 (process)</u>	5.91	-	-	-	-
<u>N003 (process)</u>	11.83	-	-	-	-
<u>N001 (combustion)</u>	0.35	9.57	0.76	3.86	0.51
<u>N002 (combustion)</u>	0.35	9.57	0.76	3.86	0.51
<u>N003 (combustion)</u>	0.35	9.57	0.76	3.86	0.51
<u>N004 (process)</u>	9.86	-	-	-	-
<u>N005 (process)</u>	9.86	-	-	-	-
<u>N004 (combustion)</u>	0.58	15.98	1.25	6.44	0.84
<u>N005 (combustion)</u>	0.58	15.98	1.25	6.44	0.84
<u>P003</u>	3.33	-	-	-	-
<u>P004</u>	2.98	-	-	-	-

<u>P005</u>	1.97	-	-	-	-
<u>P006</u>	4.42	-	-	-	-
<u>P007</u>	0.22	-	-	-	-
<u>P008</u>	1.88	-	-	-	-
<u>P009</u>	0.57	-	-	-	-
<u>P010</u>	0.26	-	-	-	-
<u>B002 (de-minimus)</u>	0.22	5.83	0.46	2.21	0.29
<u>Z001 (de-minimus)</u>	0.17	2.19	0.01	1.84	0.24
<u>Z002 (de-minimus)</u>	0.17	2.19	0.01	1.84	0.24
<b>Total</b>	<b>146.7</b>	<b>81.78</b>	<b>6.12</b>	<b>34.77</b>	<b>4.56</b>

**Table 2. SMPTI limits based on a maximum annual throughput of 450,000 tons per rolling, 12-month period for the pet food operation and 70,000 tons per rolling, 12-month period for the biscuit operation.**

<i>Emissions Unit @ SMTV Limit</i>	<i>PE</i>	<i>NO<sub>x</sub></i>	<i>SO<sub>2</sub></i>	<i>CO</i>	<i>OC</i>
<i>B001</i>	0.40	10.9	0.86	4.42	0.58
<i>F001</i>	20.25	-	-	-	-
<i>F002</i>	4.12	-	-	-	-
<i>F003</i>	3.15	-	-	-	-
<i>F004</i>	2.14	-	-	-	-
<i>N001 (process)</i>	NA	-	-	-	-
<i>N002 (process)</i>	NA	-	-	-	-
<i>N003 (process)</i>	24.3	-	-	-	-
<i>N001 (combustion)</i>	0.35	9.57	0.76	3.86	0.51
<i>N002 (combustion)</i>	0.35	9.57	0.76	3.86	0.51
<i>N003 (combustion)</i>	0.35	9.57	0.76	3.86	0.51
<i>N004 (process)</i>	NA	-	-	-	-
<i>N005 (process)</i>	25.2	-	-	-	-
<i>N004 (combustion)</i>	0.58	15.98	1.25	6.44	0.84
<i>N005 (combustion)</i>	0.58	15.98	1.25	6.44	0.84
<i>P003</i>	2.53	-	-	-	-
<i>P004</i>	4.39	-	-	-	-
<i>P005</i>	2.06	-	-	-	-
<i>P006</i>	4.50	-	-	-	-

<u>P007</u>	0.22	-	-	-	-
<u>P008</u>	0.39	-	-	-	-
<u>P009</u>	0.68	-	-	-	-
<u>P010</u>	0.29	-	-	-	-
<u>B002 (de-minimus)</u>	0.20	5.83	0.46	2.21	0.29
<u>Z001 (de-minimus)</u>	0.17	2.19	0.01	1.84	0.24
<u>Z002 (de-minimus)</u>	0.17	2.19	0.01	1.84	0.24
<b>Total</b>	<b>97.37</b>	<b>81.78</b>	<b>6.12</b>	<b>34.77</b>	<b>4.56</b>

**D. Conclusion**

The synthetic minor limitations contained within this permit will effectively restrict the particulate emissions below Title V emissions thresholds. The permit contains operational restrictions, record keeping and reporting requirements to ensure on going compliance with the emission limitations. Particulate emissions will not exceed 97.37 tons per rolling, 12-month period.



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
50 West Town Street, Suite 700  
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049  
Columbus, OH 43216-1049

**CERTIFIED MAIL**

**RE: DRAFT PERMIT TO INSTALL**

**FAYETTE COUNTY**

**Application No: 01-01304**

**Fac ID: 0124010128**

	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
40 CFR Part 60, Subpart Dc	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

**DATE:** 4/29/2008

Mars Petcare U.S., Inc  
Brian Crooks  
1 Doane Drive  
Washington Court House, OH 43160

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43216-1049.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$9600** will be due. Please do not submit any payment now.

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

Sincerely,

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

CC: USEPA

CDO

KY

**FAYETTE COUNTY**

PUBLIC NOTICE  
ISSUANCE OF DRAFT PERMIT TO INSTALL **01-01304** FOR AN AIR CONTAMINANT SOURCE  
FOR **Mars Petcare U.S., Inc**

On 4/29/2008 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Mars Petcare U.S., Inc**, located at **1 Doane Drive, Washington Court House**, Ohio.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 01-01304:

**Synthetic Minor PTI for dry pet food and biscuit production facility**

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

Isaac Robinson, Ohio EPA, Central District Office, 122 South Front St, P.O. Box 1049, Columbus, OH 43216-1049 [(614)728-3778]



**Permit To Install  
Terms and Conditions**

**Issue Date: To be entered upon final issuance  
Effective Date: To be entered upon final issuance**

**DRAFT PERMIT TO INSTALL 01-01304**

Application Number: 01-01304  
Facility ID: 0124010128  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: Mars Petcare U.S., Inc  
Person to Contact: Brian Crooks  
Address: 1 Doane Drive  
Washington Court House, OH 43160

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**1 Doane Drive  
Washington Court House, Ohio**

Description of proposed emissions unit(s):  
**Synthetic Minor PTI for dry pet food and biscuit production facility**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

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Chris Korleski  
Director

## **Part I - GENERAL TERMS AND CONDITIONS**

### **A. Permit to Install General Terms and Conditions**

#### **1. Compliance Requirements**

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

#### **2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

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

#### **3. Records Retention Requirements**

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

#### **4. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections,

conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

**9. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental

Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

**10. Public Disclosure**

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

**11. Applicability**

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

**12. Best Available Technology**

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

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

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

#### 14. Construction Compliance Certification

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

#### 15. Fees

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

### B. Permit to Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	97.37
NOx	81.78
SO2	6.12
CO	34.77
OC	4.56

**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.

**Operations, Property, and/or Equipment - (B001) - 12.0 mmBtu/hr natural gas- or propane-fired boiler; boiler no. 1 (pet food operation). The terms and conditions in this permit supercede those identified in PTI 01-07310 issued September 10, 1998.**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE) shall not exceed 0.09 lb/hr and 0.40 tons per year (TPY).</p> <p>Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 2.49 lbs/hr and 10.90 TPY.</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 0.2 lb/hr 0.86 TPY.</p> <p>Carbon monoxide (CO) emissions shall not exceed 1.01 lbs/hr and 4.42 TPY.</p> <p>Organic compound emissions (OC) shall not exceed 0.13 lb/hr 0.58 TPY.</p> <p>The requirements established pursuant to this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and the requirements of 40 CFR Part 60, Subpart Dc.</p> <p>See Section A.2.a and B.2 below.</p>
OAC rule 3745-17-07(A)	Visible PE from any stack or vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
OAC rule 3745-17-10(B)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-18-06(D)	The SO <sub>2</sub> limitation specified by this rule is less stringent than the SO <sub>2</sub> limitation established pursuant to OAC rule 3745-31-05(A)(3).
40 CFR Part 60, Subpart Dc	See Section B.1 below.

## 2. Additional Terms and Conditions

- 2.a The hourly and annual emissions limitations for this emissions unit were established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with these emissions limitations.

### B. Operational Restrictions

1. The permittee shall only combust natural gas or propane as fuels in this emissions unit.
2. The quality of propane burned in this emissions unit shall meet the following specifications on an "as burned" basis:
  - a. a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 15 grains/100 cf.

Compliance with the above-mentioned specifications shall be determined by using analytical results provided by the propane supplier for each shipment of propane.

### C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the type and quantity of fuel burned in this emissions unit.
2. For each day during which the permittee burns a fuel other than natural gas or propane in this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned.
3. For each shipment of propane received for burning in this emissions unit, the permittee shall maintain records of the total quantity of propane received and the propane supplier's analyses for sulfur content.

### D. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify the following:
  - a. each day when a fuel other than natural gas or propane was burned in this emissions unit; and
  - b. each day when propane with a sulfur content greater than 15 gr/100 cf was burned in this emissions unit.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. This emissions unit is subject to the applicable provisions of Subpart Dc of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to 40 CFR Part 60.7, the permittee is hereby advised of the requirement to report the following at the appropriate times:

- a. construction date (no later than 30 days after such date);
- b. actual start-up date (within 15 days after such date); and,
- c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit  
P. O. Box 163669  
Columbus, Ohio 43216-3669

and

Ohio Environmental Protection Agency  
Central District Office  
Division of Air Pollution Control  
3232 Alum Creek Drive  
Columbus, Ohio 43207

## **E. Testing Requirements**

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

- a. Emissions Limitation:

Emissions from natural gas and/or propane usage shall not exceed:

2.49 lbs NO<sub>x</sub>/hr and 10.9 tons NO<sub>x</sub>/yr;  
0.2 lb SO<sub>2</sub>/hr and 0.86 ton SO<sub>2</sub>/yr;  
1.01 lbs CO/hr and 4.42 tons CO/yr;  
0.09 lb PE/hr and 0.40 ton PE/yr; and  
0.13 lb OC/hr and 0.58 ton OC/yr.

Applicable Compliance Method:

The hourly emissions limitations were established by multiplying the maximum total hourly natural gas or propane usage for the boiler (.012 MMcf/hr natural gas)(.13 Mgal/hr propane) by the following emission factor for each pollutant in order to establish the worst-case hourly emission limitation for each pollutant:

<u>Pollutant</u>	<u>Emission Factor</u>
NO <sub>x</sub>	19 lbs of NO <sub>x</sub> /Mgal of propane
SO <sub>2</sub>	1.5 lbs of SO <sub>2</sub> */Mgal of propane
CO	84 lbs of CO/MMcf of natural gas
PE	7.6 lb of PE/MMcf of natural gas
OC	11 lbs of OC/MMCF of natural gas

Emission factors for propane usage are taken from Table 1.5-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for external combustion sources. Emission factors for natural gas usage are taken from Tables 1.4-1 and 1.4-2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for external combustion sources.

\* The Emission Factor for SO<sub>2</sub> is derived by multiplying the AP-42 Emission Factor (0.1 lb SO<sub>2</sub>/Mgal of propane) by the maximum sulfur content of the propane (15 grains/100 cf).

If required, the following test methods shall be used to demonstrate compliance with the hourly allowable emissions limitations:

<u>Pollutant</u>	<u>Test Method(s)</u>
NO <sub>x</sub>	Method 7 or 7E of 40 <u>CFR</u> Part 60, Appendix A
SO <sub>2</sub>	Method 6 or 6C of 40 <u>CFR</u> Part 60, Appendix A
CO	Method 10 of 40 <u>CFR</u> Part 60, Appendix A
PE	Method 5 of 40 <u>CFR</u> Part 60, Appendix A
OC	Method 18, 25 or 25A of 40 <u>CFR</u> Part 60, Appendix A

The annual emissions limitations were calculated by multiplying the maximum hourly emission rate by 8,760 hours/year and dividing by 2,000 pounds/ton. Compliance with the annual emissions limitations will be assumed as long as compliance with the lb/hr limitations are maintained.

b. Emission Limitation

Visible PE from any stack or vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

**Mars Petcare U.S., Inc**

**PTI Application: 01-01304**

**Issued: To be entered upon final issuance**

**Facility ID: 0124010128**

**Emissions Unit ID: B001**

Applicable Compliance Method

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

**F. Miscellaneous Requirements**

1. The terms and conditions in this permit supercede those identified in PTI 01-07310 issued September 10, 1998.

**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 -(F001) - truck and railcar ingredient unloading (pet food operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 9.0 lbs/hr.  See Section A.2.a below.  The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B).
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	PE shall not exceed 20.25 tons per rolling, 12-month period.  See Section B.1 below.
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

**2. Additional Terms and Conditions**

- 2.a The hourly PE limitation for this emissions unit was established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent

fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

## **B. Operational Restrictions**

1. The maximum annual ingredient throughput for this emissions unit shall not exceed 450,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for this emissions unit; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
- a. The weight of all ingredients unloaded by truck and rail for the pet food operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck and rail for the pet food operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions, in tons, calculated by multiplying C.1.b. by the controlled emission factor (.09 lb/ton) and then converting to tons.

## **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
- a. each exceedance of the rolling, 12-month ingredient throughput limitation; and
  - b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit during the previous calendar year. These reports shall include the calculations used to determine the annual emissions and shall be submitted by April

15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from this emissions unit in the annual Fee Emissions Report.

## E. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emissions Limitation:

Particulate emissions shall not exceed 9.0 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by multiplying the maximum process weight rate (100 tons/hr) by the controlled emission factor (.09 lb/ton) derived by multiplying the AP-42\* emissions factor for grain unloading (0.18 lb/ton truck) by a control efficiency of 50% to account for choke feed methods of unloading.

\*Table 9.9.1-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for grain receiving by straight truck.

- b. Emissions Limitation:

Particulate emissions shall not exceed 20.25 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

## F. Miscellaneous Requirements

None

**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 - (F002) - raw material handling (pet food operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 0.92 lb/hr.  See Section A.2.a below.  The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B).
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	PE shall not exceed 4.12 tons per rolling, 12-month period.
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

**2. Additional Terms and Conditions**

- 2.a The hourly PE limitation for this emissions unit was established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent

fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

**B. Operational Restrictions**

- 1. The maximum annual ingredient throughput for this emissions unit shall not exceed 450,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for this emissions unit; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

- 1. The permittee shall collect and record the following information each month for this emissions unit:
  - a. The weight of all ingredients unloaded by truck and rail for the pet food operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck and rail for the pet food operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions, in tons, calculated by multiplying C.1.b. by the controlled emission factor (.0183 lb/ton) and then converting to tons.

**D. Reporting Requirements**

- 1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
  - a. each exceedance of the rolling, 12-month ingredient throughput limitation; and
  - b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

- 2. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit during the previous calendar year. These reports shall include the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and

identifying the specific emission data from this emissions unit in the annual Fee Emissions Report.

## **E. Testing Requirements**

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emissions Limitation:

Particulate emissions shall not exceed 0.92 pound per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by multiplying the maximum process weight rate (50 tons/hr) by the controlled emission factor (.0183 lb/ton) derived by multiplying the AP-42\* emissions factor for grain handling (.061 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system.

\*Table 9.9.1-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for headhouse and grain handling.

- b. Emissions Limitation:

Particulate emissions shall not exceed 4.12 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

## **F. Miscellaneous Requirements**

None

**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 -(F003) - truck unloading (biscuit operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 9.0 lbs/hr.  See Section A.2.a below.  The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B).
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	PE shall not exceed 3.15 tons per rolling, 12-month period.  See Section B.1 below.
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

**2. Additional Terms and Conditions**

- 2.a The hourly PE limitation for this emissions unit was established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent

fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

**B. Operational Restrictions**

1. The maximum annual ingredient throughput for this emissions unit shall not exceed 70,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for this emissions unit; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
- a. The weight of all ingredients unloaded by truck for the biscuit operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck for the biscuit operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions, in tons, calculated by multiplying C.1.b. by the controlled emission factor (.09 lb/ton) and then converting to tons.

**D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
- a. each exceedance of the rolling, 12-month ingredient throughput limitation; and
  - b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit during the previous calendar year. These reports shall include the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and

identifying the specific emission data from this emissions unit in the annual Fee Emissions Report.

## **E. Testing Requirements**

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emissions Limitation:

Particulate emissions shall not exceed 9.0 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by multiplying the maximum process weight rate (100 tons/hr) by the controlled emission factor (.09 lb/ton) derived by multiplying the AP-42\* emissions factor for grain unloading (0.18 lb/ton truck) by a control efficiency of 50% to account for choke feed methods of unloading.

\*Table 9.9.1-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for grain receiving by straight truck.

- b. Emissions Limitation:

Particulate emissions shall not exceed 3.15 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

## **F. Miscellaneous Requirements**

None

**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 -(F004) - raw material handling (biscuit operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 0.38 lb/hr.  See Section A.2.a and A.2.f below.  The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B).
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	PE shall not exceed 2.14 tons per rolling, 12-month period.  See Section B.1 below.
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

**2. Additional Terms and Conditions**

- 2.a The hourly PE limitation for this emissions unit was established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent

fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.
- 2.f** All flour employed by this emissions unit shall be processed by a baghouse product collection system with a minimum 99% control efficiency.

**B. Operational Restrictions**

- 1. The maximum annual ingredient throughput for this emissions unit shall not exceed 70,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for this emissions unit; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

- 1. The permittee shall collect and record the following information each month for this emissions unit:
  - a. The weight of all ingredients unloaded by truck for the biscuit operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck for the biscuit operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions, in tons, calculated by multiplying C.1.b. by the uncontrolled emission factor (.061 lb/ton) and then converting to tons.

**D. Reporting Requirements**

- 1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
  - a. each exceedance of the rolling, 12-month ingredient throughput limitation; and
  - b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

- 2. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit during the previous calendar year. These reports shall include

the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from this emissions unit in the annual Fee Emissions Report.

**E. Testing Requirements**

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emissions Limitation:

Particulate emissions shall not exceed 0.38 pound per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by multiplying the maximum process weight rate (6.25 tons/hr) by the uncontrolled AP-42\* emission factor for grain handling (.061 lb/ton).

\*Table 9.9.1-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for headhouse and grain handling.

- b. Emissions Limitation:

Particulate emissions shall not exceed 2.14 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

**F. Miscellaneous Requirements**

None

**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.

**Operations, Property, and/or Equipment -(N001) - 10.5 mmBtu/hr natural gas- or propane-fired dryer vented to a cyclone; no. 1 burner (pet food operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE), excluding emissions from fuel combustion, shall not exceed 1.35 lbs/hr.</p> <p>See Section A.2.a below.</p> <p>Emissions from natural gas and/or propane usage shall not exceed:</p> <p>2.19 lbs Nitrogen Oxide (NO<sub>x</sub>)/hr,            9.57 tons NO<sub>x</sub>/yr;            0.17 lb Sulfur dioxide (SO<sub>2</sub>)/hr,            0.76 ton SO<sub>2</sub>/yr;            0.88 lb Carbon Monoxide (CO)/hr,            3.86 tons CO/yr;            0.08 lb PE/hr,            0.35 ton PE/yr;            0.12 lb Organic Compound (OC)/hr and            0.51 ton OC/yr.</p> <p>The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B) and 3745-17-07(A).</p>
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	<p>The combined PE from emissions units N001, N002 and N003 shall not exceed 24.3 tons per rolling, 12-month period.</p> <p>See Section B.1 below.</p>
OAC rule 3745-17-07(A)	Visible PE from any stack or vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

## 2. Additional Terms and Conditions

- 2.a** The hourly PE limitation and natural gas/propane combustion emission limitations for this emissions unit were established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b** This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c** This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

## B. Operational Restrictions

1. The combined maximum annual ingredient throughput for emissions units N001, N002 and N003 shall not exceed 450,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for these emissions units; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

## C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:

- a. The weight of all ingredients unloaded by truck and rail for the pet food operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck and rail for the pet food operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions for emissions units N001, N002 and N003, in tons, calculated by multiplying C.1.b. by the controlled emission factor (.0108 lb/ton) and then converting to tons.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

## **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
  - a. each exceedance of the rolling, 12-month ingredient throughput limitation; and
  - b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit annual reports that specify the total particulate emissions from emissions units N001, N002 and N003 during the previous calendar year. These reports shall include the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from these emissions units in the annual Fee Emissions Report.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

#### E. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emissions Limitation:

Particulate emissions shall not exceed 1.35 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by multiplying the maximum process weight rate (12.5 tons/hr) by the controlled emission factor (.0108 lb/ton) derived by multiplying the ODEQ\* emissions factor for a pellet cooler (.36 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system.

\*Oregon Department of Environmental Quality - *Emission Factors for Grain Elevators, Seed Cleaning and Animal Feed Mills* (revised 4/25/00) for a pellet cooler equipped with a cyclone.

- b. Emissions Limitation:

The combined PE from emissions units N001, N002 and N003 shall not exceed 24.3 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

c. Emissions Limitation:

Emissions from natural gas and/or propane usage shall not exceed:

2.19 lbs NO<sub>x</sub>/hr and 9.57 tons NO<sub>x</sub>/yr;  
 0.17 lb SO<sub>2</sub>/hr and 0.76 ton SO<sub>2</sub>/yr;  
 0.88 lb CO/hr and 3.86 tons CO/yr;  
 0.08 lb PE/hr and 0.35 ton PE/yr; and  
 0.12 lb CO/hr and 0.51 ton CO/yr.

Applicable Compliance Method:

The hourly emissions limitations were established by multiplying the maximum total hourly natural gas or propane usage for the dryer (.0105 MMcf/hr natural gas)(.115 Mgal/hr propane) by the following emission factor for each pollutant in order to establish the worst-case hourly emission limitation for each pollutant:

<u>Pollutant</u>	<u>Emission Factor</u>
NO <sub>x</sub>	19 lbs of NO <sub>x</sub> /Mgal of propane
SO <sub>2</sub>	1.5 lbs of SO <sub>2</sub> */Mgal of propane
CO	84 lbs of CO/MMcf of natural gas
PE	7.6 lbs of PE/MMcf of natural gas
OC	11 lbs of OC/MMCF of natural gas

Emission factors for propane usage are taken from Table 1.5-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for external combustion sources. Emission factors for natural gas usage are taken from Tables 1.4-1 and 1.4-2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for external combustion sources.

\* The Emission Factor for SO<sub>2</sub> is derived by multiplying the AP-42 Emission Factor (0.1 lb SO<sub>2</sub>/Mgal of propane) by the maximum sulfur content of the propane (15 grains/100 cf).

If required, the following test methods shall be used to demonstrate compliance with the hourly allowable emissions limitations:

<u>Pollutant</u>	<u>Test Method(s)</u>
NO <sub>x</sub>	Method 7 or 7E of 40 <u>CFR</u> Part 60, Appendix A
SO <sub>2</sub>	Method 6 or 6C of 40 <u>CFR</u> Part 60, Appendix A
CO	Method 10 of 40 <u>CFR</u> Part 60, Appendix A
PE	Method 5 of 40 <u>CFR</u> Part 60, Appendix A
OC	Method 18, 25 or 25A of 40 <u>CFR</u> Part 60, Appendix A

The annual emissions limitations were calculated by multiplying the maximum hourly emission rate by 8,760 hours/year and dividing by 2,000 pounds/ton.

Compliance with the annual emissions limitations will be assumed as long as compliance with the lb/hr limitations are maintained.

d. Emissions Limitation:

Visible PE from any stack or vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

**F. Miscellaneous Requirements**

None

**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.

**Operations, Property, and/or Equipment -(N002) - 10.5 mmBtu/hr natural gas- or propane-fired dryer vented to a cyclone; no. 2 burner (pet food operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE), excluding emissions from fuel combustion, shall not exceed 1.35 lbs/hr.</p> <p>See Section A.2.a below.</p> <p>Emissions from natural gas and/or propane usage shall not exceed:</p> <p>2.19 lbs Nitrogen Oxide (NO<sub>x</sub>)/hr,                      9.57 tons NO<sub>x</sub>/yr;                      0.17 lb Sulfur dioxide (SO<sub>2</sub>)/hr,                      0.76 ton SO<sub>2</sub>/yr;                      0.88 lb Carbon Monoxide (CO)/hr,                      3.86 tons CO/yr;                      0.08 lb PE/hr,                      0.35 ton PE/yr;                      0.12 lb Organic Compound (OC)/hr and                      0.51 ton OC/yr.</p> <p>The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B) and 3745-17-07(A).</p>
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	<p>The combined PE from emissions units N001, N002 and N003 shall not exceed 24.3 tons per rolling, 12-month period.</p> <p>See Section B.1 below.</p>
OAC rule 3745-17-07(A)	<p>Visible PE from any stack or vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.</p>

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

## 2. Additional Terms and Conditions

- 2.a** The hourly PE limitation and natural gas/propane combustion emission limitations for this emissions unit were established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b** This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c** This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

## B. Operational Restrictions

- The combined maximum annual ingredient throughput for emissions units N001, N002 and N003 shall not exceed 450,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for these emissions units; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
  - a. The weight of all ingredients unloaded by truck and rail for the pet food operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck and rail for the pet food operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions for emissions units N001, N002 and N003, in tons, calculated by multiplying C.1.b. by the controlled emission factor (.0108 lb/ton) and then converting to tons.
  
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

### **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
  - a. each exceedance of the rolling, 12-month ingredient throughput limitation; and

- b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit annual reports that specify the total particulate emissions from emissions units N001, N002 and N003 during the previous calendar year. These reports shall include the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from these emissions units in the annual Fee Emissions Report.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

## E. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emissions Limitation:

Particulate emissions shall not exceed 1.35 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by multiplying the maximum process weight rate (12.5 tons/hr) by the controlled emission factor (.0108 lb/ton) derived by multiplying the ODEQ\* emissions factor for a pellet cooler (.36 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system.

\*Oregon Department of Environmental Quality - *Emission Factors for Grain Elevators, Seed Cleaning and Animal Feed Mills* (revised 4/25/00) for a pellet cooler equipped with a cyclone.

- b. Emissions Limitation:

The combined PE from emissions units N001, N002 and N003 shall not exceed 24.3 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

c. Emissions Limitation:

Emissions from natural gas and/or propane usage shall not exceed:

2.19 lbs NO<sub>x</sub>/hr and 9.57 tons NO<sub>x</sub>/yr;  
 0.17 lb SO<sub>2</sub>/hr and 0.76 ton SO<sub>2</sub>/yr;  
 0.88 lb CO/hr and 3.86 tons CO/yr;  
 0.08 lb PE/hr and 0.35 ton PE/yr; and  
 0.12 lb CO/hr and 0.51 ton CO/yr.

Applicable Compliance Method:

The hourly emissions limitations were established by multiplying the maximum total hourly natural gas or propane usage for the dryer (.0105 MMcf/hr natural gas)(.115 Mgal/hr propane) by the following emission factor for each pollutant in order to establish the worst-case hourly emission limitation for each pollutant:

<u>Pollutant</u>	<u>Emission Factor</u>
NO <sub>x</sub>	19 lbs of NO <sub>x</sub> /Mgal of propane
SO <sub>2</sub>	1.5 lbs of SO <sub>2</sub> */Mgal of propane
CO	84 lbs of CO/MMcf of natural gas
PE	7.6 lbs of PE/MMcf of natural gas
OC	11 lbs of OC/MMCF of natural gas

Emission factors for propane usage are taken from Table 1.5-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for external combustion sources. Emission factors for natural gas usage are taken from Tables 1.4-1 and 1.4-2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for external combustion sources.

\* The Emission Factor for SO<sub>2</sub> is derived by multiplying the AP-42 Emission Factor (0.1 lb SO<sub>2</sub>/Mgal of propane) by the maximum sulfur content of the propane (15 grains/100 cf).

If required, the following test methods shall be used to demonstrate compliance with the hourly allowable emissions limitations:

<u>Pollutant</u>	<u>Test Method(s)</u>
NO <sub>x</sub>	Method 7 or 7E of 40 <u>CFR</u> Part 60, Appendix A
SO <sub>2</sub>	Method 6 or 6C of 40 <u>CFR</u> Part 60, Appendix A
CO	Method 10 of 40 <u>CFR</u> Part 60, Appendix A

PE	Method 5 of 40 <u>CFR</u> Part 60, Appendix A
OC	Method 18, 25 or 25A of 40 <u>CFR</u> Part 60, Appendix A

The annual emissions limitations were calculated by multiplying the maximum hourly emission rate by 8,760 hours/year and dividing by 2,000 pounds/ton. Compliance with the annual emissions limitations will be assumed as long as compliance with the lb/hr limitations are maintained.

d. Emissions Limitation:

Visible PE from any stack or vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

**F. Miscellaneous Requirements**

None

**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.

**Operations, Property, and/or Equipment -(N003) - 10.5 mmBtu/hr natural gas- or propane-fired dryer vented to 2 cyclones; no. 3 burner (pet food operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE), excluding emissions from fuel combustion, shall not exceed 2.70 lbs/hr.</p> <p>See Section A.2.a below.</p> <p>Emissions from natural gas and/or propane usage shall not exceed:</p> <p>2.19 lbs Nitrogen Oxide (NO<sub>x</sub>)/hr,                      9.57 tons NO<sub>x</sub>/yr;                      0.17 lb Sulfur dioxide (SO<sub>2</sub>)/hr,                      0.76 ton SO<sub>2</sub>/yr;                      0.88 lb Carbon Monoxide (CO)/hr,                      3.86 tons CO/yr;                      0.08 lb PE/hr,                      0.35 ton PE/yr;                      0.12 lb Organic Compound (OC)/hr and                      0.51 ton OC/yr.</p> <p>The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B) and 3745-17-07(A).</p>
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	<p>The combined PE from emissions units N001, N002 and N003 shall not exceed 24.3 tons per rolling, 12-month period.</p> <p>See Section B.1 below.</p>
OAC rule 3745-17-07(A)	<p>Visible PE from any stack or vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.</p>

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

## 2. Additional Terms and Conditions

- 2.a** The hourly PE limitation and natural gas/propane combustion emission limitations for this emissions unit were established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b** This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c** This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

## B. Operational Restrictions

1. The combined maximum annual ingredient throughput for emissions units N001, N002 and N003 shall not exceed 450,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for these emissions units; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
  - a. The weight of all ingredients unloaded by truck and rail for the pet food operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck and rail for the pet food operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions for emissions units N001, N002 and N003, in tons, calculated by multiplying C.1.b. by the controlled emission factor (.0108 lb/ton) and then converting to tons.
  
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

### **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
  - a. each exceedance of the rolling, 12-month ingredient throughput limitation; and

- b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit annual reports that specify the total particulate emissions from emissions units N001, N002 and N003 during the previous calendar year. These reports shall include the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from these emissions units in the annual Fee Emissions Report.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

## E. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emissions Limitation:

Particulate emissions shall not exceed 2.70 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by multiplying the maximum process weight rate (25 tons/hr) by the controlled emission factor (.0108 lb/ton) derived by multiplying the ODEQ\* emissions factor for a pellet cooler (.36 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system.

\*Oregon Department of Environmental Quality - *Emission Factors for Grain Elevators, Seed Cleaning and Animal Feed Mills* (revised 4/25/00) for a pellet cooler equipped with a cyclone.

- b. Emissions Limitation:

The combined PE from emissions units N001, N002 and N003 shall not exceed 24.3 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

c. Emissions Limitation:

Emissions from natural gas and/or propane usage shall not exceed:

- 2.19 lbs NO<sub>x</sub>/hr and 9.57 tons NO<sub>x</sub>/yr;
- 0.17 lb SO<sub>2</sub>/hr and 0.76 ton SO<sub>2</sub>/yr;
- 0.88 lb CO/hr and 3.86 tons CO/yr;
- 0.08 lb PE/hr and 0.35 ton PE/yr; and
- 0.12 lb CO/hr and 0.51 ton CO/yr.

Applicable Compliance Method:

The hourly emissions limitations were established by multiplying the maximum total hourly natural gas or propane usage for the dryer (.0105 MMcf/hr natural gas)(.115 Mgal/hr propane) by the following emission factor for each pollutant in order to establish the worst-case hourly emission limitation for each pollutant:

<u>Pollutant</u>	<u>Emission Factor</u>
NO <sub>x</sub>	19 lbs of NO <sub>x</sub> /Mgal of propane
SO <sub>2</sub>	1.5 lbs of SO <sub>2</sub> */Mgal of propane
CO	84 lbs of CO/MMcf of natural gas
PE	7.6 lbs of PE/MMcf of natural gas
OC	11 lbs of OC/MMCF of natural gas

Emission factors for propane usage are taken from Table 1.5-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for external combustion sources. Emission factors for natural gas usage are taken from Tables 1.4-1 and 1.4-2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for external combustion sources.

\* The Emission Factor for SO<sub>2</sub> is derived by multiplying the AP-42 Emission Factor (0.1 lb SO<sub>2</sub>/Mgal of propane) by the maximum sulfur content of the propane (15 grains/100 cf).

If required, the following test methods shall be used to demonstrate compliance with the hourly allowable emissions limitations:

<u>Pollutant</u>	<u>Test Method(s)</u>
NO <sub>x</sub>	Method 7 or 7E of 40 <u>CFR</u> Part 60, Appendix A
SO <sub>2</sub>	Method 6 or 6C of 40 <u>CFR</u> Part 60, Appendix A
CO	Method 10 of 40 <u>CFR</u> Part 60, Appendix A

PE	Method 5 of 40 <u>CFR</u> Part 60, Appendix A
OC	Method 18, 25 or 25A of 40 <u>CFR</u> Part 60, Appendix A

The annual emissions limitations were calculated by multiplying the maximum hourly emission rate by 8,760 hours/year and dividing by 2,000 pounds/ton. Compliance with the annual emissions limitations will be assumed as long as compliance with the lb/hr limitations are maintained.

d. Emissions Limitation:

Visible PE from any stack or vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

**F. Miscellaneous Requirements**

None

**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.

**Operations, Property, and/or Equipment -(N004) - 17.5 mmBtu/hr natural gas- or propane-fired dryer; no. 4 burner (biscuit operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE), excluding emissions from fuel combustion, shall not exceed 2.25 lbs/hr.</p> <p>See Section A.2.a below.</p> <p>Emissions from natural gas and/or propane usage shall not exceed:</p> <p>3.65 lbs Nitrogen Oxide (NO<sub>x</sub>)/hr,                      15.98 tons NO<sub>x</sub>/yr;                      0.29 lb Sulfur dioxide (SO<sub>2</sub>)/hr,                      1.25 tons SO<sub>2</sub>/yr;                      1.47 lbs Carbon Monoxide (CO)/hr,                      6.44 tons CO/yr;                      0.13 lb PE/hr,                      0.58 ton PE/yr;                      0.19 lb Organic Compound (OC)/hr and                      0.84 ton OC/yr.</p> <p>The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B) and 3745-17-07(A).</p>
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	<p>The combined PE from emissions units N004 and N005 shall not exceed 25.2 tons per rolling, 12-month period.</p> <p>See Section B.1 below.</p>
OAC rule 3745-17-07(A)	<p>Visible PE from any stack or vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.</p>

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

## 2. Additional Terms and Conditions

- 2.a** The hourly PE limitation and natural gas/propane combustion emission limitations for this emissions unit were established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b** This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c** This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

## B. Operational Restrictions

1. The combined maximum annual ingredient throughput for emissions units N004 and N005 shall not exceed 70,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for these emissions units; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
  - a. The weight of all ingredients unloaded by truck for the biscuit operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck for the biscuit operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions for emissions units N004 and N005, in tons, calculated by multiplying C.1.b. by the controlled emission factor (0.72 lb/ton) and then converting to tons.
  
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

**D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
  - a. each exceedance of the rolling, 12-month ingredient throughput limitation; and
  - b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit annual reports that specify the total particulate emissions from emissions units N004 and N005 during the previous calendar year. These reports shall include the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from these emissions units in the annual Fee Emissions Report.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

#### E. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emissions Limitation:

Particulate emissions shall not exceed 2.25 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by multiplying the maximum process weight rate (3.125 tons/hr) by the controlled emission factor (0.72 lb/ton) derived by multiplying the ODEQ\* emissions factor for a pellet cooler (2.4 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system.

\*Oregon Department of Environmental Quality - *Emission Factors for Grain Elevators, Seed Cleaning and Animal Feed Mills* (revised 4/25/00) for a pellet cooler.

- b. Emissions Limitation:

The combined PE from emissions units N004 and N005 shall not exceed 25.2 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

c. Emissions Limitation:

Emissions from natural gas and/or propane usage shall not exceed:

3.65 lbs NO<sub>x</sub>/hr and 15.98 tons NO<sub>x</sub>/yr;  
 0.29 lb SO<sub>2</sub>/hr and 1.25 tons SO<sub>2</sub>/yr;  
 1.47 lbs CO/hr and 6.44 tons CO/yr;  
 0.13 lb PE/hr and 0.58 ton PE/yr; and  
 0.19 lb CO/hr and 0.84 ton CO/yr.

Applicable Compliance Method:

The hourly emissions limitations were established by multiplying the maximum total hourly natural gas or propane usage for the dryer (.0175 MMcf/hr natural gas)(.192 Mgal/hr propane) by the following emission factor for each pollutant in order to establish the worst-case hourly emission limitation for each pollutant:

<u>Pollutant</u>	<u>Emission Factor</u>
NO <sub>x</sub>	19 lbs of NO <sub>x</sub> /Mgal of propane
SO <sub>2</sub>	1.5 lbs of SO <sub>2</sub> */Mgal of propane
CO	84 lbs of CO/MMcf of natural gas
PE	7.6 lbs of PE/MMcf of natural gas
OC	11 lbs of OC/MMCF of natural gas

Emission factors for propane usage are taken from Table 1.5-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for external combustion sources. Emission factors for natural gas usage are taken from Tables 1.4-1 and 1.4-2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for external combustion sources.

\* The Emission Factor for SO<sub>2</sub> is derived by multiplying the AP-42 Emission Factor (0.1 lb SO<sub>2</sub>/Mgal of propane) by the maximum sulfur content of the propane (15 grains/100 cf).

If required, the following test methods shall be used to demonstrate compliance with the hourly allowable emissions limitations:

<u>Pollutant</u>	<u>Test Method(s)</u>
NO <sub>x</sub>	Method 7 or 7E of 40 <u>CFR</u> Part 60, Appendix A
SO <sub>2</sub>	Method 6 or 6C of 40 <u>CFR</u> Part 60, Appendix A
CO	Method 10 of 40 <u>CFR</u> Part 60, Appendix A
PE	Method 5 of 40 <u>CFR</u> Part 60, Appendix A
OC	Method 18, 25 or 25A of 40 <u>CFR</u> Part 60, Appendix A

The annual emissions limitations were calculated by multiplying the maximum hourly emission rate by 8,760 hours/year and dividing by 2,000 pounds/ton. Compliance with the annual emissions limitations will be assumed as long as compliance with the lb/hr limitations are maintained.

d. Emissions Limitation:

Visible PE from any stack or vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

**F. Miscellaneous Requirements**

None

**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.

**Operations, Property, and/or Equipment - (N005) - 17.5 mmBtu/hr natural gas- or propane-fired dryer; no. 5 burner (biscuit operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE), excluding emissions from fuel combustion, shall not exceed 2.25 lbs/hr.  See Section A.2.a below.  Emissions from natural gas and/or propane usage shall not exceed:  3.65 lbs Nitrogen Oxide (NO <sub>x</sub> )/hr 15.98 tons NO <sub>x</sub> /yr; 0.29 lb Sulfur dioxide (SO <sub>2</sub> )/hr, 1.25 tons SO <sub>2</sub> /yr; 1.47 lbs Carbon Monoxide (CO)/hr, 6.44 tons CO/yr; 0.13 lb PE/hr, 0.58 ton PE/yr; 0.19 lb Organic Compound (OC)/hr and 0.84 ton OC/yr.  The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B) and 3745-17-07(A).
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	The combined PE from emissions units N004 and N005 shall not exceed 25.2 tons per rolling, 12-month period.  See Section B.1 below.
OAC rule 3745-17-07(A)	Visible PE from any stack or vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

## 2. Additional Terms and Conditions

- 2.a** The hourly PE limitation and natural gas/propane combustion emission limitations for this emissions unit were established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b** This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c** This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

## B. Operational Restrictions

1. The combined maximum annual ingredient throughput for emissions units N004 and N005 shall not exceed 70,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for these emissions units; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
  - a. The weight of all ingredients unloaded by truck for the biscuit operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck for the biscuit operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions for emissions units N004 and N005, in tons, calculated by multiplying C.1.b. by the controlled emission factor (0.72 lb/ton) and then converting to tons.
  
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

**D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
  - a. each exceedance of the rolling, 12-month ingredient throughput limitation; and
  - b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit annual reports that specify the total particulate emissions from emissions units N004 and N005 during the previous calendar year. These reports shall include the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from these emissions units in the annual Fee Emissions Report.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

#### E. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emissions Limitation:

Particulate emissions shall not exceed 2.25 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by multiplying the maximum process weight rate (3.125 tons/hr) by the controlled emission factor (0.72 lb/ton) derived by multiplying the ODEQ\* emissions factor for a pellet cooler (2.4 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system.

\*Oregon Department of Environmental Quality - *Emission Factors for Grain Elevators, Seed Cleaning and Animal Feed Mills* (revised 4/25/00) for a pellet cooler.
  - b. Emissions Limitation:

The combined PE from emissions units N004 and N005 shall not exceed 25.2 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

c. Emissions Limitation:

Emissions from natural gas and/or propane usage shall not exceed:

3.65 lbs NO<sub>x</sub>/hr and 15.98 tons NO<sub>x</sub>/yr;  
 0.29 lb SO<sub>2</sub>/hr and 1.25 tons SO<sub>2</sub>/yr;  
 1.47 lbs CO/hr and 6.44 tons CO/yr;  
 0.13 lb PE/hr and 0.58 ton PE/yr; and  
 0.19 lb CO/hr and 0.84 ton CO/yr.

Applicable Compliance Method:

The hourly emissions limitations were established by multiplying the maximum total hourly natural gas or propane usage for the dryer (.0175 MMcf/hr natural gas)(.192 Mgal/hr propane) by the following emission factor for each pollutant in order to establish the worst-case hourly emission limitation for each pollutant:

<u>Pollutant</u>	<u>Emission Factor</u>
NO <sub>x</sub>	19 lbs of NO <sub>x</sub> /Mgal of propane
SO <sub>2</sub>	1.5 lbs of SO <sub>2</sub> */Mgal of propane
CO	84 lbs of CO/MMcf of natural gas
PE	7.6 lbs of PE/MMcf of natural gas
OC	11 lbs of OC/MMCF of natural gas

Emission factors for propane usage are taken from Table 1.5-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for external combustion sources. Emission factors for natural gas usage are taken from Tables 1.4-1 and 1.4-2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for external combustion sources.

\* The Emission Factor for SO<sub>2</sub> is derived by multiplying the AP-42 Emission Factor (0.1 lb SO<sub>2</sub>/Mgal of propane) by the maximum sulfur content of the propane (15 grains/100 cf).

If required, the following test methods shall be used to demonstrate compliance with the hourly allowable emissions limitations:

<u>Pollutant</u>	<u>Test Method(s)</u>
NO <sub>x</sub>	Method 7 or 7E of 40 <u>CFR</u> Part 60, Appendix A
SO <sub>2</sub>	Method 6 or 6C of 40 <u>CFR</u> Part 60, Appendix A
CO	Method 10 of 40 <u>CFR</u> Part 60, Appendix A
PE	Method 5 of 40 <u>CFR</u> Part 60, Appendix A
OC	Method 18, 25 or 25A of 40 <u>CFR</u> Part 60, Appendix A

The annual emissions limitations were calculated by multiplying the maximum hourly emission rate by 8,760 hours/year and dividing by 2,000 pounds/ton. Compliance with the annual emissions limitations will be assumed as long as compliance with the lb/hr limitations are maintained.

d. Emissions Limitation:

Visible PE from any stack or vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

**F. Miscellaneous Requirements**

None

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

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

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

**Operations, Property, and/or Equipment -(P003) - raw ingredient screening, storage and mixing (pet food operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 0.76 lb/hr.  See Section A.2.a below.  The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B).
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	PE shall not exceed 2.53 tons per rolling, 12-month period.  See Section B.1 below.
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

**2. Additional Terms and Conditions**

- 2.a The hourly PE limitation for this emissions unit was established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which

requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

## **B. Operational Restrictions**

1. The maximum annual ingredient throughput for this emissions unit shall not exceed 450,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for this emissions unit; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
- a. The weight of all ingredients unloaded by truck and rail for the pet food operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck and rail for the pet food operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions, in tons, calculated by:
    - i. multiplying C.1.b. by the controlled emission factor (.00375 lb/ton) to determine the emissions from screening;
    - ii. multiplying C.1.b. by the controlled emission factor (.0075 lb/ton) to determine the emissions from storage; and
    - iii. adding C.1.c.i to C.1.c.ii and then converting the result into tons.

## **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
- a. each exceedance of the rolling, 12-month ingredient throughput limitation; and
  - b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit during the previous calendar year. These reports shall include the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from this emissions unit in the annual Fee Emissions Report.

## E. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emissions Limitation:

Particulate emissions shall not exceed 0.76 pound per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by:

- i. multiplying the maximum process weight rate for screening (100 tons/hr) by the controlled emission factor (.00375 lb/ton) derived by multiplying the AP-42\* emissions factor for crushed stone screening (.0125 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system;
- ii. multiplying the maximum process weight rate for storage (50 tons/hr) by the controlled emission factor (.0075 lb/ton) derived by multiplying the AP-42\*\* emissions factor for grain storage (.025 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system; and
- iii. adding E.1.a.i to E.1.a.ii. above.

\*Table 11.19.2-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for crushed stone screening.

\*\*Table 9.9.1-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for a grain storage bin.

- b. Emissions Limitation:

Particulate emissions shall not exceed 2.53 tons per rolling, 12-month period.

**Mars Petcare U.S., Inc**

**PTI Application: 01-01304**

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**Facility ID: 0124010128**

**Emissions Unit ID: P003**

**Mars Petcare U.S., Inc**

**PTI Application: 01-01304**

**Issued: To be entered upon final issuance**

**Facility ID: 0124010128**

**Emissions Unit ID: P003**

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

**F. Miscellaneous Requirements**

None

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

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

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

**Operations, Property, and/or Equipment -(P004) - pet food milling, 2 hammermills utilizing 2 product collecting baghouses, and raw mix storage (pet food operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 0.68 lb/hr.  See Section A.2.a below.  The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B).
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	PE shall not exceed 4.39 tons per rolling, 12-month period.  See Section B.1 below.
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

**2. Additional Terms and Conditions**

- 2.a The hourly PE limitation for this emissions unit was established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent

fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

## **B. Operational Restrictions**

1. The maximum annual ingredient throughput for this emissions unit shall not exceed 450,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for this emissions unit; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
- a. The weight of all ingredients unloaded by truck and rail for the pet food operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck and rail for the pet food operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions, in tons, calculated by:
    - i. multiplying C.1.b. by the controlled emission factor (.012 lb/ton) to determine the emissions from milling;
    - ii. multiplying C.1.b. by the controlled emission factor (.0075 lb/ton) to determine the emissions from storage; and
    - iii. adding C.1.c.i to C.1.c.ii and then converting the result into tons.

## **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
- a. each exceedance of the rolling, 12-month ingredient throughput limitation; and
  - b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit during the previous calendar year. These reports shall include the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from this emissions unit in the annual Fee Emissions Report.

## E. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emissions Limitation:

Particulate emissions shall not exceed 0.68 pound per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by:

- i. multiplying the maximum process weight rate for milling (25 tons/hr) by the controlled emission factor (.012 lb/ton) derived by multiplying the AP-42\* emissions factor for grain milling (1.2 lb/ton) by a control efficiency of 99% to account for the product collecting baghouses;
- ii. multiplying the maximum process weight rate for storage (50 tons/hr) by the controlled emission factor (.0075 lb/ton) derived by multiplying the AP-42\*\* emissions factor for grain storage (.025 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system; and
- iii. adding E.1.a.i to E.1.a.ii. above.

\*Table 9.9.1-2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for a hammermill at an animal feed mill.

\*\*Table 9.9.1-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for a grain storage bin.

- b. Emissions Limitation:

Particulate emissions shall not exceed 4.39 tons per rolling, 12-month period.

**Mars Petcare U.S., Inc**

**PTI Application: 01-01304**

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**Emissions Unit ID: P004**

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

**F. Miscellaneous Requirements**

None

**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 - (P005) - extruding process, 4 extruders utilizing 3 product collecting cyclones (pet food operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 0.45 lb/hr.  See Section A.2.a below.  The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B).
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	PE shall not exceed 2.06 tons per rolling, 12-month period.  See Section B.1 below.
OAC rule 3745-17-07(A)	Visible PE from any stack or vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

**2. Additional Terms and Conditions**

- 2.a The hourly PE limitation for this emissions unit was established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

- 2.c** This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

## **B. Operational Restrictions**

- 1. The maximum annual ingredient throughput for this emissions unit shall not exceed 450,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for this emissions unit; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

- 1. The permittee shall collect and record the following information each month for this emissions unit:
  - a. The weight of all ingredients unloaded by truck for the pet food operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck for the pet food operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions in tons, calculated by multiplying C.1.b. by the controlled emission factor (0.00915 lb/ton) and then converting to tons.
- 2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
  - a. each exceedance of the rolling, 12-month ingredient throughput limitation; and
  - b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit during the previous calendar year. These reports shall include the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from these emissions units in the annual Fee Emissions Report.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

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

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emissions Limitation:

Particulate emissions shall not exceed 0.68 pound per hour.

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**Mars Petcare U.S., Inc**

**PTI Application: 01-01304**

**Issued: To be entered upon final issuance**

**Facility ID: 0124010128**

**Emissions Unit ID: P005**

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by:

- i. multiplying the maximum process weight rate for extruder 1 (12.5 tons/hr) by the controlled emission factor (.00915 lb/ton) derived by multiplying the AP-42\* emissions factor for grain handling (0.061 lb/ton) by a control efficiency of 85% to account for the product collecting cyclones;
- ii. multiplying the maximum process weight rate for extruder 2 (12.5 tons/hr) by the controlled emission factor (.00915 lb/ton) derived by multiplying the AP-42\* emissions factor for grain handling (0.061 lb/ton) by a control efficiency of 85% to account for the product collecting cyclones; and
- iii. multiplying the combined maximum process weight rate for extruder 3 and extruder 4 (25 tons/hr) by the controlled emission factor (.00915 lb/ton) derived by multiplying the AP-42\* emissions factor for grain handling (0.061 lb/ton) by a control efficiency of 85% to account for the product collecting cyclones;
- iv. adding E.1.a.i, E.1.a.ii and E.1.a.iii above.

\*Table 9.9.1-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for headhouse and grain handling.

b. Emissions Limitation:

Particulate emissions shall not exceed 2.06 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

c. Emissions Limitation:

Visible PE from any stack or vent shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

**Mars Petcare U.S., Inc**

**PTI Application: 01-01304**

**Issued: To be entered upon final issuance**

**Facility ID: 0124010128**

**Emissions Unit ID: P005**

**F. Miscellaneous Requirements**

None

**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 -(P006) - rotex screening, coating and finished product storage (pet food operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 1.01 lbs/hr.  See Section A.2.a below.  The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B).
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	PE shall not exceed 4.5 tons per rolling, 12-month period.  See Section B.1 below.
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

**2. Additional Terms and Conditions**

- 2.a The hourly PE limitation for this emissions unit was established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which

requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

## **B. Operational Restrictions**

1. The maximum annual ingredient throughput for this emissions unit shall not exceed 450,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for this emissions unit; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
- a. The weight of all ingredients unloaded by truck and rail for the pet food operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck and rail for the pet food operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions, in tons, calculated by:
    - i. multiplying C.1.b. by the uncontrolled emission factor (.0125 lb/ton) to determine the emissions from screening;
    - ii. multiplying C.1.b. by the controlled emission factor (.0075 lb/ton) to determine the emissions from storage; and
    - iii. adding C.1.c.i to C.1.c.ii and then converting the result into tons.

## **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
- a. each exceedance of the rolling, 12-month ingredient throughput limitation; and
  - b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit during the previous calendar year. These reports shall include the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from this emissions unit in the annual Fee Emissions Report.

## E. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emissions Limitation:

Particulate emissions shall not exceed 1.01 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by:

- i. multiplying the maximum process weight rate for rotex screening (50 tons/hr) by the uncontrolled AP-42\* emission factor for crushed stone screening (.0125 lb/ton);
- ii. multiplying the maximum process weight rate for storage (50 tons/hr) by the controlled emission factor (.0075 lb/ton) derived by multiplying the AP-42\*\* emissions factor for grain storage (.025 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system; and
- iii. adding E.1.a.i to E.1.a.ii. above.

\*Table 11.19.2-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for crushed stone screening.

\*\*Table 9.9.1-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for a grain storage bin.

- b. Emissions Limitation:

Particulate emissions shall not exceed 4.5 tons per rolling, 12-month period.

**Mars Petcare U.S., Inc**

**PTI Application: 01-01304**

**Issued: To be entered upon final issuance**

**Facility ID: 0124010128**

**Emissions Unit ID: P006**

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

**F. Miscellaneous Requirements**

None

**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 - (P007) - finished product bagging (pet food operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 0.05 lbs/hr.  See Section A.2.a below.  The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B).
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	PE shall not exceed 0.22 tons per rolling, 12-month period.  See Section B.1 below.
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

**2. Additional Terms and Conditions**

- 2.a The hourly PE limitation for this emissions unit was established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which

requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

## **B. Operational Restrictions**

1. The maximum annual ingredient throughput for this emissions unit shall not exceed 450,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for this emissions unit; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
- a. The weight of all ingredients unloaded by truck and rail for the pet food operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck and rail for the pet food operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions, in tons, calculated by multiplying C.1.b. by the controlled emission factor (.0009 lb/ton) and then converting to tons.

## **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
- a. each exceedance of the rolling, 12-month ingredient throughput limitation; and
  - b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit during the previous calendar year. These reports shall include

the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from this emissions unit in the annual Fee Emissions Report.

**E. Testing Requirements**

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emissions Limitation:

Particulate emissions shall not exceed 0.05 pound per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by multiplying the maximum process weight rate (50 tons/hr) by the controlled emission factor (.0009 lb/ton) derived by multiplying the AP-42\* emissions factor for feed shipping (.0033 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system.

\*Table 9.9.1-2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for feed shipping at an animal feed mill.

b. Emissions Limitation:

Particulate emissions shall not exceed 0.22 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

**F. Miscellaneous Requirements**

None

**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 -(P008) - raw ingredient screening, pre-mix storage and mixing (biscuit operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 0.43 lb/hr.  See Section A.2.a below.  The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B).
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	PE shall not exceed 0.39 tons per rolling, 12-month period.  See Section B.1 below.
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

**2. Additional Terms and Conditions**

- 2.a The hourly PE limitation for this emissions unit was established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which

requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

## **B. Operational Restrictions**

1. The maximum annual ingredient throughput for this emissions unit shall not exceed 70,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for this emissions unit; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
- a. The weight of all ingredients unloaded by truck for the biscuit operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck for the biscuit operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions, in tons, calculated by:
    - i. multiplying C.1.b. by the controlled emission factor (.00375 lb/ton) to determine the emissions from screening;
    - ii. multiplying C.1.b. by the controlled emission factor (.0075 lb/ton) to determine the emissions from storage; and
    - iii. adding C.1.c.i to C.1.c.ii and then converting the result into tons.

## **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
- a. each exceedance of the rolling, 12-month ingredient throughput limitation; and
  - b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit during the previous calendar year. These reports shall include the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from this emissions unit in the annual Fee Emissions Report.

## E. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emissions Limitation:

Particulate emissions shall not exceed 0.43 pound per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by:

- i. multiplying the maximum process weight rate for screening (100 tons/hr) by the controlled emission factor (.00375 lb/ton) derived by multiplying the AP-42\* emissions factor for crushed stone screening (.0125 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system;
- ii. multiplying the maximum process weight rate for storage (6.25 tons/hr) by the controlled emission factor (.0075 lb/ton) derived by multiplying the AP-42\*\* emissions factor for grain storage (.025 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system; and
- iii. adding E.1.a.i to E.1.a.ii. above.

\*Table 11.19.2-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for crushed stone screening.

\*\*Table 9.9.1-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for a grain storage bin.

- b. Emissions Limitation:

Particulate emissions shall not exceed 0.39 ton per rolling, 12-month period.

**Mars Petcare U.S., Inc**

**PTI Application: 01-01304**

**Issued: To be entered upon final issuance**

**Facility ID: 0124010128**

**Emissions Unit ID: P008**

**Mars Petcare U.S., Inc**

**PTI Application: 01-01304**

**Issued: To be entered upon final issuance**

**Facility ID: 0124010128**

**Emissions Unit ID: P008**

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

**F. Miscellaneous Requirements**

None

**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 - (P009) - biscuit milling, 1 hammermill utilizing a product collecting baghouse, and raw mix storage (biscuit operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 0.13 lb/hr.  See Section A.2.a below.  The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B).
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	PE shall not exceed 0.68 tons per rolling, 12-month period.  See Section B.1 below.
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

**2. Additional Terms and Conditions**

- 2.a The hourly PE limitation for this emissions unit was established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which

requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

## **B. Operational Restrictions**

1. The maximum annual ingredient throughput for this emissions unit shall not exceed 70,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for this emissions unit; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
- a. The weight of all ingredients unloaded by truck for the biscuit operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck for the biscuit operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions, in tons, calculated by:
    - i. multiplying C.1.b. by the controlled emission factor (.012 lb/ton) to determine the emissions from milling;
    - ii. multiplying C.1.b. by the controlled emission factor (.0075 lb/ton) to determine the emissions from storage; and
    - iii. adding C.1.c.i to C.1.c.ii and then converting the result into tons.

## **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
- a. each exceedance of the rolling, 12-month ingredient throughput limitation; and
  - b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit during the previous calendar year. These reports shall include the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from this emissions unit in the annual Fee Emissions Report.

## E. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emissions Limitation:

Particulate emissions shall not exceed 0.13 pound per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by:

- i. multiplying the maximum process weight rate for milling (6.25 tons/hr) by the controlled emission factor (.012 lb/ton) derived by multiplying the AP-42\* emissions factor for grain milling (1.2 lb/ton) by a control efficiency of 99% to account for the product collecting baghouse;
- ii. multiplying the maximum process weight rate for storage (6.25 tons/hr) by the controlled emission factor (.0075 lb/ton) derived by multiplying the AP-42\*\* emissions factor for grain storage (.025 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system; and
- iii. adding E.1.a.i to E.1.a.ii. above.

\*Table 9.9.1-2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for a hammermill at an animal feed mill.

\*\*Table 9.9.1-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for a grain storage bin.

- b. Emissions Limitation:

Particulate emissions shall not exceed 0.68 ton per rolling, 12-month period.

**Mars Petcare U.S., Inc**

**PTI Application: 01-01304**

**Issued: To be entered upon final issuance**

**Facility ID: 0124010128**

**Emissions Unit ID: P009**

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

**F. Miscellaneous Requirements**

None

**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 - (P010) - finished product storage and bagging (biscuit operation)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 0.06 lb/hr.  See Section A.2.a below.  The requirements established pursuant to this rule also include compliance with the requirements of OAC rule 3745-35-07(B).
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	PE shall not exceed 0.29 tons per rolling, 12-month period.  See Section B.1 below.
OAC rule 3745-17-07(B)	See Section A.2.b below.
OAC rule 3745-17-08	See Section A.2.c below.
40 Code of Federal Regulations Part 60, Subpart DD (NSPS DD)	See Section A.2.d below.

**2. Additional Terms and Conditions**

- 2.a The hourly PE limitation for this emissions unit was established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.
- 2.b This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which

requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

- 2.d** The provisions of NSPS Subpart DD for grain terminal elevators do not apply to this facility according to 40 CFR Part 60, Subpart DD Section 60.301(c) because the facility manufactures pet food.

## **B. Operational Restrictions**

1. The maximum annual ingredient throughput for this emissions unit shall not exceed 70,000 tons based upon a rolling, 12-month summation of the throughput figures.

The permittee has existing records of the ingredient throughput for this emissions unit; therefore, the first year of accumulating monthly ingredient throughput limitations is not necessary.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
- a. The weight of all ingredients unloaded by truck for the biscuit operation, in tons;
  - b. The rolling, 12-month summation of the weight of all ingredients unloaded by truck for the biscuit operation, in tons; and
  - c. The rolling, 12-month summation of particulate emissions, in tons, calculated by:
    - i. multiplying C.1.b. by the controlled emission factor (.0075 lb/ton) to determine the emissions from storage;
    - ii. multiplying C.1.b. by the controlled emission factor (.0009 lb/ton) to determine the emissions from bagging and
    - iii. adding C.1.c.i to C.1.c.ii and then converting the result into tons.

## **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
- a. each exceedance of the rolling, 12-month ingredient throughput limitation; and
  - b. each exceedance of the rolling, 12-month particulate emissions limitation.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit during the previous calendar year. These reports shall include the calculations used to determine the annual emissions and shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data from this emissions unit in the annual Fee Emissions Report.

## E. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emissions Limitation:

Particulate emissions shall not exceed 0.06 pound per hour.

Applicable Compliance Method:

Compliance with the hourly limitation may be calculated by:

- i. multiplying the maximum process weight rate for storage (6.25 tons/hr) by the controlled emission factor (.0075 lb/ton) derived by multiplying the AP-42\* emissions factor for grain storage (.025 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system;
- ii. multiplying the maximum process weight rate for bagging (6.25 tons/hr) by the controlled emission factor (.0009 lb/ton) derived by multiplying the AP-42\*\* emissions factor for feed shipping (.0033 lb/ton) by a control efficiency of 70% to account for a "weather-tight" enclosure system; and
- iii. adding E.1.a.i to E.1.a.ii. above.

\*Table 9.9.1-1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for a grain storage bin.

\*\*Table 9.9.1-2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for feed shipping at an animal feed mill.

- b. Emissions Limitation:

Particulate emissions shall not exceed 0.29 tons per rolling, 12-month period.

**Mars Petcare U.S., Inc**

**PTI Application: 01-01304**

**Issued: To be entered upon final issuance**

**Facility ID: 0124010128**

**Emissions Unit ID: P010**

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be based upon the record keeping requirements specified in Section C.

**F. Miscellaneous Requirements**

None