



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-15660

DATE: 7/30/2002

McConnell Farm
Eric McConnell
15804 State Route 58
Oberlin, OH 44074

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

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 7/30/2002
Effective Date: 7/30/2002**

FINAL PERMIT TO INSTALL 02-15660

Application Number: 02-15660
APS Premise Number: 0247100983
Permit Fee: **\$1600**
Name of Facility: McConnell Farm
Person to Contact: Eric McConnell
Address: 15804 State Route 58
Oberlin, OH 44074

Location of proposed air contaminant source(s) [emissions unit(s)]:
**15804 State Route 58
Oberlin, Ohio**

Description of proposed emissions unit(s):
Roadways, storage piles, material handling at composting 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

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 Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

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

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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

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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 application must be made to the Director for the installation or modification of any other emissions unit(s).

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 thirty (30) days after

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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>
NO _x	24.48
CO	5.44
SO ₂	4.97
OC	1.34
PE	6.31

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F001 - unpaved roads and parking areas	OAC rule 3745-31-05(A)(3)	<p>no visible particulate emissions except for 3 minutes during any 60-minute period</p> <p>particulate emission limit: 5.23 tpy</p> <p>best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.g)</p>

2. Additional Terms and Conditions

- 2.a The unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

unpaved roadways:

From entrance of facility to, and around, the composting area

unpaved parking areas:

All parking areas

- 2.b The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee’s permit application, the permittee has committed to treat the unpaved roadways and parking areas with water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.c The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for an unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.d Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled using appropriate dust control measures for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to a visible emission limitation of no visible particulate emissions except for one minute during any 60-minute period.
- 2.e The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.f Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.g Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the unpaved roadways and parking areas in accordance with the following frequencies:

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Emissions Unit ID: F001

unpaved roadways

minimum inspection frequency

From entrance of facility to, and around,
the composting area

Daily

unpaved parking areasminimum inspection frequency

All parking areas

Daily

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, unless the next required inspection has been adjusted as per Section C.3 below.
3. The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice

cover or precipitation; and

- b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

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

E. Testing Requirements

1. Emission Limitation:

no visible particulate emissions except for 3 minutes during any 60-minute period

Applicable Compliance Method:

Compliance with the emission limit on visible emissions for the unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

2. Emission Limitation:

5.23 tons of particulate emission per year

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$E = k[(s/12)^a(W/3)^b/(M/0.2)^c] \times (365-p)/365 \quad (\text{AP-42 section 13.2., Eq. 2 (September, '98 version)})$$

where: E = annual sized-specific emission factor extrapolated for natural mitigation, lb/VMT

M = surface material moisture content, 0.2 %

W = mean vehicle weight (tons), 4.79

k = 10 (empirical constant for PM, lb/VMT)

s = surface material silt content (%), 6.4 %

p = # of days with at least 0.01 inch precipitation per year, 155 days

a = 0.8 (empirical constant)

b = 0.5 (empirical constant)

$c = 0.4$ (empirical constant)

$$E = 10[(6.4/12)^{0.8}(4.79/3)^{0.5}/(0.2/0.2)^{0.4}] \times (365-155)/365 = 4.397 \text{ lbs/VMT}$$

The calculated emission factor (E) shall be multiplied by the total miles traveled (in miles/yr), and by applying a control efficiency of 60% for the application of water (1 - 0.60) and divided by 2,000 lbs/ton, annual estimated emissions shall be calculated as follows:

$$\text{Annual emissions} = (4.397 \text{ lbs/mi}) \times (\text{miles/yr}) \times (1 - 0.60) \times (1 \text{ ton}/2000 \text{ lbs})$$

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Facility ID: 0247100983

Emissions Unit ID: F001

F. Miscellaneous Requirements

1. OAC rules 3745-17-07 (B)(5) and 3745-17-08 (B) do not apply to this emissions unit; it is not located in an Appendix A area.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P001 - Material Handling - 150 hp diesel-fired screener (combustion emissions)	<p>OAC rule 3745-31-05 (A)(3)</p> <p>OAC rule 3745-17-11 (B)(5)(a)</p> <p>OAC rule 3745-18-06 (F)</p> <p>OAC rule 3745-17-07 (A)(1)</p> <p>OAC rule 3745-35-07 (B)</p>

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Emissions Unit ID: P001

Applicable Emissions
Limitations/Control Measures

Emissions from the combustion of number two fuel oil shall not exceed the following:

Nitrogen Oxide emissions: 4.65 pounds per hour and 6.79 tons per year

Carbon Monoxide emissions: 1.00 pound per hour and 1.46 tons per year

Sulfur Dioxide emissions: 0.31 pound per hour and 0.45 tons per year

Organic Compound emissions: 0.37 pound per hour and 0.54 tons per year

Particulate emissions: 0.48 tons per year

Visible particulate emissions from fugitive dust shall not exceed twenty percent opacity as a three-minute average.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(5)(a) and 3745-17-07(A).

The permittee shall employ best available control measures that are

sufficient to minimize or eliminate visible emissions of fugitive dust from the screened materials. Process emissions have been calculated to be under 1 ton per year.

Particulate matter emissions: 0.310 pound per million Btu of actual heat input.

Exempt in accordance with OAC 3745-18-06 (B).

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

Nitrogen Oxide emissions: 6.79 tons per rolling 12-month period

Carbon Monoxide emissions: 1.46 tons per rolling 12-month period

Sulfur Dioxide emissions: 0.45 tons per rolling 12-month period

Organic Compound emissions: 0.54 tons per rolling 12-month period

Particulate emissions: 0.48 tons per rolling 12-month period

2. Additional Terms and Conditions

2.a None

B. Operational Restrictions

1. The permittee shall burn only number two fuel oil in this emissions unit.
2. The maximum annual operating hours for this emissions unit shall not exceed 2,920, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the operating hours levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Operating Hours</u>
1	243
1-2	487
1-3	730
1-4	973
1-5	1,217
1-6	1,460
1-7	1,703
1-8	1,947
1-9	2,190
1-10	2,433
1-11	2,677
1-12	2,920

After the first 12 calendar months of operation, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

C. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.
2. The permittee shall maintain monthly records of the following information:
 - a. the operating hours for each month;
 - b. during the first 12 calendar months of operation, the cumulative operating hours for each calendar month; and
 - c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the operating hours.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other

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Emissions Unit ID: **P001**

than number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation, and for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative operating hours levels (Section B.2). The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

Compliance with the emission limitations in the Air Emissions Summary and in the terms and conditions for the emissions unit P001 shall be determined in accordance with the following methods:

1. Emission Limitation

4.65 pounds of nitrogen oxide per hour
 1.00 pound of carbon monoxide per hour
 0.31 pound of sulfur dioxide per hour
 0.37 pound of organic compounds per hour

Applicable Compliance Method

Compliance shall be demonstrated by applying the emission factors from AP-42, Section 3.3, for "Gasoline and Diesel Industrial Engines", found in Table 3.3-1 as follows:

$$E = EF \times 150\text{hp} \quad \text{where}$$

E = emission rate (pounds per hour)

EF = emission factors from AP-42, Fifth edition, Section 3.3 for "Gasoline and Diesel Industrial Engines", 10/96, Table 3.3-1:

for NO_x: 0.031 lbs/hp-hr

for CO : 0.00668 lbs/hp-hr

for SO₂ : 0.00205 lbs/hp-hr

for OC : 0.00247 lbs/hp-hr

150 = power output (hp)

2. Emission Limitation

0.310 pound of particulate matter per million Btu of actual heat input.

Applicable Compliance Method

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Emissions Unit ID: **P001**

The particulate emission limit for this emissions unit has been established using the emission factor of 0.0022 pounds/hp-hr or 0.31 pounds/MMBtu, as outlined in AP-42, Section 3.3 for "Gasoline and Diesel Industrial Engines", Table 3.3-1; and this limit is also set by rule.

If required by the Ohio EPA, compliance with the allowable particulate emission limit shall be determined in accordance with the following method(s): Methods 1-4, and Method 5 of 40 CFR Part 60, Appendix A.

3. Emission Limitation

6.79 tons of Nitrogen Oxide per year, based on a rolling 12-month summation
1.46 tons of Carbon Monoxide per year, based on a rolling 12-month summation
0.45 tons of Sulfur Dioxide per year, based on a rolling 12-month summation
0.48 tons of Particulate Matter per year, based on a rolling 12-month summation
0.54 tons of Organic Compound per year, based on a rolling 12-month summation

Applicable Compliance Method

The rolling 12-month emission limits, for all but particulates, are based on the hourly emission limits and the maximum allowable operating hours per year. The hourly particulate emission rate (0.33 lbs/hr) shall be determined by multiplying the emission factor from AP-42, Section 3.3, for "Gasoline and Diesel Industrial Engines", Table 3.3-1 (0.0022 lb/hp-hr) by the horsepower rating of the diesel engine (150 hp-hr).

Compliance may be determined by multiplying the hourly emission rate for each pollutant by the summation of hours of operation for each 12-consecutive month period of time, and then dividing by 2000 (pounds per ton). Compliance shall be demonstrated by not exceeding 2,920 hours of operation during any rolling 12-month period.

4. Emission Limitation

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

Applicable Compliance Method

Visible particulate emissions from the stack shall be determined in accordance with OAC rule 3745-17-03(B)(3), using the methods and procedures specified in USEPA Reference Method 9, found in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

5. Emission Limitation

Visible particulate emissions from fugitive dust shall not exceed twenty percent opacity as a

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three-minute average.

Applicable Compliance Method

Visible particulate emissions from fugitive dust shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

F. Miscellaneous Requirements

1. OAC rules 3745-17-07 (B)(5) and 3745-17-08 (B) do not apply to this emissions unit; it is not located in an Appendix A area.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P002 - Material Handling - 800 hp diesel-fired Tub Grinder (combustion emissions)	OAC rule 3745-31-05 (A)(3)
	OAC rule 3745-17-11 (B)(5)(b)
	OAC rule 3745-18-06 (F)
	OAC rule 3745-17-07 (A)(1)
	OAC rule 3745-35-07 (B)

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PTI A

Issued: 7/30/2002

Emissions Unit ID: P002

Applicable Emissions Limitations/Control Measures	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(5)(a) and 3745-17-07(A).
Emissions from the combustion of number two fuel oil shall not exceed the following:	Particulate matter emissions: 0.062 pound per million Btu of actual heat input.
Nitrogen Oxide emissions: 19.20 pounds per hour and 12.26 tons per year	Exempt in accordance with OAC 3745-18-06 (B).
Carbon Monoxide emissions: 4.40 pound per hour and 2.81 tons per year	Visible particulate emissions from the stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.
Sulfur Dioxide emissions: 6.47 pound per hour and 4.15 tons per year	Nitrogen Oxide emissions: 12.26 tons per rolling 12-month period
Organic Compound emissions: 0.56 pound per hour and 0.36 tons per year	Carbon Monoxide emissions: 2.81 tons per rolling 12-month period
Particulate emissions: 0.22 tons per year	Sulfur Dioxide emissions: 4.15 tons per rolling 12-month period
Visible particulate emissions from fugitive dust shall not exceed twenty percent opacity as a three-minute average.	Organic Compound emissions: 0.36 tons per rolling 12-month period
The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust from the processed materials. Process emissions have been calculated to be under 1 ton per year.	Particulate emissions: 0.22 tons per rolling 12-month period

2. Additional Terms and Conditions

2.a None

B. Operational Restrictions

1. The permittee shall burn only number two fuel oil in this emissions unit.
2. The maximum annual operating hours for this emissions unit shall not exceed 1,277, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the operating hours levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Operating Hours</u>
1	106
1-2	213
1-3	319
1-4	426
1-5	532
1-6	639
1-7	745
1-8	851
1-9	958
1-10	1,064
1-11	1,171
1-12	1,277

After the first 12 calendar months of operation, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

C. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.
2. The permittee shall maintain monthly records of the following information:
 - a. the operating hours for each month;
 - b. during the first 12 calendar months of operation, the cumulative operating hours for each calendar month; and
 - c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the operating hours.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other

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than number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative operating hours levels. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

Compliance with the emission limitations in the Air Emissions Summary and in the terms and conditions for the emissions unit P002 shall be determined in accordance with the following methods:

1. Emission Limitation

19.20 pounds of nitrogen oxide per hour
 4.40 pound of carbon monoxide per hour
 6.47 pound of sulfur dioxide per hour
 0.56 pound of organic compound per hour

Applicable Compliance Method

Compliance shall be demonstrated by applying the emission factors from AP-42, Section 3.4, for "Large Stationary Diesel and All Stationary Dual-Fuel Engines", found in Table 3.4-1 as follows:

$$E = EF \times 800hp \quad \text{where}$$

E = emission rate (pounds per hour)

EF = emission factors from AP-42, Fifth edition, Section 3.4 for "Large Stationary Diesel and All Stationary Dual-Fuel Engines", 10/96, Table 3.4-1:

for NO_x: 0.024 lbs/hp-hr

for CO : 0.0055 lbs/hp-hr

for SO₂ :0.00809S* lbs/hp-hr

for OC : 0.000705 lbs/hp-hr

800 = power output (hp)

*S = % sulfur in fuel oil

2. Emission Limitation

0.0620 pound of particulate matter per million Btu of actual heat input.

Applicable Compliance Method

The particulate emission limit for this emissions unit has been established using the emission factor of 0.0620 lb/MMBtu, as outlined in AP-42, Section 3.4, for "Large Stationary Diesel and All Stationary Dual-Fuel Engines", Table 3.4-2, and this limit is also set by rule.

If required by the Ohio EPA, compliance with the allowable particulate emission limit shall be determined in accordance with the following method(s): Methods 1-4, and Method 5 of 40 CFR Part 60, Appendix A.

3. Emission Limitation

12.26 tons of Nitrogen Oxide per year, based on a rolling 12-month summation
2.81 tons of Carbon Monoxide per year, based on a rolling 12-month summation
4.15 tons of Sulfur Dioxide per year, based on a rolling 12-month summation
0.22 tons of Particulate Matter per year, based on a rolling 12-month summation
0.36 tons of Organic Compound per year, based on a rolling 12-month summation

Applicable Compliance Method

The rolling 12-month emission limits, for all but particulates, are based on the hourly emission limits and the maximum allowable operating hours per year. The hourly particulate emission rate (0.347 lbs/hr) shall be determined by multiplying the emission factor from AP-42, Section 3.4, for "Large Stationary Diesel and All Stationary Dual-Fuel Engines", Table 3.4-2 (0.062 lb/MMBtu) by the maximum heat input of the diesel engine (800 hp x 7000 Btu/hp-hr = 5.6MMBtu/hr).

Compliance may be determined by multiplying the hourly emission rate for each pollutant by the summation of hours of operation for each 12-consecutive month period of time, and then dividing by 2000 (pounds per ton). Compliance shall be demonstrated by not exceeding 1,277 hours of operation during any rolling 12-month period.

4. Emission Limitation

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

Applicable Compliance Method

Visible particulate emissions from the stack shall be determined in accordance with OAC rule 3745-17-03(B)(3), using the methods and procedures specified in USEPA Reference Method 9,

found in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

5. Emission Limitation

Visible particulate emissions from fugitive dust shall not exceed twenty percent opacity as a three-minute average.

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Applicable Compliance Method

Visible particulate emissions from fugitive dust shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

F. Miscellaneous Requirements

1. OAC rules 3745-17-07 (B)(5) and 3745-17-08 (B) do not apply to this emissions unit; it is not located in an Appendix A area.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P003 - Material Handling - 120 hp diesel-fired Windrow Turner (combustion emissions)	OAC rule 3745-31-05 (A)(3)
	OAC rule 3745-17-11 (B)(5)(a)
	OAC rule 3745-18-06 (F)
	OAC rule 3745-17-07 (A)(1)
	OAC rule 3745-35-07 (B)

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Applicable Emissions Limitations/Control Measures	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(5)(a) and 3745-17-07(A).
Emissions from the combustion of number two fuel oil shall not exceed the following:	
Nitrogen Oxide emissions: 3.72 pounds per hour and 5.43 tons per year	Particulate matter emissions: 0.310 pound per million Btu of actual heat input.
Carbon Monoxide emissions: 0.80 pound per hour and 1.17 tons per year	Exempt in accordance with OAC 3745-18-06 (B).
Sulfur Dioxide emissions: 0.25 pound per hour and 0.37 tons per year	Visible particulate emissions from the stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.
Organic Compound emissions: 0.30 pound per hour and 0.44 tons per year	Nitrogen Oxide emissions: 5.43 tons per rolling 12-month period
Particulate emissions: 0.38 tons per year	Carbon Monoxide emissions: 1.17 tons per rolling 12-month period
Visible particulate emissions from fugitive dust shall not exceed twenty percent opacity as a three-minute average.	Sulfur Dioxide emissions: 0.37 tons per rolling 12-month period
The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust from the processed materials. Process emissions have been calculated to be under 1 ton per year.	Organic Compound emissions: 0.44 tons per rolling 12-month period Particulate emissions: 0.38 tons per rolling 12-month period

2. Additional Terms and Conditions

2.a None

B. Operational Restrictions

1. The permittee shall burn only number two fuel oil in this emissions unit.
2. The maximum annual operating hours for this emissions unit shall not exceed 2,920, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the operating hours levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Operating Hours</u>
1	243
1-2	487
1-3	730
1-4	973
1-5	1,217
1-6	1,460
1-7	1,703
1-8	1,947
1-9	2,190
1-10	2,433
1-11	2,677
1-12	2,920

After the first 12 calendar months of operation, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

C. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.
2. The permittee shall maintain monthly records of the following information:
 - a. the operating hours for each month;
 - b. during the first 12 calendar months of operation, the cumulative operating hours for each calendar month; and
 - c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the operating hours.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other

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than number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative operating hours levels. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

Compliance with the emission limitations in the Air Emissions Summary and in the terms and conditions for the emissions unit P003 shall be determined in accordance with the following methods:

1. Emission Limitation

3.72 pounds of nitrogen oxide per hour
 0.80 pound of carbon monoxide per hour
 0.25 pound of sulfur dioxide per hour
 0.30 pound of organic compound per hour

Applicable Compliance Method

Compliance shall be demonstrated by applying the emission factors from AP-42, Section 3.3, for "Gasoline and Diesel Industrial Engines", found in Table 3.3-1 as follows:

$$E = EF \times 120hp \quad \text{where}$$

E = emission rate (pounds per hour)

EF = emission factors from AP-42, Fifth edition, Section 3.3 for "Gasoline and Diesel Industrial Engines", 10/96, Table 3.3-1:

for NO_x: 0.031 lbs/hp-hr

for CO : 0.00668 lbs/hp-hr

for SO₂ :0.00205 lbs/hp-hr

for OC : 0.00247 lbs/hp-hr

120 = power output (hp)

2. Emission Limitation

0.310 pound of particulate matter per million Btu of actual heat input.

Applicable Compliance Method

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The particulate emission limit for this emissions unit has been established using the emission factor of 0.0022 pounds/hp-hr or 0.31 pounds/MMBtu, as outlined in AP-42, Section 3.3 for "Gasoline and Diesel Industrial Engines", Table 3.3-1; and this limit is also set by rule.

If required by the Ohio EPA, compliance with the allowable particulate emission limit shall be determined in accordance with the following method(s): Methods 1-4, and Method 5 of 40 CFR Part 60, Appendix A.

3. Emission Limitation

5.43 tons of Nitrogen Oxide per year, based on a rolling 12-month summation
1.17 tons of Carbon Monoxide per year, based on a rolling 12-month summation
0.37 tons of Sulfur Dioxide per year, based on a rolling 12-month summation
0.38 tons of Particulate Matter per year, based on a rolling 12-month summation
0.44 tons of Organic Compound per year, based on a rolling 12-month summation

Applicable Compliance Method

The rolling 12-month emission limits, for all but particulates, are based on the hourly emission limits and the maximum allowable operating hours per year. The hourly particulate emission rate (0.264 lbs/hr) shall be determined by multiplying the emission factor from AP-42, Section 3.3, for "Gasoline and Diesel Industrial Engines", Table 3.3-1 (0.0022 lb/hp-hr) by the horsepower rating of the diesel engine (120 hp-hr).

Compliance may be determined by multiplying the hourly emission rate for each pollutant by the summation of hours of operation for each 12-consecutive month period of time, and then dividing by 2000 (pounds per ton). Compliance shall be demonstrated by not exceeding 2,920 hours of operation during any rolling 12-month period.

4. Emission Limitation

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

Applicable Compliance Method

Visible particulate emissions from the stack shall be determined in accordance with OAC rule 3745-17-03(B)(3), using the methods and procedures specified in USEPA Reference Method 9, found in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

5. Emission Limitation

Visible particulate emissions from fugitive dust shall not exceed twenty percent opacity as a

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three-minute average.

Applicable Compliance Method

Visible particulate emissions from fugitive dust shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

F. Miscellaneous Requirements

1. OAC rules 3745-17-07 (B)(5) and 3745-17-08 (B) do not apply to this emissions unit; it is not located in an Appendix A area.