



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
COLUMBIANA 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: 02-16424**

**DATE: 4/30/2002**

R and R Land Clearing  
Rick Haldeman  
46486 State Route 14  
Columbiana, OH 44408

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



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**Permit To Install  
Terms and Conditions**

**Issue Date: 4/30/2002  
Effective Date: 4/30/2002**

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**FINAL PERMIT TO INSTALL 02-16424**

Application Number: 02-16424  
APS Premise Number: 0215010352  
Permit Fee: **\$2800**  
Name of Facility: R and R Land Clearing  
Person to Contact: Rick Haldeman  
Address: 46486 State Route 14  
Columbiana, OH 44408

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**46486 State Route 14  
Columbiana, Ohio**

Description of proposed emissions unit(s):  
**Unpaved roadways, storage piles, tub grinder.**

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

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

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

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

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

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Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

**10. Public Disclosure**

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

**11. Applicability**

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate 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 commencing operation of the emissions unit(s) covered by this permit.

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**14. Construction Compliance Certification**

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

**15. Fees**

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

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

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
<b>Particulate</b>	<b>5.37 tpy</b>
<b>NO<sub>x</sub></b>	<b>24.5 tpy</b>
<b>CO</b>	<b>5.26 tpy</b>
<b>SO<sub>x</sub></b>	<b>1.61 tpy</b>
<b>OC</b>	<b>1.95 tpy</b>

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F001 - Unpaved roadways and parking areas	OAC rule 3745-31-05(A)(3)	1.89 ton per year of particulate emissions  No visible particulate emissions except for 3 minutes during any 60-minute period
	OAC rule 3745-17-07(B)(5)	Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Additional Terms and Conditions A.2.b through A.2.g).
	OAC rule 3745-17-08(B)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).  The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a** The unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:
- unpaved roadways:  
All unpaved roadways
- unpaved parking areas:  
All unpaved 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 and/or any other suitable dust suppression chemicals 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 water. 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**

- 1. When a dust suppressant is used for controlling fugitive dust from the unpaved road segments and parking areas, the following restrictions shall be followed:
  - a. The permittee shall certify or possess certification that all dust suppressants used to control fugitive dust meet the PCB limitations set forth in 40 CFR 761, and that there are no listed hazardous wastes or characteristic hazardous wastes as set forth in 40 CFR 261.
  - b. The permittee shall not apply used oil as defined by OAC rule 3745-279-01(A)(12) as a dust suppressant.
  - c. The dust suppressant shall be applied in such a manner as to prevent pollution of waters of the State as required by the Ohio Revised Code, section 6111.

**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:

<u>unpaved roadways</u>	<u>minimum inspection frequency</u>
All unpaved roadways	Daily

<u>unpaved parking areas</u>	<u>minimum inspection frequency</u>
All unpaved 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, except if the next required inspection is within one week.
- 3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, 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.
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**

1. Emission Limitation  
1.89 ton per year of particulate emissions

##### Applicable Compliance Method

Compliance shall be determined by using the following equation:

$$E \text{ (tpy)} = [(EF, \text{ lb/VMT} \times \text{Vehicle Miles Traveled, VMT/yr}) \times (1 - CE/100)] / 2,000 \text{ lbs/ton}$$

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**Emissions Unit ID: F001**

Where: E = particulate emissions, in ton per year  
EF = emission factor calculated using the equation and variables summarized in AP-42, Section 13.2.2 (Unpaved Roads, Draft 10/01), in lb/VMT  
CE = control efficiency (50% estimated control efficiency for watering as outlined in Ohio EPA, Reasonably Available Control Measures for Fugitive Dust Sources (RACM) document, Section 2.1.1, Table 2.1.1-3)

2. Compliance with the visible particulate emission limitation 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," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

#### **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	OAC rule 3745-17-08(B)(6)
F002 - Wood mulch storage piles  Load-in and load-out of storage piles (see Additional Terms and Conditions A.2.a for identification of storage piles)	OAC rule 3745-31-05(A)(3)	
Wind erosion from storage piles (see Additional Terms and Conditions A.2.a for identification of storage piles)	OAC rule 3745-31-05(A)(3)	
Load-in and load-out of storage piles, and wind erosion from storage piles	OAC rule 3745-17-07(B)(6)	

Applicable Emissions  
Limitations/Control Measures

0.27 ton per year of particulate emissions

No visible emissions except for one minute in any hour

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Additional Terms and Conditions A.2.b, A.2.c and A.2.f).

No visible emissions except for one minute in any hour

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Additional Terms and Conditions A.2.d through A.2.f).

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a** The storage piles that are covered by this permit and subject to the above-mentioned requirements are listed below:
- All storage piles
- 2.b** The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles 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 watering to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- 2.d** The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles 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 watering to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile 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.
- 2.f** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 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 each load-in operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
All storage piles	Daily

- 2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
All storage piles	Daily

- 3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
All storage piles	Daily

- 4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity 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, except if the next required inspection is within one week.

- 5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

- 6. 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.

7. 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, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 7.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and 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.
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**

1. Emission Limitation  
0.27 ton per year of particulate emissions

Applicable Compliance Method

Compliance shall be determined by using the following equation:

$$E \text{ (tpy)} = EF, \text{ lb/ton} \times \text{Amount of Material Processed, tpy}$$

Where: E = particulate emissions, in ton per year  
EF = emission factor calculated using the equation and variables summarized in AP-42, Section 13.2.4 (Aggregate Handling and Storage Piles, 1/95), in lb/ton

2. Compliance with the visible emission limitations for the storage piles 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"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	OAC rule 3745-31-05(A)(3) for fugitive emissions
P001 - 425 hp diesel engine tub grinder used for mulching wood waste	OAC rule 3745-31-05(A)(3) for products of combustion	OAC rule 3745-17-11(B)(5)(a)
		OAC rule 3745-17-07(A)(1)
		OAC rule 3745-18-06(B)

**R and  
PTI A**

**Issued: 4/30/2002**

Emissions Unit ID: **P001**

Applicable Emissions  
Limitations/Control Measures

Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 13.2 pounds per hour and 24.5 tons per year

Carbon monoxide (CO) emissions shall not exceed 2.84 pounds per hour and 5.26 tons per year

Sulfur dioxide (SO<sub>x</sub>) emissions shall not exceed 0.87 pound per hour and 1.61 ton per year

Particulate emissions (PE) shall not exceed 0.310 pound per MMBtu of actual heat input for a small bore, internal combustion engine, 0.94 pound per hour and 1.74 ton per year

Organic compound (OC) emissions shall not exceed 1.05 pound per hour and 1.95 ton per year

Visible particulate stack emissions shall not exceed 10 percent opacity as a six-minute average.

Particulate emissions (PE) shall not exceed 1.47 ton per year.

Visible fugitive particulate emissions shall not exceed 10 percent opacity as a six-minute average.

The emission limitation specified by

this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a** The emission limitations for this emissions unit were established to reflect the potential to emit of the diesel engine tub grinder. This potential is based on a maximum rated capacity of 33 tons of wood per hour and the maximum fuel burning capacity of the engine. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

**B. Operational Restrictions**

1. The maximum annual operating hours for this emissions unit shall not exceed 3,700 hours per year.
2. The permittee shall burn only number two fuel oil in this emissions unit.
3. The quality of the oil burned in this emissions unit shall meet, on an "as received" basis, a sulfur content which is sufficient to comply with the allowable SO<sub>2</sub> emission limitation of 0.87 pound of SO<sub>2</sub> per hour, or 0.29 pound of SO<sub>2</sub> per MMBtu of actual heat input.

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

1. The permittee shall maintain daily records of the operating hours for this emissions unit.
2. 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 emissions unit.
3. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content (lbs/MMBtu) and heat content (Btu/gallon) in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Ohio EPA, Northeast District Office.
4. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content.

**D. Reporting Requirements**

Emissions Unit ID: **P001**

1. The permittee shall submit annual reports which identify any exceedances of the annual operating hours limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit quarterly deviation (excursion) reports that identify any record showing an exceedance of the 0.29 pound of SO<sub>2</sub> per MMBtu limitation. The notification shall include a copy of any such record and shall be sent to the Ohio EPA, Northeast District Office as required in Part I, Section A.2.b of the General Terms and Conditions of this permit.

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

1. Emission Limitation:  
13.2 pounds per hour of NO<sub>x</sub> emissions

Applicable Compliance Method:

Compliance with this emission limitation may be demonstrated by multiplying the maximum rated capacity of the emissions unit (425 hp) by the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", Section 3.3 (Gasoline and Diesel Industrial Engines), 10/96 - Fifth Edition, Table 3.3-1 for NO<sub>x</sub> emissions from diesel fuel oil combustion (0.031 lb NO<sub>x</sub>/hp-hr). If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 or 7E.

2. Emission Limitation:  
24.5 tons per year of NO<sub>x</sub> emissions

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$E(\text{tpy}) = (\text{hourly emission rate, lb/hr} \times \text{annual hours of operation, hr/yr}) / 2,000 \text{ lbs/ton}$$

3. Emission Limitation:  
2.84 pounds per hour of CO emissions

Applicable Compliance Method:

Compliance with this emission limitation may be demonstrated by multiplying the maximum rated capacity of the emissions unit (425 hp) by the emission factor from AP-42, "Compilation of Air

Pollutant Emission Factors", Section 3.3 (Gasoline and Diesel Industrial Engines), 10/96 - Fifth Edition, Table 3.3-1 for CO emissions from diesel fuel oil combustion (0.00668 lb CO/hp-hr). If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

4. Emission Limitation:  
5.26 tons per year of CO emissions

Applicable Compliance Method:  
Compliance shall be determined by using the following equation:

$$E(\text{tpy}) = (\text{hourly emission rate, lb/hr} \times \text{annual hours of operation, hr/yr}) / 2,000 \text{ lbs/ton}$$

5. Emission Limitation:  
0.87 pound per hour of SO<sub>x</sub> emissions

Applicable Compliance Method:  
Compliance with the SO<sub>x</sub> limitation shall be based on the analytical test results of each shipment of oil that meets a sulfur content of 0.29 pounds of SO<sub>x</sub> per MMBtu.

6. Emission Limitation:  
1.61 ton per year of SO<sub>x</sub> emissions

Applicable Compliance Method:  
Compliance shall be determined by using the following equation:

$$E(\text{tpy}) = (\text{hourly emission rate, lb/hr} \times \text{annual hours of operation, hr/yr}) / 2,000 \text{ lbs/ton}$$

7. Emission Limitation:  
0.94 pound per hour of particulate emissions (from combustion of fuel oil)

Applicable Compliance Method:  
Compliance with this emission limitation may be demonstrated by multiplying the maximum rated capacity of the emissions unit (425 hp) by the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", Section 3.3 (Gasoline and Diesel Industrial Engines), 10/96 - Fifth Edition, Table 3.3-1 for particulate emissions from diesel fuel oil combustion (0.0022 lb particulate/hp-hr).

8. Emission Limitation:

Emissions Unit ID: **P001**

0.310 pound particulate per MMBtu of actual heat input for small bore, internal combustion engine

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated through compliance with the pound per hour limitation stated above, since 0.0022 lb of particulate per hp-hr multiplied by 1 hp-hr/7,000 Btu is equal to 0.310 lb of particulate per MMBtu. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B).

9. Emission Limitation:  
 1.74 ton per year of particulate emissions (from combustion of fuel oil)

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$E(\text{tpy}) = (\text{hourly emission rate, lb/hr} \times \text{annual hours of operation, hr/yr}) / 2,000 \text{ lbs/ton}$$

10. Emission Limitation:  
 1.05 pound per hour of OC emissions

Applicable Compliance Method:

Compliance with this emission limitation may be demonstrated by multiplying the maximum rated capacity of the emissions unit (425 hp) by the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", Section 3.3 (Gasoline and Diesel Industrial Engines), 10/96 - Fifth Edition, Table 3.3-1 for OC emissions from diesel fuel oil combustion (0.00247 lb OC/hp-hr). If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 or 25A.

11. Emission Limitation:  
 1.95 ton per year of OC emissions

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$E(\text{tpy}) = (\text{hourly emission rate, lb/hr} \times \text{annual hours of operation, hr/yr}) / 2,000 \text{ lbs/ton}$$

12. Emission Limitation:  
Visible fugitive particulate emissions shall not exceed 10 percent opacity as a six-minute average.  
Visible particulate stack emissions shall not exceed 10 percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission 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).

13. Emission Limitation:  
1.47 ton per year of particulate emissions (from wood mulching operations)

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$E \text{ (tpy)} = (EF \times \text{Amount of material processed, ton/yr}) / 2,000 \text{ lbs/ton}$$

Where: E = particulate emissions, in ton per year  
EF = emission factor, 0.024 lb particulate per ton of material processed  
(outlined in Ohio EPA, Reasonably Available Control Measures for Fugitive Dust Sources (RACM) document, Section 2.17, Table 2.17-1)

**F. Miscellaneous Requirements**

None