

Facility ID: 1431344222 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

- [Go to Part II for Emissions Unit F001](#)
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Facility ID: 1431344222 Emissions Unit ID: F001 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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-Mulch, Soil and Aggregate Storage Piles	OAC rule 3745-31-05(A)(3) 14-05884	Fugitive particulate emissions (PE) shall not exceed 11 tons per year.
		Fugitive particulate matter emissions of 10 microns and less in diameter (PM10) shall not exceed 6 tons per year.
		No visible particulate emissions except for a total of one minute during any 60 minute observation period.
	OAC rule 3745-17-07(B)(6)	Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see terms and conditions A.2.a through A.2.d) The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).
	OAC rule 3745-17-08(B)	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. Additional Terms and Conditions

- (a) 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 application, the permittee has committed to maintain minimal drop heights for stackers and front-loaders, and chemical stabilization/dust suppressants and/or watering/sprinkling systems at sufficient treatment frequencies to ensure compliance. The operator shall avoid dragging any front-end loader bucket along the ground. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
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.
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 application, the permittee has committed to perform one or more of the following: (chemical stabilization, watering/sprinkling systems/hoses, covering the storage piles) to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

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.

Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit, visible emissions limitations and compliance with specified emission limits is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

B. Operational Restrictions

1. None

C. Monitoring and/or Record Keeping 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:

storage pile identification = all
minimum load-in inspection frequency = weekly

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:

storage pile identification = all
minimum load-out inspection frequency = weekly

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:

storage pile identification = all
minimum wind erosion inspection frequency = weekly

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 Hamilton County Department of Environmental Services, 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 C.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. All deviation reports unless otherwise specified shall be submitted in accordance with the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitations:

Fugitive particulate emissions (PE) shall not exceed 11 tons per year.

Fugitive particulate matter emissions of 10 microns and less in diameter (PM10) shall not exceed 6 tons per year.

Applicable Compliance Method:

Compliance with fugitive PE and PM10 limitations shall be determined by using the emission factor equations in Section 13.2.4 in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95) for aggregate handling and storage piles and the permittee-supplied operational parameters as submitted in PTI application 14-05884, received on September 28, 2006. Should further updates in AP-42 occur, the most current equations for aggregate handling and storage piles shall be used.

b. Emission Limitations:

No visible PE except for a total of one minute during any 60 minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitations listed 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").

F. **Miscellaneous Requirements**

1. None

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
F002 - Roadways and Parking Areas	OAC rule 3745-31-05(A)(3)	Fugitive particulate emissions (PE) shall not exceed 70 tons per year. Fugitive particulate matter emissions of 10 microns and less in diameter (PM10) shall not exceed 14 tons per year. There shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed three minutes during any 60-minute observation period. There shall be no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed one minute during any 60-minute observation period.
	OAC rule 3745-17-07(B)(4)	Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See terms and conditions A.2.a through A.2.d). The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(B)(5)	This emissions unit is exempt from the visible

OAC rule 3745-17-08(B)

particulate emission limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.

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. Additional Terms and Conditions

- (a) The permittee shall employ best available control measures on all paved and unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with permittee's permit application, the permittee has committed to treat the paved and unpaved roadways and parking areas with chemical stabilization/dust suppressants and/or water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance. 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 a paved or 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. 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. 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. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit, compliance with specified emission limits and visible emission limitations is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

B. Operational Restrictions

1. None

C. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:
- unpaved roadways and parking areas = all
minimum inspection frequency = once daily, during operation
- paved roadways and parking areas = all
minimum inspection frequency = once daily, during operation
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 Hamilton County Department of Environmental Services, 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 C.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. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitations:

Fugitive particulate emissions (PE) shall not exceed 70 tons per year.

Fugitive particulate matter emissions of 10 microns and less in diameter (PM10) shall not exceed 14 tons per year.

Applicable Compliance Method:

Compliance with fugitive PE and PM10 limitations shall be determined by using the emission factor equations in Section 13.2.1 and 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for paved and unpaved roadways and the permittee-supplied operational parameters as submitted in PTI application 14-05884, received September 28, 2006. Should further updates in AP-42 occur, the most current equations for paved and unpaved roads shall be used.

b. Emission Limitations:

No visible PE from any unpaved roadway or parking area except for three minutes during any 60-minute observation period.

No visible PE from any paved roadway or parking area except for one` minute during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitations listed 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").

F. Miscellaneous Requirements

- 1. None

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Facility ID: 1431344222 Emissions Unit ID: P001 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - 1000 HP Tub Grinder and Material Handling	OAC rule 3745-31-05(A)(3) 14-05884	Emissions from tub grinding: Particulate emissions (PE) shall not exceed 1.5 pounds per hour and 6.6 tons per year. Particulate matter emissions 10 microns and less in diameter shall not exceed 0.83 pound per hour and 3.6 tons per year. Emissions from material handling: Particulate emissions (PE) shall not exceed 0.9 pound per hour and 3.9 tons per year.

Particulate matter emissions 10 microns and less in diameter shall not exceed 0.43 pound per hour and 1.9 tons per year.

Emissions from the diesel engine:

Particulate emissions (PE) and Particulate matter emissions 10 microns and less in diameter (PM-10) shall not exceed 0.47 pound per hour and 2.1 tons per year.

Sulfur dioxide (SO₂) emissions shall not exceed 0.4 pound per hour and 1.8 tons per year.

Nitrogen oxides (NO_x) emissions shall not exceed 15.2 pounds per hour and 66.6 tons per year.

Carbon monoxide (CO) emissions shall not exceed 5.5 pounds per hour and 24.1 tons per year.

Volatile organic compound emissions shall not exceed 0.7 pound per hour and 3.1 tons per year.

See terms A.2.a, A.2.b, A.2.c and A.2.e.

The hourly and annual emission limitation outlined under OAC rule 3745-31-05(A)(3) are based upon the emissions unit's potential to emit. Therefore, no records are required to demonstrate compliance with these limitations.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B)(5)(b), 3745-35-07(B) and OAC rule 3745-21-08(B).

OAC rule 3745-17-07(A)

Visible particulate emissions from the diesel engine exhaust stack shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.

OAC rule 3745-17-11(B)(5)(b)

The particulate emissions from the diesel engine's exhaust shall not exceed 0.062 pound per million Btu of actual heat input.

OAC rule 3745-17-07(B)(1)

This emissions unit is exempt from the visible particulate emission limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.

OAC rule 3745-17-08(B)

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).

OAC rule 3745-18-06(B)

Exempt.

OAC rule 3745-35-07(B)

Particulate emissions (PE) from emissions units P001, P002 and P003 combined shall not exceed 13.5 tons per year, based upon a rolling, 12-month summation. This includes emissions from tub grinding, material handling, and the diesel engine.

Particulate matter emissions 10 microns and less in diameter from emissions units P001, P002 and P003 combined shall not exceed 8.1 tons per year, based upon a rolling, 12-month summation. This includes emissions from tub grinding, material handling, and the diesel engine.

Sulfur dioxide (SO₂) emissions from emissions units P001, P002 and P003 combined shall not exceed 1.9 tons per year, based upon a rolling, 12-month summation.

Nitrogen oxides (NO_x) emissions from emissions units P001, P002 and P003 combined shall not exceed 71.4 tons per year, based upon a rolling, 12-month summation.

Carbon monoxide (CO) emissions from emissions units P001, P002 and P003 combined shall not exceed 25.8 tons per year, based upon a rolling, 12-month summation.

Volatile organic compound (VOC) emissions from emissions units P001, P002 and P003 combined shall not exceed 3.3 tons per year, based upon a rolling, 12-month summation.

See section B.2.

See term A.2.d.

OAC rule 3745-21-08(B)

2. Additional Terms and Conditions

- (a) The permittee shall employ best available control measures for the tub grinder, the processed mulch pile (s), conveyor transfer point(s) and the loading and unloading activities associated with the tub grinder for the purpose of ensuring compliance with the visible particulate emissions requirement. The permittee shall employ water on an 'as needed' basis to ensure compliance.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

The above-identified control measure(s) shall be implemented if the permittee determines as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is(are) necessary to ensure compliance with the visible particulate emissions requirement. Any required implementation of the control measure(s) shall continue until further observation confirms that use of the control measure(s) is unnecessary.

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 rule 3745-31-05(A)(3).

The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

Fugitive visible particulate emissions from the tub grinder, conveyor transfer point(s) and the loading and unloading activities associated with the tub grinder and material handling shall not exceed 20% opacity, as a three-minute average.

B. Operational Restrictions

1. The permittee shall use only number two fuel oil (0.5% sulfur by weight or less) in the diesel engine integral to this emissions unit.
2. The maximum annual operating hours for emissions units P001, P002, and P003 combined shall not exceed 9390 hours, based upon a rolling, 12 month summation of the operating hours.

C. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the grinding and material handling operations in accordance with the following frequencies:
 - grinding and material handling operation = 1000 HP tub grinder and material handling
 - minimum inspection frequency = once daily during operation
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 operating conditions. No inspection shall be necessary for this material handling operation if the material used in this operation 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.
3. The permittee may, upon receipt of written approval from the Hamilton County Department of Environmental Services, 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;
 - 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.

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

5. For each day during which the permittee burns a fuel other than number two fuel oil (0.5% sulfur by weight or less), the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
6. The permittee shall maintain monthly records of the following information:
 - a. the annual operating hours of this emissions unit;
 - b. the rolling, 12-month summation of the operating hours for emissions units P001, P002, and P003 combined (this will include the number of hours of operation for the current month and the previous 11 calendar months); and
 - c. the rolling, 12-month summation of PE, PM-10, SO₂, VOC, NO_x, and CO emissions for emissions units P001, P002, and P003 combined.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation/exceedance reports that identify any of the following occurrences:
 - a. Each day when a fuel other than number two fuel oil (0.5% sulfur by weight or less) was burned in this emissions unit.
 - b. 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.
 - c. Each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
 - d. Any exceedance on the annual operating hours limitation as outlined in term B.2. If no exceedances occurred, the permittee shall state so in the report.
 - e. Any exceedance of the annual allowable tons per year PE, PM-10, SO₂, VOC, NO_x, and CO emissions on a rolling, 12 month summation for emissions units P001, P002, and P003 combined. If no exceedances occurred, the permittee shall state so in the report.
2. The permittee shall submit annual reports that specify the total emissions in tons per year for PE, PM-10, VOC, SO₂, NO_x and CO for this emissions unit. These reports shall be submitted by January 31 of each year.
3. All deviation reports unless otherwise specified shall be submitted in accordance with the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):
For tub grinding operation:

Emission Limitations:
Particulate emissions (PE) shall not exceed 1.5 pounds per hour and 6.6 tons per year.

Particulate matter emissions 10 microns and less in diameter shall not exceed 0.83 pound per hour and 3.6 tons per year.

Applicable Compliance Method:
The hourly PE and PM-10 emission limitations are based upon the emissions unit's potential to emit and were established by the following methodology:

pounds of PE = (A) x (B)

pounds of PM-10 emissions = (A) x (B);

where:

A = PE or PM-10 emission factor, lb/ton, as referred from SCC Code 3-07-008-01 in FIRE Version 6.23. See detailed emission calculations in PTI application 14-05884. For PE = 0.02 lb/ton. For PM10 = 0.011 lb/ton.

B = maximum hourly throughput of 75 tons.

The tons per year annual emission limitations are based on maximum hourly emission rate multiplied by the maximum annual operational hours of 8760 and divided by 2000 pounds per ton.
Emission Limitations for Material Handling:

Particulate emissions (PE) shall not exceed 0.9 pound per hour and 3.9 tons per year.

Particulate matter emissions 10 microns and less in diameter shall not exceed 0.43 pound per hour and 1.9 tons per year.

Applicable Compliance Method:

The hourly PE and PM-10 emission limitations are based upon the emissions unit's potential to emit, and were established by the following methodology:

Note: Emissions from the mulch handling were added to the emissions from sand, gravel and soil handling to determine the emissions limitation.

lbs of PE from mulch = (A) x (B)

lbs of PM-10 emissions from mulch = (A) x (B); where:

A = PE or PM-10 emission factors, lb/ton, determined based on equation referred from AP-42, Section 13.2.4 (January 1995). See detailed emission calculations in PTI application 14-05884. For PE = 0.0001lb/ton. For PM-10 = 0.00005 lb/ton.

B = maximum hourly throughput for material load-in/load-out = 300 tons per hour for mulch.

lbs of PE from soil, sand and gravel = (A) x (B)

lbs of PM-10 emissions from soil, sand and gravel = (A) x (B); where:

A = PE or PM-10 emission factors, lb/ton, determined based on equation referred from AP-42, Section 13.2.4 (January 1995). See detailed emission calculations in PTI application 14-05884. For PE = 0.0044 lb/ton. For PM-10 = 0.002075 lb/ton.

B = maximum hourly throughput for material load-in/load-out = 200 tons per hour for sand, gravel and soil.
The tons per year annual emission limitations are based on maximum hourly emission rate multiplied by 8760 hours of operation and divided by 2000 pounds per ton.
For diesel engine:

Emission Limitations:

Particulate emissions (PE) and Particulate matter emissions 10 microns and less in diameter (PM-10) shall not exceed 0.47 pound per hour and 2.1 tons per year.

Applicable Compliance Method:

The hourly emission rate for particulate emissions (PE/PM10) is based on following relationship:

pounds/hour PE/PM10 = (A) * (B) * (C); where

A = Emission factor referred from OAC rule 3745-17-11(B)(5)(b), which is 0.062 pounds of PE/PM10 per mm Btu of heat input;

B = Maximum hourly fuel consumption by the diesel engine = 52 gallons per hour; and

C = Heat content in diesel fuel = 0.147 mm Btu per gallon

The TPY emission limitation is based on maximum hourly emission rate multiplied by the maximum annual operational hours (8760 hours) and divided by 2000 pounds per ton.

Emission Limitations:

Sulfur dioxide (SO₂) emissions shall not exceed 0.4 pound per hour and 1.8 tons per year.

Applicable Compliance Method:

The hourly emission rates for SO₂ emissions is based on following relationship:

pounds/hour SO₂ = (A) * (B); where

A = Emission factor (lb/hp-hr) referred from AP-42 Section 3.3 for diesel fuel (SCC 2-02-001-02, 2-03-001-01) = 0.0004 pounds per horsepower-hour; and

B = Power output of the diesel engine (1000 horsepower-hour/hour).

The TPY emission limitation is based on maximum hourly emission rate multiplied by the maximum annual operational hours (8760 hours) and divided by 2000 pounds per ton.

Emission Limitations:

Nitrogen oxides (NO_x) emissions shall not exceed 15.2 pounds per hour and 66.6 tons per year.

Applicable Compliance Method:

The hourly emission rates for NO_x emissions is based on the following relationship:

pounds/hour NO_x = (A) * (B); where

A = Emission factor (lb/hp-hr) referred from the manufacturer's data = 0.0152 pound per horsepower-hour; and

B = Power output of the diesel engine (1000 horsepower-hour/hour).

The TPY emission limitation is based on maximum hourly emission rate multiplied by the maximum annual operational hours (8760 hours) and divided by 2000 pounds per ton.

Emission Limitations:

Carbon monoxide (CO) emissions shall not exceed 5.5 pounds per hour and 24.1 tons per year.

Applicable Compliance Method:

The hourly emission rates for CO emissions is based on following relationship:

pounds/hour CO = (A) * (B); where

A = Emission factor (lb/hp-hr) referred from AP-42 Section 3.3 for diesel fuel (SCC 2-02-001-02, 2-03-001-01) = 0.0055 pound per horsepower-hour; and

B = Power output of the diesel engine (1000 horsepower-hour/hour).

The TPY emission limitation is based on maximum hourly emission rate multiplied by the maximum annual operational hours (8760 hours) and divided by 2000 pounds per ton.

Emission Limitations:

Volatile organic compound emissions shall not exceed 0.7 pound per hour and 3.1 tons per year.

Applicable Compliance Method:

The hourly emission rates for VOC emissions is based on following relationship:

pounds/hour VOC = (A) * (B); where

A = Emission factor (lb/hp-hr) referred from AP-42 Section 3.3 for diesel fuel (SCC 2-02-001-02, 2-03-001-01) = 0.000705 pound per horsepower-hour; and

B = Power output of the diesel engine (1000 horsepower-hour/hour).

The TPY emission limitation is based on maximum hourly emission rate multiplied by the maximum annual operational hours (8760 hours) and divided by 2000 pounds per ton.

2. Compliance with the emission limitation(s) outlined for OAC rule 3745-35-07(B) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitations:

Particulate emissions (PE) from emissions units P001, P002 and P003 combined shall not exceed 13.5 tons per year, based upon a rolling, 12-month summation. This includes emissions from tub grinding, material handling, and the engine.

Particulate matter emissions 10 microns and less in diameter from emissions units P001, P002 and P003 combined shall not exceed 8.1 tons per year, based upon a rolling, 12-month summation. This includes emissions from tub grinding, material handling, and the engine.

Sulfur dioxide (SO₂) emissions from emissions units P001, P002 and P003 combined shall not exceed 1.9 tons per year, based upon a rolling, 12-month summation.

Nitrogen oxides (NO_x) emissions from emissions units P001, P002 and P003 combined shall not exceed 71.4 tons per year, based upon a rolling, 12-month summation.

Carbon monoxide (CO) emissions from emissions units P001, P002 and P003 combined shall not exceed 25.8 tons per year, based upon a rolling, 12-month summation.

Volatile organic compound (VOC) emissions from emissions units P001, P002 and P003 combined shall not exceed 3.3 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined by multiplying the hourly emission limitation for each pollutant by the updated rolling, 12-month summation of the operating hours for emissions unit P001, P002, and P003, combined (see term C.6) and divided by 2000 pounds per ton.

3. Compliance with the operating hours limitation in section B.2 shall be demonstrated by the record keeping in section C.6.
4. Compliance with the section B.1 shall be demonstrated by the record keeping in section C.5.
5. Visible Emission Limitation:
Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 9 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, 2002, and the applicable modifications listed in paragraphs (B)(3)(a) through (B)(3)(e) of OAC rule 3745-17-03.

Visible particulate emissions from the diesel engine exhaust stack shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

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

1. At the discretion and following the approval of the director, the permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install (PTI) providing the appropriate notification and exemption requirements have been met. The director may issue a "Notice of Site Approval" through either of the following scenarios:
If future location(s) of the proposed portable source are unknown, the approval to relocate the portable source shall be in accordance with OAC rule 3745-31-03(A)(1)(p)(i) and the following criteria shall be met:
 - i. the portable source has been issued a permit to install (PTI) and the permittee continues to comply with any applicable best available technology (BAT) determination;
 - ii. the portable source is operating pursuant to a currently effective PTI and/or a current permit to operate (PTO) and continues to comply with the requirements of the permit and any applicable state and/or federal rules;

- iii. the permittee has provided a minimum of 30 days notice of the intent to relocate the portable source to the permitting authority (the Ohio EPA District Office or local air agency that has issued the effective current permit) prior to the scheduled relocation;
- iii. the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance in violation of OAC rule 3745-15-07 and that the relocation of the portable source, along with any supporting permitted emissions (e.g. roadways or storage piles), would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site; and
- iv. the director has issued a "Notice of Site Approval", stating that the proposed site is acceptable under OAC rule 3745-15-07 and the relocation will not result in the installation of a major stationary source or a modification of an existing major stationary source.

The portable source can be relocated upon receipt of the director's "Notice of Site Approval" for the site; or

Pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the director may issue a "Notice of Site Approval" for any pre-disclosed location(s) if the portable source meets the requirements of OAC rule 3745-31-05(E), as follows:

- i. the portable source has been issued a permit to install (PTI) and the permittee continues to comply with any applicable best available technology (BAT) determination;
- ii. the portable source is operating pursuant to a currently effective PTI and/or a current permit to operate (PTO) and continues to comply with the requirements of the permit and any applicable state and/or federal rules;
- iii. the permittee has identified the proposed site(s) to the permitting District Office or local air agency;

iv. the permitting District Office/local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the portable source will have an acceptable environmental impact at the proposed site(s);

- v. a public notice, meeting the requirements OAC rule 3745-47, is published in the county where the proposed site(s) is/are located;
- vi. the owner of the proposed site(s) (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site(s); and
- vii. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation.

The portable source can be relocated upon receipt of the director's "Notice of Site Approval" for the site. Any site approval(s) issued by the Ohio EPA, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), shall be valid for no longer than 3 years and are subject to renewal. Pursuant to OAC rule 3745-31-05(F), the director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

- 2. If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTI for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility, in order to determine the potential to emit for Title V and PSD applicability. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745- 77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.

The "Notice of Intent to Relocate" shall be submitted to the Ohio EPA District Office or local air agency responsible for issuing the permits for the portable source. Upon receipt of the notice, the permitting office shall notify the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1431344222 Emissions Unit ID: P002 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law

only with the exception of those listed below which are federally enforceable.

- (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
P002 - 1000 HP Tub Grinder and Material Handling	OAC rule 3745-31-05(A)(3) 14-05884	<p>Emissions from tub grinding:</p> <p>Particulate emissions (PE) shall not exceed 1.5 pounds per hour and 6.6 tons per year.</p> <p>Particulate matter emissions 10 microns and less in diameter shall not exceed 0.83 pound per hour and 3.6 tons per year.</p> <p>Emissions from material handling:</p> <p>Particulate emissions (PE) shall not exceed 0.9 pound per hour and 3.9 tons per year.</p> <p>Particulate matter emissions less 10 microns and less in diameter shall not exceed 0.43 pound per hour and 1.9 tons per year.</p> <p>Emissions from the diesel engine:</p> <p>Particulate emissions (PE) and Particulate matter emissions 10 microns and less in diameter (PM-10) shall not exceed 0.47 pound per hour and 2.1 tons per year.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.4 pound per hour and 1.8 tons per year.</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 15.2 pounds per hour and 66.6 tons per year.</p> <p>Carbon monoxide (CO) emissions shall not exceed 5.5 pounds per hour and 24.1 tons per year.</p> <p>Volatile organic compound emissions shall not exceed 0.7 pound per hour and 3.1 tons per year.</p> <p>See terms A.2.a, A.2.b, A.2.c, and A.2.e.</p> <p>The hourly and annual emission limitations outlined under OAC rule 3745-31-05(A)(3) are based upon the emissions unit's potential to emit. Therefore, no records are required to demonstrate compliance with these limitations.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B)(5)(b), 3745-35-07(B) and OAC rule 3745-21-08(B).</p>
	OAC rule 3745-17-07(A)	Visible particulate emissions from the diesel engine exhaust stack shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)(b)	The particulate emissions from the diesel engine's exhaust shall not exceed 0.062 pounds per million Btu of actual heat input.
	OAC rule 3745-17-07(B)(1)	This emissions unit is exempt from the visible particulate emission limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in

OAC rule 3745-17-08(B)	"Appendix A" of OAC rule 3745-17-08. 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).
OAC rule 3745-18-06(B) OAC rule 3745-35-07(B)	Exempt. Particulate emissions (PE) from emissions units P001, P002 and P003 combined shall not exceed 13.5 tons per year, based upon a rolling, 12-month summation. This includes emissions from tub grinding, material handling, and the diesel engine. Particulate matter emissions 10 microns and less in diameter from emissions units P001, P002 and P003 combined shall not exceed 8.1 tons per year, based upon a rolling, 12-month summation. This includes emissions from tub grinding, material handling, and the diesel engine. Sulfur dioxide (SO2) emissions from emissions units P001, P002 and P003 combined shall not exceed 1.9 tons per year, based upon a rolling, 12-month summation. Nitrogen oxides (NOx) emissions from emissions units P001, P002 and P003 combined shall not exceed 71.4 tons per year, based upon a rolling, 12-month summation. Carbon monoxide (CO) emissions from emissions units P001, P002 and P003 combined shall not exceed 25.8 tons per year, based upon a rolling, 12-month summation. Volatile organic compound (VOC) emissions from emissions units P001, P002 and P003 combined shall not exceed 3.3 tons per year, based upon a rolling, 12-month summation. See section B.2. See term and condition A.2.d
OAC rule 3745-21-08(B)	

2. Additional Terms and Conditions

- (a) The permittee shall employ best available control measures for the tub grinder, the processed mulch pile (s), conveyor transfer point(s) and the loading and unloading activities associated with the tub grinder for the purpose of ensuring compliance with the visible particulate emissions requirement. The permittee shall employ water on an 'as needed' basis to ensure compliance.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

The above-identified control measure(s) shall be implemented if the permittee determines as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is(are) necessary to ensure compliance with the visible particulate emissions requirement. Any required implementation of the control measure(s) shall continue until further observation confirms that use of the control measure(s) is unnecessary.

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 rule 3745-31-05(A)(3).

The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

Fugitive visible particulate emissions from the tub grinder, conveyor transfer point(s) and the loading and unloading activities associated with the tub grinder and material handling shall not exceed 20% opacity, as a three-minute average.

B. Operational Restrictions

- 1. The permittee shall use only number two fuel oil (0.5% sulfur by weight or less) in the diesel engine integral to this emissions unit.
- 2. The maximum annual operating hours for emissions units P001, P002, and P003 combined shall not exceed 9390 hours, based upon a rolling, 12 month summation of the operating hours.

C. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the grinding and material handling operations in accordance with the following frequencies:

grinding and material handling operation = 1000 HP tub grinder and material handling

minimum inspection frequency = once daily during operation
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 operating conditions. No inspection shall be necessary for this material handling operation if the material used in this operation 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.
3. The permittee may, upon receipt of written approval from the Hamilton County Department of Environmental Services, 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;
 - 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.The information required in C.4.d shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.
5. For each day during which the permittee burns a fuel other than number two fuel oil (0.5% sulfur by weight or less), the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
6. The permittee shall maintain monthly records of the following information:
 - a. the annual operating hours of this emissions unit;
 - b. the rolling, 12-month summation of the operating hours for emissions units P001, P002, and P003 combined (this will include the number of hours of operation for the current month and the previous 11 calendar months); and
 - c. the rolling, 12-month summation of PE, PM-10, SO₂, VOC, NO_x, and CO emissions for emissions units P001, P002, and P003 combined.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation/exceedance reports that identify any of the following occurrences:
 - a. Each day when a fuel other than number two fuel oil (0.5% sulfur by weight or less) was burned in this emissions unit.
 - b. 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.
 - c. Each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
 - d. Any exceedance on the annual operating hours limitation as outlined in term B.2. If no exceedances occurred, the permittee shall state so in the report.
 - e. Any exceedance of the annual allowable tons per year PE, PM-10, SO₂, VOC, NO_x, and CO emissions on a rolling, 12 month summation for emissions units P001, P002, and P003 combined. If no exceedances occurred, the permittee shall state so in the report.
2. The permittee shall submit annual reports that specify the total emissions in tons per year for PE, PM-10, VOC, SO₂, NO_x and CO for this emissions unit. These reports shall be submitted by January 31 of each year.
3. All deviation reports unless otherwise specified shall be submitted in accordance with the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):
For tub grinding operation:

Emission Limitations:
1.5 pounds per hour and 6.6 tons per year of particulate emissions (PE).

0.83 pound per hour and 3.6 tons per year of PM-10 emissions.

Applicable Compliance Method:
The hourly PE and PM-10 emission limitations are based upon the emissions unit's potential to emit and were established by the following methodology:

pounds of PE = (A) x (B)

pounds of PM-10 emissions = (A) x (B);

where:

A = PM or PM-10 emission factor, lb/ton, as referred from SCC Code 3-07-008-01 in FIRE Version 6.23. See detailed emission calculations in PTI application 14-05884.

B = maximum hourly throughput of 75 tons.

The tons per year annual emissions limitations are based on maximum hourly emission rate multiplied by 8760 hours of operation and divided by 2000 pounds per ton.

Emission Limitations for Material Handling:

Particulate emissions (PE) shall not exceed 0.9 pound per hour and 3.9 tons per year.

Particulate matter emissions 10 microns and less in diameter shall not exceed 0.43 pound per hour and 1.9 tons per year.

Applicable Compliance Method:

The hourly PE and PM-10 emission limitations are based upon the emissions unit's potential to emit, and were established by the following methodology:

Note: Emissions from the mulch handling were added to the emissions from sand, gravel and soil handling to determine the emissions limitation.

lbs of PE from mulch = (A) x (B)

lbs of PM-10 emissions from mulch = (A) x (B); where:

A = PE or PM-10 emission factors, lb/ton, determined based on equation referred from AP-42, Section 13.2.4 (January 1995). See detailed emission calculations in PTI application 14-05884. For PE = 0.0001lb/ton. For PM-10 = 0.00005 lb/ton.

B = maximum hourly throughput for material load-in/load-out = 300 tons per hour for mulch.

lbs of PE from soil, sand and gravel = (A) x (B)

lbs of PM-10 emissions from soil, sand and gravel = (A) x (B); where:

A = PE or PM-10 emission factors, lb/ton, determined based on equation referred from AP-42, Section 13.2.4 (January 1995). See detailed emission calculations in PTI application 14-05884. For PE = 0.0044 lb/ton. For PM-10 = 0.002075 lb/ton.

B = maximum hourly throughput for material load-in/load-out = 200 tons per hour for sand, gravel and soil.

The tons per year annual emission limitations are based on maximum hourly emission rate multiplied by 8760 hours of operation and divided by 2000 pounds per ton.

For diesel engine:

Emission Limitations:

Particulate emissions (PE) and Particulate matter emissions 10 microns and less in diameter (PM-10) shall not exceed 0.47 pound per hour and 2.1 tons per year.

Applicable Compliance Method:

The hourly emission rate for particulate emissions (PE/PM10) is based on following relationship:

pounds/hour PE/PM10 = (A) * (B) * (C); where

A = Emission factor referred from OAC rule 3745-17-11(B)(5)(b), which is 0.062 pounds of PE/PM10 per mm Btu of heat input;

B = Maximum hourly fuel consumption by the diesel engine = 52 gallons per hour; and

C = Heat content in diesel fuel = 0.147 mm Btu per gallon

The TPY emission limitation is based on maximum hourly emission rate multiplied by the maximum annual operational hours (8760 hours) and divided by 2000 pounds per ton.

Emission Limitations:

Sulfur dioxide (SO2) emissions shall not exceed 0.4 pound per hour and 1.8 tons per year.

Applicable Compliance Method:

The hourly emission rates for SO2 emissions is based on following relationship:

pounds/hour SO2 = (A) * (B); where

A = Emission factor (lb/hp-hr) referred from AP-42 Section 3.3 for diesel fuel (SCC 2-02-001-02, 2-03-001-01) = 0.0004 pounds per horsepower-hour; and

B = Power output of the diesel engine (1000 horsepower-hour/hour).

The TPY emission limitation is based on maximum hourly emission rate multiplied by the maximum annual

operational hours (8760 hours) and divided by 2000 pounds per ton.

Emission Limitations:

Nitrogen oxides (NOx) emissions shall not exceed 15.2 pounds per hour and 66.6 tons per year.

Applicable Compliance Method:

The hourly emission rates for NOx emissions is based on the following relationship:

pounds/hour NOx = (A) * (B); where

A = Emission factor (lb/hp-hr) referred from the manufacturer's data = 0.0152 pound per horsepower-hour; and

B = Power output of the diesel engine (1000 horsepower-hour/hour).

The TPY emission limitation is based on maximum hourly emission rate multiplied by the maximum annual operational hours (8760 hours) and divided by 2000 pounds per ton.

Emission Limitations:

Carbon monoxide (CO) emissions shall not exceed 5.5 pounds per hour and 24.1 tons per year.

Applicable Compliance Method:

The hourly emission rates for CO emissions is based on following relationship:

pounds/hour CO = (A) * (B); where

A = Emission factor (lb/hp-hr) referred from AP-42 Section 3.3 for diesel fuel (SCC 2-02-001-02, 2-03-001-01) = 0.0055 pound per horsepower-hour; and

B = Power output of the diesel engine (1000 horsepower-hour/hour).

The TPY emission limitation is based on maximum hourly emission rate multiplied by the maximum annual operational hours (8760 hours) and divided by 2000 pounds per ton.

Emission Limitations:

Volatile organic compound emissions shall not exceed 0.7 pound per hour and 3.1 tons per year.

Applicable Compliance Method:

The hourly emission rates for VOC emissions is based on following relationship:

pounds/hour VOC = (A) * (B); where

A = Emission factor (lb/hp-hr) referred from AP-42 Section 3.3 for diesel fuel (SCC 2-02-001-02, 2-03-001-01) = 0.000705 pound per horsepower-hour; and

B = Power output of the diesel engine (1000 horsepower-hour/hour).

The TPY emission limitation is based on maximum hourly emission rate multiplied by the maximum annual operational hours (8760 hours) and divided by 2000 pounds per ton.

2. Compliance with the emission limitation(s) outlined for OAC rule 3745-37-07(B) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitations:

Particulate emissions (PE) from emissions units P001, P002 and P003 combined shall not exceed 13.5 tons per year, based upon a rolling, 12-month summation. This includes emissions from tub grinding, material handling, and the engine.

Particulate matter emissions 10 microns and less in diameter from emissions units P001, P002 and P003 combined shall not exceed 8.1 tons per year, based upon a rolling, 12-month summation. This includes emissions from tub grinding, material handling, and the engine.

Sulfur dioxide (SO₂) emissions from emissions units P001, P002 and P003 combined shall not exceed 1.9 tons per year, based upon a rolling, 12-month summation.

Nitrogen oxides (NOx) emissions from emissions units P001, P002 and P003 combined shall not exceed 71.4 tons per year, based upon a rolling, 12-month summation.

Carbon monoxide (CO) emissions from emissions units P001, P002 and P003 combined shall not exceed 25.8 tons per year, based upon a rolling, 12-month summation.

Volatile organic compound (VOC) emissions from emissions units P001, P002 and P003 combined shall not exceed 3.3 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined by multiplying the hourly emission limitation for each pollutant by the updated rolling, 12-month summation of the operating hours for emissions unit P001, P002, and P003, combined (see term C.6) and divided by 2000 pounds per ton.

3. Compliance with the operating hours limitation in section B.2 shall be demonstrated by the record keeping in section C.6.
4. Compliance with the section B.1 shall be demonstrated by the record keeping in section C.5.
5. Visible Emission Limitation:
Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 9 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, 2002, and the applicable modifications listed in paragraphs (B)(3)(a) through (B)(3)(e) of OAC rule 3745-17-03.

Visible particulate emissions from the diesel engine exhaust stack shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

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

1. At the discretion and following the approval of the director, the permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install (PTI) providing the appropriate notification and exemption requirements have been met. The director may issue a "Notice of Site Approval" through either of the following scenarios:

If future location(s) of the proposed portable source are unknown, the approval to relocate the portable source shall be in accordance with OAC rule 3745-31-03(A)(1)(p)(i) and the following criteria shall be met:

- i. the portable source has been issued a permit to install (PTI) and the permittee continues to comply with any applicable best available technology (BAT) determination;
- ii. the portable source is operating pursuant to a currently effective PTI and/or a current permit to operate (PTO) and continues to comply with the requirements of the permit and any applicable state and/or federal rules;
- iii. the permittee has provided a minimum of 30 days notice of the intent to relocate the portable source to the permitting authority (the Ohio EPA District Office or local air agency that has issued the effective current permit) prior to the scheduled relocation;
- iii. the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance in violation of OAC rule 3745-15-07 and that the relocation of the portable source, along with any supporting permitted emissions (e.g. roadways or storage piles), would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site; and
- iv. the director has issued a "Notice of Site Approval", stating that the proposed site is acceptable under OAC rule 3745-15-07 and the relocation will not result in the installation of a major stationary source or a modification of an existing major stationary source.

The portable source can be relocated upon receipt of the director's "Notice of Site Approval" for the site; or

Pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the director may issue a "Notice of Site Approval" for any pre-disclosed location(s) if the portable source meets the requirements of OAC rule 3745-31-05(E), as follows:

- i. the portable source has been issued a permit to install (PTI) and the permittee continues to comply with any applicable best available technology (BAT) determination;
- ii. the portable source is operating pursuant to a currently effective PTI and/or a current permit to operate (PTO) and continues to comply with the requirements of the permit and any applicable state and/or federal rules;
- iii. the permittee has identified the proposed site(s) to the permitting District Office or local air agency;

iv. the permitting District Office/local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the portable source will have an acceptable environmental impact at the proposed site(s);

- v. a public notice, meeting the requirements OAC rule 3745-47, is published in the county where the proposed site(s) is/are located;
- vi. the owner of the proposed site(s) (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site(s); and
- vii. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation.

The portable source can be relocated upon receipt of the director's "Notice of Site Approval" for the site. Any site approval(s) issued by the Ohio EPA, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), shall be valid for no longer than 3 years and are subject to renewal. Pursuant to OAC rule 3745-31-05(F), the director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

2. If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTI for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility, in order to determine the potential to emit for Title V and PSD applicability. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745- 77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.

The "Notice of Intent to Relocate" shall be submitted to the Ohio EPA District Office or local air agency responsible for issuing the permits for the portable source. Upon receipt of the notice, the permitting office shall notify the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1431344222 Emissions Unit ID: P003 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may 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>
P003 - 1000 HP Tub Grinder and Material Handling	OAC rule 3745-31-05(A)(3) 14-05884	Emissions from tub grinding: Particulate emissions (PE) shall not exceed 1.5 pounds per hour and 6.6 tons per year. Particulate matter emissions 10 microns and less in diameter shall not exceed 0.83 pound per hour and 3.6 tons per year. Emissions from material handling: Particulate emissions (PE) shall not exceed 0.9 pound per hour and 3.9 tons per year. Particulate matter emissions 10 microns and less in diameter shall not exceed 0.43 pound per hour and 1.9 tons per year. Emissions from the diesel engine: Particulate emissions (PE) and Particulate matter emissions 10 microns and less in diameter (PM-10) shall not exceed 0.47 pound per hour and 2.1 tons per year. Sulfur dioxide (SO2) emissions shall not exceed 0.4 pound per hour and 1.8 tons per year. Nitrogen oxides (NOx) emissions shall not exceed 15.2 pounds per hour and 66.6 tons per year. Carbon monoxide (CO) emissions shall not exceed 5.5 pounds per hour and 24.1 tons per year. Volatile organic compound emissions shall not exceed 0.7 pound per hour and 3.1 tons per year.

See terms A.2.a, A.2.b, A.2.c and A.2.e.

The hourly and annual emission limitations outlined under OAC rule 3745-31-05(A)(3) are based upon the emissions unit's potential to emit. Therefore, no records are required to demonstrate compliance with these limitations.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B)(5)(b), 3745-35-07(B) and OAC rule 3745-21-08(B).

- OAC rule 3745-17-07(A) Visible particulate emissions from the diesel engine exhaust stack shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
- OAC rule 3745-17-11(B)(5)(b) The particulate emissions from the diesel engine's exhaust shall not exceed 0.062 pounds per million Btu of actual heat input.
- OAC rule 3745-17-07(B)(1) This emissions unit is exempt from the visible particulate emission limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.
- OAC rule 3745-17-08(B) 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).
- OAC rule 3745-18-06(B) Exempt.
- OAC rule 3745-35-07(B) Particulate emissions (PE) from emissions units P001, P002 and P003 combined shall not exceed 13.5 tons per year, based upon a rolling, 12-month summation. This includes emissions from tub grinding, material handling, and the diesel engine.

Particulate matter emissions 10 microns and less in diameter from emissions units P001, P002 and P003 combined shall not exceed 8.1 tons per year, based upon a rolling, 12-month summation. This includes emissions from tub grinding, material handling, and the diesel engine.

Sulfur dioxide (SO₂) emissions from emissions units P001, P002 and P003 combined shall not exceed 1.9 tons per year, based upon a rolling, 12-month summation.

Nitrogen oxides (NO_x) emissions from emissions units P001, P002 and P003 combined shall not exceed 71.4 tons per year, based upon a rolling, 12-month summation.

Carbon monoxide (CO) emissions from emissions units P001, P002 and P003 combined shall not exceed 25.8 tons per year, based upon a rolling, 12-month summation.

Volatile organic compound (VOC) emissions from emissions units P001, P002 and P003 combined shall not exceed 3.3 tons per year, based upon a rolling, 12-month summation.
- OAC rule 3745-21-08(B) See section B.2.
See term and condition A.2.d.

2. **Additional Terms and Conditions**

- (a) The permittee shall employ best available control measures for the tub grinder, the processed mulch pile (s), conveyor transfer point(s) and the loading and unloading activities associated with the tub grinder for the purpose of ensuring compliance with the visible particulate emissions requirement. The permittee shall employ water on an 'as needed' basis to ensure compliance.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
The above-identified control measure(s) shall be implemented if the permittee determines as a result of

the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is(are) necessary to ensure compliance with the visible particulate emissions requirement. Any required implementation of the control measure(s) shall continue until further observation confirms that use of the control measure(s) is unnecessary.

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 rule 3745-31-05(A)(3).

The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

Fugitive visible particulate emissions from the tub grinder, conveyor transfer point(s) and the loading and unloading activities associated with the tub grinder and material handling shall not exceed 20% opacity, as a three-minute average.

B. Operational Restrictions

1. The permittee shall use only number two fuel oil (0.5% sulfur by weight or less) in the diesel engine integral to this emissions unit.
2. The maximum annual operating hours for emissions units P001, P002, and P003 combined shall not exceed 9390 hours, based upon a rolling, 12 month summation of the operating hours.

C. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the grinding and material handling operations in accordance with the following frequencies:
 - grinding and material handling operation = 1000 HP tub grinder and material handling
 - minimum inspection frequency = once daily during operation
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 operating conditions. No inspection shall be necessary for this material handling operation if the material used in this operation 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.
3. The permittee may, upon receipt of written approval from the Hamilton County Department of Environmental Services, 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;
 - 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.

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

5. For each day during which the permittee burns a fuel other than number two fuel oil (0.5% sulfur by weight or less), the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
6. The permittee shall maintain monthly records of the following information:
 - a. the annual operating hours of this emissions unit;
 - b. the rolling, 12-month summation of the operating hours for emissions units P001, P002, and P003 combined (this will include the number of hours of operation for the current month and the previous 11 calendar months); and
 - c. the rolling, 12-month summation of PE, PM-10, SO₂, VOC, NO_x, and CO emissions for emissions units P001, P002, and P003 combined.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation/exceedance reports that identify any of the following occurrences:
 - a. Each day when a fuel other than number two fuel oil (0.5% sulfur by weight or less) was burned in this emissions unit.
 - b. 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.
 - c. Each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

d. Any exceedance on the annual operating hours limitation as outlined in term B.2. If no exceedances occurred, the permittee shall state so in the report.

e. Any exceedance of the annual allowable tons per year PE, PM-10, SO₂, VOC, NO_x, and CO emissions on a rolling, 12 month summation for emissions units P001, P002, and P003 combined. If no exceedances occurred, the permittee shall state so in the report.

2. The permittee shall submit annual reports that specify the total emissions in tons per year for PE, PM-10, VOC, SO₂, NO_x and CO for this emissions unit. These reports shall be submitted by January 31 of each year.
3. All deviation reports unless otherwise specified shall be submitted in accordance with the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):
For tub grinding operation:

Emission Limitations:

Particulate emissions (PE) shall not exceed 1.5 pounds per hour and 6.6 tons per year.

Particulate matter emissions 10 microns and less in diameter shall not exceed 0.83 pound per hour and 3.6 tons per year.

Applicable Compliance Method:

The hourly PE and PM-10 emission limitations are based upon the emissions unit's potential to emit and were established by the following methodology:

pounds of PE = (A) x (B)

pounds of PM-10 emissions = (A) x (B);

where:

A = PE or PM-10 emission factor, lb/ton, as referred from SCC Code 3-07-008-01 in FIRE Version 6.23. See detailed emission calculations in PTI application 14-05884. For PE = 0.02 lb/ton. For PM10 = 0.011 lb/ton.

B = maximum hourly throughput of 75 tons.

The tons per year annual emission limitations are based on maximum hourly emission rate multiplied by the maximum annual operational hours of 8760 and divided by 2000 pounds per ton.
Emission Limitations for Material Handling:

Particulate emissions (PE) shall not exceed 0.9 pound per hour and 3.9 tons per year.

Particulate matter emissions 10 microns and less in diameter shall not exceed 0.43 pound per hour and 1.9 tons per year.

Applicable Compliance Method:

The hourly PE and PM-10 emission limitations are based upon the emissions unit's potential to emit, and were established by the following methodology:

Note: Emissions from the mulch handling were added to the emissions from sand, gravel and soil handling to determine the emissions limitation.

lbs of PE from mulch = (A) x (B)

lbs of PM-10 emissions from mulch = (A) x (B); where:

A = PE or PM-10 emission factors, lb/ton, determined based on equation referred from AP-42, Section 13.2.4 (January 1995). See detailed emission calculations in PTI application 14-05884. For PE = 0.0001lb/ton. For PM-10 = 0.00005 lb/ton.

B = maximum hourly throughput for material load-in/load-out = 300 tons per hour for mulch.

lbs of PE from soil, sand and gravel = (A) x (B)

lbs of PM-10 emissions from soil, sand and gravel = (A) x (B); where:

A = PE or PM-10 emission factors, lb/ton, determined based on equation referred from AP-42, Section 13.2.4 (January 1995). See detailed emission calculations in PTI application 14-05884. For PE = 0.0044 lb/ton. For PM-10 = 0.002075 lb/ton.

B = maximum hourly throughput for material load-in/load-out = 200 tons per hour for sand, gravel and soil.

The tons per year annual emission limitations are based on maximum hourly emission rate multiplied by 8760 hours of operation and divided by 2000 pounds per ton.

For diesel engine:

Emission Limitations:

Particulate emissions (PE) and Particulate matter emissions 10 microns and less in diameter (PM-10) shall not exceed 0.47 pound per hour and 2.1 tons per year.

Applicable Compliance Method:

The hourly emission rate for particulate emissions (PE/PM10) is based on following relationship:

pounds/hour PE/PM10 = (A) * (B) * (C); where

A = Emission factor referred from OAC rule 3745-17-11(B)(5)(b), which is 0.062 pounds of PE/PM10 per mm Btu of heat input;

B = Maximum hourly fuel consumption by the diesel engine = 52 gallons per hour; and

C = Heat content in diesel fuel = 0.147 mm Btu per gallon

The TPY emission limitation is based on maximum hourly emission rate multiplied by the maximum annual operational hours (8760 hours) and divided by 2000 pounds per ton.

Emission Limitations:

Sulfur dioxide (SO2) emissions shall not exceed 0.4 pound per hour and 1.8 tons per year.

Applicable Compliance Method:

The hourly emission rates for SO2 emissions is based on following relationship:

pounds/hour SO2 = (A) * (B); where

A = Emission factor (lb/hp-hr) referred from AP-42 Section 3.3 for diesel fuel (SCC 2-02-001-02, 2-03-001-01) = 0.0004 pounds per horsepower-hour; and

B = Power output of the diesel engine (1000 horsepower-hour/hour).

The TPY emission limitation is based on maximum hourly emission rate multiplied by the maximum annual operational hours (8760 hours) and divided by 2000 pounds per ton.

Emission Limitations:

Nitrogen oxides (NOx) emissions shall not exceed 15.2 pounds per hour and 66.6 tons per year.

Applicable Compliance Method:

The hourly emission rates for NOx emissions is based on the following relationship:

pounds/hour NOx = (A) * (B); where

A = Emission factor (lb/hp-hr) referred from the manufacturer's data = 0.0152 pound per horsepower-hour; and

B = Power output of the diesel engine (1000 horsepower-hour/hour).

The TPY emission limitation is based on maximum hourly emission rate multiplied by the maximum annual operational hours (8760 hours) and divided by 2000 pounds per ton.

Emission Limitations:

Carbon monoxide (CO) emissions shall not exceed 5.5 pounds per hour and 24.1 tons per year.

Applicable Compliance Method:

The hourly emission rates for CO emissions is based on following relationship:

pounds/hour CO = (A) * (B); where

A = Emission factor (lb/hp-hr) referred from AP-42 Section 3.3 for diesel fuel (SCC 2-02-001-02, 2-03-001-01) = 0.0055 pound per horsepower-hour; and

B = Power output of the diesel engine (1000 horsepower-hour/hour).

The TPY emission limitation is based on maximum hourly emission rate multiplied by the maximum annual operational hours (8760 hours) and divided by 2000 pounds per ton.

Emission Limitations:

Volatile organic compound emissions shall not exceed 0.7 pound per hour and 3.1 tons per year.

Applicable Compliance Method:

The hourly emission rates for VOC emissions is based on following relationship:

pounds/hour VOC = (A) * (B); where

A = Emission factor (lb/hp-hr) referred from AP-42 Section 3.3 for diesel fuel (SCC 2-02-001-02, 2-03-001-01) = 0.000705 pound per horsepower-hour; and

B = Power output of the diesel engine (1000 horsepower-hour/hour).

The TPY emission limitation is based on maximum hourly emission rate multiplied by the maximum annual operational hours (8760 hours) and divided by 2000 pounds per ton.

2. Compliance with the emission limitation(s) outlined for OAC rule 3745-35-07(B) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitations:

Particulate emissions (PE) from emissions units P001, P002 and P003 combined shall not exceed 13.5 tons per year, based upon a rolling, 12-month summation. This includes emissions from tub grinding, material handling, and the engine.

Particulate matter emissions 10 microns and less in diameter from emissions units P001, P002 and P003 combined shall not exceed 8.1 tons per year, based upon a rolling, 12-month summation. This includes

emissions from tub grinding, material handling, and the engine.

Sulfur dioxide (SO₂) emissions from emissions units P001, P002 and P003 combined shall not exceed 1.9 tons per year, based upon a rolling, 12-month summation.

Nitrogen oxides (NO_x) emissions from emissions units P001, P002 and P003 combined shall not exceed 71.4 tons per year, based upon a rolling, 12-month summation.

Carbon monoxide (CO) emissions from emissions units P001, P002 and P003 combined shall not exceed 25.8 tons per year, based upon a rolling, 12-month summation.

Volatile organic compound (VOC) emissions from emissions units P001, P002 and P003 combined shall not exceed 3.3 tons per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined by multiplying the hourly emission limitation for each pollutant by the updated rolling, 12-month summation of the operating hours for emissions unit P001, P002, and P003, combined (see term C.6) and divided by 2000 pounds per ton.

3. Compliance with the operating hours limitation in section B.2 shall be demonstrated by the record keeping in section C.6.
4. Compliance with the section B.1 shall be demonstrated by the record keeping in section C.5.
5. Visible Emission Limitation:
Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 9 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, 2002, and the applicable modifications listed in paragraphs (B)(3)(a) through (B)(3)(e) of OAC rule 3745-17-03.

Visible particulate emissions from the diesel engine exhaust stack shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

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

1. At the discretion and following the approval of the director, the permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install (PTI) providing the appropriate notification and exemption requirements have been met. The director may issue a "Notice of Site Approval" through either of the following scenarios:
If future location(s) of the proposed portable source are unknown, the approval to relocate the portable source shall be in accordance with OAC rule 3745-31-03(A)(1)(p)(i) and the following criteria shall be met:
 - i. the portable source has been issued a permit to install (PTI) and the permittee continues to comply with any applicable best available technology (BAT) determination;
 - ii. the portable source is operating pursuant to a currently effective PTI and/or a current permit to operate (PTO) and continues to comply with the requirements of the permit and any applicable state and/or federal rules;
 - iii. the permittee has provided a minimum of 30 days notice of the intent to relocate the portable source to the permitting authority (the Ohio EPA District Office or local air agency that has issued the effective current permit) prior to the scheduled relocation;
 - iii. the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance in violation of OAC rule 3745-15-07 and that the relocation of the portable source, along with any supporting permitted emissions (e.g. roadways or storage piles), would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site; and
 - iv. the director has issued a "Notice of Site Approval", stating that the proposed site is acceptable under OAC rule 3745-15-07 and the relocation will not result in the installation of a major stationary source or a modification of an existing major stationary source.

The portable source can be relocated upon receipt of the director's "Notice of Site Approval" for the site;
or

Pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the director may issue a "Notice of Site Approval" for any pre-disclosed location(s) if the portable source meets the requirements of OAC rule 3745-31-05(E), as follows:

- i. the portable source has been issued a permit to install (PTI) and the permittee continues to comply with any applicable best available technology (BAT) determination;
- ii. the portable source is operating pursuant to a currently effective PTI and/or a current permit to operate (PTO) and continues to comply with the requirements of the permit and any applicable state and/or federal rules;
- iii. the permittee has identified the proposed site(s) to the permitting District Office or local air agency;

iv. the permitting District Office/local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the portable source will have an acceptable environmental impact at the proposed site(s);

- v. a public notice, meeting the requirements OAC rule 3745-47, is published in the county where the proposed site(s) is/are located;
- vi. the owner of the proposed site(s) (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site(s); and
- vii. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation.

The portable source can be relocated upon receipt of the director's "Notice of Site Approval" for the site. Any site approval(s) issued by the Ohio EPA, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), shall be valid for no longer than 3 years and are subject to renewal. Pursuant to OAC rule 3745-31-05(F), the director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

- 2. If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTI for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility, in order to determine the potential to emit for Title V and PSD applicability. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745- 77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.

The "Notice of Intent to Relocate" shall be submitted to the Ohio EPA District Office or local air agency responsible for issuing the permits for the portable source. Upon receipt of the notice, the permitting office shall notify the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.