

Facility ID: 1677100034 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.

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

Facility ID: 1677100034 Emissions Unit ID: P902 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

**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>
Portable Morbark Model 1200 Tub Grinder with a 660 HP diesel engine.	OAC rule 3745-31-05(A)(3) (PTI 16-02493)	2.8 pounds of particulate emissions (PE) per hour  4.41 tons of PE per year  There shall be no visible particulate emissions from the tub grinder, the processed mulch pile(s), conveyor transfer point(s), and the loading and unloading activities associated with the tub grinder.  Emissions from the diesel engine shall not exceed the following rates:  15.84 pounds of nitrogen oxides (NOx) per hour and 24.95 tons of NOx per year  3.63 pounds of carbon monoxide (CO) per hour and 5.72 tons of CO per year  2.67 pounds of sulfur dioxide (SO2) per hour and 4.21 tons of SO2 per year  0.29 pound of PE per hour and 0.46 ton of PE per year  0.47 pound of organic compounds (OC) per hour and 0.74 ton of OC per year  (See Sections A.2.b through A.2.d and Section B.2.)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B)(5)(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 3745-17-07(B)(1)	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)	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 3745-17-11(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 3745-18-06(B)

Stationary internal combustion engines which have rated heat input capacities equal to, or less than, ten MM Btu per hour total rated capacity are exempt from paragraphs (D), (F), and (G) of OAC rule 3745-18-06 and from rules 3745-18-07 to 3745-18-94 of the Administrative Code.

2. **Additional Terms and Conditions**

- (a) This facility shall not cause a nuisance per Ohio Administrative Code 3745-15-07. 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 "no 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 "no 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 rules 3745-17-08 and 3745-31-05(A)(3).

The pounds per hour limit for PE for the tub grinder and the pounds per hour limits for PE, NO<sub>x</sub>, CO, SO<sub>2</sub>, and OC for the tub grinder's diesel engine reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits. The tons per year limit for PE for the tub grinder and the tons per year limits for PE, NO<sub>x</sub>, Co, SO<sub>2</sub>, OC for the tub grinder's diesel engine are based on the maximum pounds per hour multiplied by the maximum annual operating hours limitation. Therefore, the record keeping and/or reporting requirements for the annual operating hours limitation is sufficient to ensure compliance with these annual emission limits.

B. **Operational Restrictions**

1. This emissions unit shall be operated with diesel fuel with a sulfur content less than or equal to 0.5% by weight.
2. The maximum annual operating hours for this emissions unit shall not exceed 3150.

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

1. While the emissions unit is in operation, the permittee shall visibly monitor the following operations: the tub grinder, the conveyor transfer point(s), loading and unloading activities associated with the tub grinder, and the processed storage piles to determine if visible particulate emissions are observed.
2. If visible particulate emissions are observed from the above-mentioned monitoring, the permittee shall note the following in an operations log for each operation (i.e., tub grinder, processed mulch pile(s), conveyor transfer point(s), and the loading and unloading activities associated with the tub grinder) whenever the emissions unit is in operation:
  - a. the dates and times of any observed visible particulate emissions;
  - b. the dates and times the control measures were implemented;
  - c. the control measure that was implemented (i.e., watering); and
  - d. the name of the person reporting the observation.

If for the entire day, while the emissions unit was in operation, no visible particulate emissions were observed, then the permittee shall record the date, a statement that no visible particulate emissions were observed while the emissions unit was in operation, and the name of the person who made the observations.

3. The operations log shall be maintained on site.
4. The permittee shall maintain a record of the sulfur content of each shipment of diesel fuel received for burning in this emissions unit.
5. The permittee shall maintain monthly records of the operating hours for this emissions unit.

D. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify any of the following occurrences:
  - a. each day during which the tub grinder was operating and an inspection was not performed; and,
  - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The permittee shall submit deviation (excursion) reports which identify each day when a fuel that does not meet the requirements of section B.1 of these terms and conditions was burned in this emissions unit.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports which identify any exceedances of the annual operating hours limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

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):  
Emission Limitation:

There shall be no visible particulate emissions from the tub grinder, the processed mulch pile(s), conveyor transfer point(s), and the loading and unloading activities associated with the tub grinder.

Applicable Compliance Method:

If required, compliance with the allowable particulate emission limitation 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") and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

Emission Limitation:

2.8 pounds of PE per hour

Applicable Compliance Method:

Compliance with the hourly allowable PE limitation above shall be demonstrated by multiplying the RACM emission factor of 0.35 pound of particulate emissions per ton of material processed (Ohio EPA RACM Table 2.17-1) by the maximum hourly process rate (40 tons/hour) times (1-0.8\*).

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation based on the results of emission testing conducted in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

\*The control efficiency for watering and for the moisture content of the material processed.

Emission Limitation:

15.84 pounds of NOx per hour

Applicable Compliance Method:

Compliance with the hourly allowable NOx emission limitation above shall be demonstrated by multiplying the AP-42 emission factor of 0.024 pounds of NOx per horsepower-hour (AP-42 Table 3.4-1 dated 10/96) by the maximum power output (660 HP).

If required, the permittee shall demonstrate compliance with the hourly allowable NOx emission limitation based on the results of emission testing conducted in accordance with Methods 1-4, and 7, 7A, 7C, or 7E, as appropriate, of 40 CFR Part 60, Appendix A.

Emission Limitation:

3.63 pounds of CO per hour

Applicable Compliance Method:

Compliance with the hourly allowable CO emission limitation above shall be demonstrated by multiplying the AP-42 emission factor of 0.0055 pound of CO per horsepower-hour (AP-42 Table 3.4-1 dated 10/96) by the maximum power output (660 HP).

If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation based on the results of emission testing conducted in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

Emission Limitation:

2.67 pounds of SO2 per hour

Applicable Compliance Method:

Compliance with the hourly allowable SO2 emission limitation above shall be demonstrated by multiplying the AP-42 derived emission factor of 0.004045 pound of SO2 per horsepower-hour (AP-42 Table 3.4-1 dated 10/96) by the maximum power output (660 HP).

If required, the permittee shall demonstrate compliance with the hourly allowable SO2 emission limitation based on the results of emission testing conducted in accordance with Methods 1-4 and 6 or 6C, as appropriate, of 40 CFR Part 60, Appendix A.

Emission Limitation:

0.29 pound of PE per hour

Applicable Compliance Method:

Compliance with the hourly allowable PE limitation above shall be demonstrated by multiplying the allowable emission limit of 0.062 pound of PE per million Btu of actual fuel input by 7000 Btu/horsepower-hour times 1 MM Btu/1 x 10<sup>6</sup> Btu times the maximum power output (660 HP).

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation based on the results of emission testing conducted in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

Emission Limitation:

0.47 pound of OC per hour

Applicable Compliance Method:

Compliance with the hourly allowable OC emission limitation above shall be demonstrated by multiplying the AP-42 emission factor of 0.000705 pound of OC per horsepower-hour (AP-42 Table 3.4-1 dated 10/96) by the

maximum power output (660 HP).

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation based on the results of emission testing conducted in accordance with Methods 1-4 and 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A.  
Emission Limitations:

4.41 tons of PE per year  
24.95 tons of NO<sub>x</sub> per year  
5.72 tons of CO per year  
4.21 tons of SO<sub>2</sub> per year  
0.46 ton of PE per year  
0.74 of OC per year

Applicable Compliance Method:

The annual allowable emission limitations above were determined by multiplying the hourly allowable emission limitations by the maximum annual allowable operating hours (3150 hours per year), and then dividing by 2000. Therefore, as long as compliance with the hourly allowable emission limitations and the annual allowable operating hours is maintained, compliance with the annual allowable emission limitations shall be assumed.  
Emission Limitation:

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 with the visible PE limitation from the diesel engine exhaust stack shall be demonstrated in accordance with the test method and procedures specified in OAC rule 3745-17-03(B)(1).  
Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with the allowable PE limitation shall be demonstrated in accordance with test method(s) and procedures specified in OAC rule 3745-17-03(B)(10).

**F. Miscellaneous Requirements**

1. The permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install (PTI) providing the appropriate exemption requirements have been met and following the approval of the director. The director may issue a "Notice of Site Approval" if the portable source meets the following criteria pursuant to OAC rule 3745-31-03(A)(1)(p)(i):
  - a. 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 and state and/or federal rules;
  - b. the portable source is operating pursuant to a currently effective PTI and/or any applicable permit to operate (PTO) and continues to comply with the requirements of the permit;
  - c. 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\*;
  - d. 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 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
  - e. 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.

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.  
\* Even if notification of the proposed relocation is submitted 30 days prior to the scheduled relocation date, the emissions unit shall not be moved prior to receiving the "Notice of Site Approval".
2. 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 exemption requirements have been met. 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:
  - a. the portable source is operating pursuant to a currently effective permit to install (PTI) and/or any applicable permit to operate (PTO) and continues to comply with the requirements of this permit and any applicable state and/or federal rules;
  - b. the portable source has been issued a PTI and the permittee continues to comply with the requirements of the permit including any applicable best available technology (BAT) determination;
  - c. the portable source owner has identified the proposed site(s) to the Ohio EPA;
  - d. the Ohio EPA has determined that the portable source will have an acceptable environmental impact at the

proposed site(s);

e. a public notice, meeting the requirements OAC rule 3745-47, is published in the county where the proposed site(s) is/are located;

f. 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

g. 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 approvals 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.

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. If the relocation of the portable source would result in the installation of a major stationary source or the modification of a major stationary source, the permittee shall submit an application and obtain a PTI for the new location prior to moving the portable source. Also, 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.

\* 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.