



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

9/6/2011

KEVIN SABLTONY
GREENLINE COMPANY INC.
8821 FREEWAY DRIVE
MACEDONIA, OH 44056

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1677940009
Permit Number: P0108698
Permit Type: Renewal
County: Summit

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Akron Regional Air Quality Management District at (330)375-2480 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: ARAQMD



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
GREENLINE COMPANY INC.**

Facility ID:	1677940009
Permit Number:	P0108698
Permit Type:	Renewal
Issued:	9/6/2011
Effective:	9/6/2011
Expiration:	9/6/2021



Division of Air Pollution Control
Permit-to-Install and Operate
for
GREENLINE COMPANY INC.

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Authorization

Facility ID: 1677940009
Application Number(s): A0042699
Permit Number: P0108698
Permit Description: Renewal PTIO, General Permits, for a Tub Grinder and diesel engine
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 9/6/2011
Effective Date: 9/6/2011
Expiration Date: 9/6/2021
Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

GREENLINE COMPANY INC.
8821 FREEWAY DRIVE
MACEDONIA, OH 44056

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

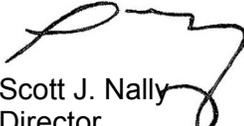
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Akron Regional Air Quality Management District
146 South High Street, Room 904
Akron, OH 44308
(330)375-2480

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Scott J. Nally
Director

Authorization (continued)

Permit Number: P0108698
Permit Description: Renewal PTIO, General Permits, for a Tub Grinder and diesel engine

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	B001
Company Equipment ID:	Diesel engine
Superseded Permit Number:	
General Permit Category and Type:	Compression Ignition Internal Combustion Engine - Pre-2007 model year, commenced construction before 6/12/06, < 10 liters/cylinder, > 600 HP and < or = 1,100 HP (GP 9.12)
Emissions Unit ID:	P901
Company Equipment ID:	Morbark 1300 Tub Grinder
Superseded Permit Number:	P0103612
General Permit Category and Type:	Tub Grinder - Tub Grinder (11.1)

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Akron Regional Air Quality Management District in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

¹Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

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

C. Emissions Unit Terms and Conditions



1. B001, Diesel Engine – 850 Hp

Operations, Property and/or Equipment Description:

Pre-2007 model year, stationary compression ignition (CI) internal combustion engine (ICE); less than 10 liters per cylinder and greater than 600 HP and less than or equal to 1,100 HP; complying with 40 CFR 63, Subpart ZZZZ Table 2d, #3; and installed before 6/12/06.

a) 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) b)(1)g., c)(1), d)(3), and e)(2)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR Part 63 Subpart ZZZZ (40 CFR 63.6580 to 63.6675) In accordance with 40 CFR 63.6585, this emissions unit is a stationary reciprocating internal combustion engine (RICE) subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines.	The existing stationary compression ignition (CI) RICE, located at an area source for hazardous air pollutants (HAPs), shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ no later than May 3, 2013. See b)(1)b. below.
b.	40 CFR 63.6603(a) Table 2d #3 to Subpart ZZZZ	Following the compliance date of 5/3/13, emissions of carbon monoxide (CO) shall not exceed 23 ppmvd at 15% O ₂ or emissions of CO shall be reduced by 70% or more, using



		an oxidation catalyst.
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (AP-42 emission factors)	The exhaust emissions from this engine shall not exceed: 0.85 pound of carbon monoxide per million British thermal unit (0.85 lb CO/MMBtu) until 5/3/13; 0.09 pound of volatile organic compounds per million Btu (0.09 lb VOC/MMBtu); and 3.2 pounds of nitrogen oxides per million Btu (3.2 lbsNOx/MMBtu). See term b)(2)a.
d.	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.062 lb/MMBtu of actual heat input from RICE greater than 600 horsepower (HP)
e.	40 CFR 63.6604 40 CFR 80.510(b) OAC rule 3745-31-05(A)(3), as effective 11/30/01	The sulfur content of the diesel fuel burned in this engine shall not exceed 15 ppm or 0.0015% sulfur by weight. See terms b)(2)a, b)(2)d, d)(1), and NESHAP tables.
f.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack serving this engine shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
g.	OAC rule 3745-31-05(D) OAC rule 3745-31-05(A)(3), as effective 11/30/01	Particulate emissions (PE) shall not exceed 1.92 tons per rolling 12-month period from all diesel-fired engines combined located at this facility. Nitrogen oxide (NOx) emissions shall not exceed 99.0 tons per rolling 12-month period from all diesel-fired engines combined located at this facility. Carbon monoxide (CO) emissions shall not exceed 26.30 tons per rolling 12-month period from all diesel-fired engines combined located at this facility. Volatile organic compound (VOC) emissions shall not exceed 2.78 tons per rolling 12-month period from all diesel-fired engines combined located at this facility.

		<p>Sulfur dioxide (SO₂) emissions shall not exceed 0.052 tons per rolling 12-month period from all diesel-fired engines combined located at this facility. See term f)(1)h.</p> <p>For the pollutants under 10 tons per rolling 12-month period, PE, VOC, and SO₂, see term b)(2)a.</p>
h.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	For pollutants above having a potential-to-emit under 10 tons per rolling 12-month period, BAT does not apply where the source is installed after 8/3/06. See term b)(2)b.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 these emission limitations/control measures no longer apply.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

[OAC rule 3745-31-05(A)(3), as effective 12/01/06]

- c. Following the compliance date of the NESHAP, the permittee shall control the emissions of carbon monoxide (CO) from the stationary RICE exhaust using an oxidationcatalyst control device. The permittee shall either limit the concentration of CO to 23 ppmvd or less at 15% O₂ at the outlet of the control device or the average reduction of CO, calculated according to 40 CFR 63.6620(e), shall not be less than 70% of the uncontrolled CO emissions.

[40 CFR 63.6603], [40 CFR 63.6640(a)], and [Subpart ZZZZ Table 2d #3]

- d. The quality of the diesel fuel burned in this engine shall meet the following specifications on an "as received" basis:

- i. a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.0015 pound sulfur dioxide/MMBtu actual heat input; and 15 ppm sulfur or 0.0015% sulfur by weight;
- ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent; and
- iii. a heating value greater than 135,000 Btu/gallon.

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

[40 CFR 63.6604] and [40 CFR 80.510(b)]

- e. The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6595(a)(1)	The compliance date for Part 63 Subpart ZZZZ for existing CI RICE is 5/3/13.
Applicable Tables from Part 63, Subpart ZZZZ	Following the compliance date, comply with: emission limit options in Table 2d #3; operating limitations in Table 2b #1; performance test frequency in Table 3 #4; performance test methods in Table 4 #1 or #3; initial compliance demonstration in Table 5 #1, #2, #5, or #6; continuous compliance in Table 6 #3 or #10; reporting requirements/frequency in Table 7; general provision from Subpart A in Table 8.
40 CFR 63.6603(a)	Following the compliance date, maintain compliance with the emission limitation in Table 2d #3 (limit CO to 23 ppmvd at 15% O ₂ or reduce CO by 70%) and operating limitations identified in Table 2b to Part 63 Subpart ZZZZ.
40 CFR 63.6603; 40 CFR 63.6612; 40 CFR 63.6620; and Subpart ZZZZ Tables 4 & 5	Conduct an initial performance test within 180 days following the compliance date, or by 11/3/13, using the appropriate test methods in Table 4; while continuously monitoring either CO and O ₂ (or CO ₂), using continuous emissions monitoring systems (CEMS), or the temperature at the inlet of the catalyst to the control device using a continuous parameter monitoring system (CPMS), as required in Table 5; and establish the operating parameter for the pressure drop across the catalyst.
40 CFR 63.6615; Subpart ZZZZ Table 3 #4; and Table 6 #3 or #10	By the compliance date, either install CEMS to continuously monitor CO at the inlet and outlet of the control device if demonstrating compliance with the control requirement or at the outlet if choosing to comply with the CO concentration limit and conduct annual relative accuracy test audits (RATA) and daily data quality checks according to Table 6 #3 and measure the pressure drop across the catalyst monthly; or

	As required in Table 6 #10, install CPMS at the inlet of the catalyst and conduct subsequent performance tests every 8760 hours of operation or every 3 years, whichever comes first, to demonstrate compliance with the chosen CO emission standard, using the test methods in Table 4; and measure the pressure drop across the catalyst monthly.
40 CFR 63.6625(a); or 40 CFR 63.6625(b); and 40 CFR 63.8(c),(d), & (e)	Develop and implement a site-specific monitoring plan for the continuous monitoring system (CMS), to include a quality control program and performance evaluation test plan for the CMS, in accordance with 40 CFR 63.8.
40 CFR 63.6625(g)	Install crankcase ventilation system by 5/3/13 if not already equipped.
40 CFR 63.6665	Meet all of the general provisions of Subpart A, from Sections 63.1 through 63.15, that apply to the CI RICE, as identified in Table 8 to Subpart ZZZZ.

c) Operational Restrictions

- (1) The maximum annual diesel fuel oil usage rate from all diesel engines located at this facility shall not exceed 451,642 gallons per rolling 12-month period; or where monthly calculations demonstrate that the facility's total rolling, 12-month NOx emissions are less than 99 tons, based on the fuel usage in each engine and the certified or worst-case exhaust standards to which they are permitted, the maximum annual diesel fuel oil usage rate from all diesel engines used at this facility shall not exceed 500,000 gallons per rolling 12-month period.

[OAC rule 3745-31-05(D)]

- (2) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6604	Compliance with 80.510(b) for the quality of diesel fuel burned in non-emergency CI RICE with a displacement of less than 30 liters/cylinder and a site rating of more than 300 brake horsepower. Standard for diesel fuel oil.
40 CFR 63.6605	General duty to minimize emissions, with good air pollution control practices for minimizing emissions; and compliance required at all times.
40 CFR 63.6625(h)	Minimize idle and startup time, not to exceed 30 minutes.
40 CFR 63.6603; 40 CFR 63.6640(a); and Subpart ZZZZ Table 2b #1	Comply with operating limitations in Table 2b: The temperature of the stationary RICE exhaust at the inlet of the oxidation catalyst shall be maintained at greater than or equal to 450 degrees Fahrenheit and less than or equal to 1,350 degrees Fahrenheit; and the pressure drop across the catalyst shall be maintained at no more than 2 inches of water, plus or minus 10% of the pressure drop measured during the initial performance test, at 100% load.
40 CFR 63.6625(b)	Must conduct an annual equipment performance evaluation or system



	accuracy audit on the temperature measurement device. The temperature sensor must meet the minimum tolerance range and must be installed, operated, and maintained as specified in 40 CFR 63.6625(b) and in accordance with a site-specific monitoring plan.
--	--

d) Monitoring and/or Recordkeeping Requirements

- (3) For each shipment of oil received for burning in this engine, the permittee shall maintain records of the total quantity of the diesel oil received and the oil supplier's (or permittee's) analyses for sulfur content, in parts per million (40 CFR 80.510) or percent by weight. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR 80.580, using the appropriate ASTM methods. These records shall be retained for a minimum of 5 years and shall be available for inspection by the Director or his/her representative.

For [40 CFR 63.6604] and [40 CFR 80.510(b)]; [40 CFR 63.6660] and [40 CFR 63.10(b)(1)]

- (4) The permittee shall maintain a record of the diesel fuel burned in diesel-fired engines at the facility each month and for each engine type. Two engines are considered separate types if any of the gram/kW-hr emission limits described in section 1.b)(1)a. of their air permits are different. Records of NOx emission calculations shall be maintained for each diesel engine at the facility and they shall document the NOx emissions to be less than 99 tons each rolling 12-month period at this throughput; or the same demonstration can be made using a worst-case NOx emission factor.

[OAC rule 3745-31-05(A)(3)- to calculate emissions]

- (5) The permittee shall maintain a record of the diesel fuel burned in all diesel fired engines at this facility on a rolling 12-month basis, i.e., at the end of each month, the sum of the gallons of diesel fuel burned in all diesel-fired engines during the month plus the number of gallons burned during the preceding 11 months of operations. During the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, where 11 months of fuel usage records are not available, the permittee shall record the cumulative diesel fuel usage for the facility as specified in the following table:

<u>Month(s)</u>	<u>1. Maximum Allowable Cumulative Diesel Usage (gallons)</u>	<u>2. Maximum Allowable Cumulative Diesel Usage (gallons)</u>
1	80,000	80,000
1-2	160,000	160,000
1-3	240,000	240,000
1-4	320,000	320,000
1-5	400,000	400,000
1-6	451,642	480,000
1-7	451,642	500,000
1-8	451,642	500,000
1-9	451,642	500,000
1-10	451,642	500,000
1-11	451,642	500,000
1-12	451,642	500,000



1. Where any engine is put into operation that is not certified and permitted to emission standards that meet those found in 40 CFR 89.112 (Tier 1 through Tier 3) or 40 CFR 1039.102 (Interim Tier 4)
2. Where monthly calculations demonstrate that the facility's total rolling, 12-month NOx emissions are less than 99 tons, based on the fuel usage in each engine and the exhaust standards to which they are permitted.

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the facility's annual diesel fuel usage limitation shall be based upon a rolling, 12-month summation of the fuel usage records for each engine.

[OAC rule 3745-31-05(D)]

- (6) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6625(a); 40 CFR 63.8; and Subpart ZZZZ Table 6 #3	Following the compliance date, if installing CEMS to demonstrate continuous compliance must conduct: <ol style="list-style-type: none"> 1. daily and periodic data quality checks in accordance with 40 CFR Part 60, Appendix F, procedure 1. 2. an initial performance evaluation of the CEMS (initially in conjunction with the appropriate test methods in Table 4) using Performance Specifications 3 and 4A (PS 3 and 4A) of 40 CFR Part 60, Appendix B; and 3. annual relative accuracy test audits (RATA) for each CEMS according to the requirements in 40 CFR 63.8 and using PS 3 and 4A of 40 CFR Part 60, Appendix B. <p>Data from the CEMS shall be reduced to 1-hour and 4-hour averages according to Table 6 #3.</p>
40 CFR 63.6625(b); 40 CFR 63.8; and Subpart ZZZZ Table 6 #10	Following the compliance date, if installing CPMS to demonstrate continuous compliance, the CPMS must collect data at least once every 15 minutes and the catalyst inlet temperature shall be reduced to 4-hour rolling averages. The pressure drop across the catalyst must be monitored and recorded monthly. Develop site-specific monitoring plan for the CPMS.
40 CFR 63.6603 and Subpart ZZZZ Table 2	If not using CPMS to demonstrate compliance, maintain a daily log to record the catalyst inlet temperature. Maintain a monthly record of the pressure drop across the catalyst.
40 CFR 63.6635	Except for monitor malfunctions, associated repairs, and required quality assurance activities, must continuously monitor that the RICE is operating. Must use all valid data (not recorded during malfunctions, repairs, or required quality assurance or control activities) in calculations used to report emissions or operating levels.
40 CFR 63.6640(a)	Demonstrate continuous compliance with the emission limitation and operating limitations identified in Tables 2d and 2b according to the methods specified in Table 6 to Subpart ZZZZ.

40 CFR 63.6655(a) and 40 CFR 63.10	Keep records of: 1. each notification and report submitted to comply with Subpart ZZZZ; 2. the occurrence and duration of each malfunction of the RICE and any control or monitoring equipment; 3. corrective actions taken during each period of malfunction to minimize emissions and restore normal operations; 4. records of performance tests and performance evaluations; 5. all required maintenance performed on air pollution control and monitoring equipment; and 6. any excess emissions or parameter monitoring exceedances, as identified by 40 CFR 63.10(b) and (c).
40 CFR 63.6655(b); 40 CFR 63.10(b); and 40 CFR 63.8(d)	Keep records for each CEMS or CPMS used to demonstrate compliance, including: the performance evaluation test plan; previous versions of the performance test plan; performance tests and evaluations; results of the quality control program; CMS calibration checks; maintenance performed on air pollution control and monitoring equipment; the occurrence, duration, and corrective actions taken during periods of malfunction; and all measurements needed to demonstrate compliance with the relevant standard.
40 CFR 63.6655(d)	Keep the records required in Table 6 to Subpart ZZZZ to demonstrate continuous compliance.
40 CFR 63.6604; and 40 CFR 80.510(b)	Maintain records for the quality of diesel fuel burned in the CI RICE, i.e., for the standards identified in 40 CFR 80.510(b).
40 CFR 63.6625(h)	Maintain a record of each idle and/or startup time that exceeded 30 minutes.
40 CFR 63.6660	Records readily available and retained for at least 5 years after the date of occurrence or date of report according to 63.10(b)(1).

e) Reporting Requirements

(7) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the Director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2) and (D)]

(8) The permittee shall identify in the quarterly deviation report any exceedance of the facility's diesel fuel oil usage restriction, to include the amount of diesel fuel usage recorded for each such rolling 12-month period.

[OAC rule 3745-15-03(B)(1) and (C)] for [OAC rule 3745-31-05(D)]

(9) A comprehensive written report on the results of the performance tests, conducted to demonstrate compliance with 40 CFR 63.6603(a), shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.



[OAC rule 3745-15-04(A)]; [40 CFR 63.6645(h)]; and [40 CFR 63.9(h)(2)(ii)]

- (10) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6604 and OAC rule 3745-15-03(B)(2) and (D)	Identify in the PER and semiannual compliance reports any period of time (date and number of hours), during the reporting period, that the quality of oil burned in this engine did not meet the requirements established in 40 CFR 80.510(b).
40 CFR 63.6640(b)	Submit a report of each instance in which the emission limitation or operating limitation in Tables 2d and 2b were not met; these deviations to be reported according to the requirements of 63.6650.
40 CFR 63.6640(e)	Submit a report of each instance in which the applicable requirements in Table 8 to Subpart ZZZZ, the general provisions from Subpart A, were not met.
40 CFR 63.6645(a)(2)	Submit all notifications required per 63.7(b) and (c); 63.8(e), (f)(4), and (f)(6); and 63.9(b) through (e), (g), and (h) that apply to the CI RICE.
40 CFR 6625(a) and (b); 40 CFR 63.7(c); and 40 CFR 63.8(d) and (e)(3)	Upon request, submit a performance evaluation test plan for each monitoring system and/or the site-specific test plan to the office requesting it.
40 CFR 63.6645(g); 40 CFR 63.7(b); 40 CFR 63.8(e); and 40 CFR 63.9(e) and (g)	Submit a Notification of Intent to conduct a performance test for the engine or a performance evaluation of the CMS at least 60 days before the test is scheduled to begin.
40 CFR 63.6645(h); 40 CFR 63.6630(c); 40 CFR 63.8(e)(5); 40 CFR 63.9(h); 40 CFR 63.10(d)(2) and (e)(2); and OAC rule 3745-15-04(A)	Submit a Notification of Compliance Status for each compliance demonstration required in Tables 3 and 5 to Subpart ZZZZ, including the performance test and CMS performance evaluation results, before the close of business on the 60 th day following the completion of the test; or within 30 days of the initial compliance demonstration if the demonstration does not include a performance test. OAC rule 3745-15-04(A) requires performance test results to be submitted within 30 days of the test date unless additional time is requested.
40 CFR 63.6650(a)	Submit each applicable report in Table 7 of Subpart ZZZZ.
40 CFR 63.6650(b)(1) to (5) and Part 63 Subpart ZZZZ Table 7 #1	Following the initial compliance date, submit Semiannual Compliance Reports to include the information identified in 63.6650(c) through (f), as applicable to the CI RICE. Following the initial compliance report, each subsequent report shall cover the reporting period from January 1 st through June 30 th and July 1 st through December 31 st . The Semiannual Compliance Reports must be postmarked or delivered no later than July 31 st and January 31 st .
40 CFR 63.6650(c)	63.6650(c) contains the required information to be submitted in each compliance report.

40 CFR 63.6650(d) and (e)	63.6650(d) contains the required information to be submitted for each deviation from an emission or operating limitation not monitored by a continuous monitoring system (CMS) and 63.6650(e) the information needed where using a CMS to comply with the emission or operating limitation.
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f) Testing Requirements

(11) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Opacity Limitation:

Visible particulate emissions from the exhaust stack serving this engine shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

[OAC rule 3745-17-07(A)(1)]

b. Emission Limitations:

0.062 lb PE/MMBtu

1.92tonsPE/rolling 12-months for the facility

Applicable Compliance Method:

Theparticulate emission limitation is from OAC rule 3745-17-11(B)(5) for stationary internal combustion engines. Compliance with the ton per rolling 12-month PE emissions limitation shall be determined by the following calculation:

Where:

Gi = Gallons of diesel fuel used per rolling 12-month period for engine type i.

EFi = theparticulate emission limitation from OAC rule 3745-17-11(B)(5)(b) for stationary large internal combustion engines greater than 600 horsepower, 0.062 lb PE/MMBtu

E = Total tons of PE/rolling 12-month period emitted.

$$E = \sum_{i=1}^n \left(G_i \frac{\text{Gallons}}{\text{Rolling 12 - months}} \right) \left(\frac{137,000 \text{ Btu} *}{\text{Gallon}} \right) \left(E_{Fi} \frac{\text{lb}}{\text{MMBtu}} \right) \left(\frac{\text{Ton}}{2000 \text{ lb}} \right)$$

If required, the permittee shall demonstrate compliance with the emission limitations through exhaust emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

[OAC rule 3745-31-05(D)] and [OAC rule 3745-17-11(B)(5)(b)]

c. Emission Limitations:

3.2 lbNOx/MMBtu

99.0tons NOx/rolling 12-months for the facility

Applicable Compliance Method:

The NOx emissions limit is based on using the AP-42 emission factor of 3.2 lbsNOx/MMBtu from Chapter 3.4, Table 3.4-1, "Gaseous Emission Factors for Large Stationary Diesel and All Stationary Dual-Fuel Engines".

Compliance with the ton per rolling 12-month VOC emissions limitation shall be determined by the following calculation:

Where:

Gi = Gallons of diesel fuel used per rolling 12-month period for engine type i.

EFi = AP-42 emission factor from Chapter 3.4, Table 3.4-1, 3.2 lbsNOx/MMBtu.

E = Total tons of VOC/rolling 12-month period emitted.

$$E = \sum_{i=1}^n \left(Gi \frac{\text{Gallons}}{\text{Rolling 12 - months}} \right) \left(\frac{137,000 \text{ Btu} *}{\text{Gallon}} \right) \left(EFi \frac{\text{lb}}{\text{MMBtu}} \right) \left(\frac{\text{Ton}}{2000 \text{ lb}} \right)$$

If required, the permittee shall demonstrate compliance with the emission limitations through exhaust emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7, as appropriate.

[OAC rule 3745-31-05(D)]

d. Emission Limitations:

0.85 lb CO/MMBtu

26.30 tonsCO/rolling 12-months for the facility

Applicable Compliance Method:

The carbon monoxide emissions limit is based on using the AP-42 emission factor of 0.85 lb CO/MMBtu from Chapter 3.4, Table 3.4-1, "Gaseous Emission Factors for Large Stationary Diesel and All Stationary Dual-Fuel Engines". This limit will be replaced by the CO exhaust concentration limit or CO control requirement from 40 CFR Part 63, Subpart ZZZZ, Table 2d effective May 3, 2013.

Compliance with the ton per rolling 12-month CO emissions limitation shall be determined by the following calculation:

Where:

G_i = Gallons of diesel fuel used per rolling 12-month period for engine type i .

E_{Fi} = AP-42 emission factor from Chapter 3.4, Table 3.4-1, 0.85 lb CO/MMBtu.

E = Total tons of CO/rolling 12-month period emitted.

$$E = \sum_{i=1}^n \left(G_i \frac{\text{Gallons}}{\text{Rolling 12 - months}} \right) \left(\frac{137,000 \text{ Btu} *}{\text{Gallon}} \right) \left(\frac{\text{lb}}{\text{MMBtu}} \right) \left(\frac{\text{Ton}}{2000 \text{ lb}} \right)$$

If required, the permittee shall demonstrate compliance with the emission limitations through exhaust emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

[OAC rule 3745-31-05(D)]

e. Emission Limitations:

23 ppmvd CO at 15% O₂ or

reduce CO by 70%

Applicable Compliance Method:

Unless a performance test is submitted that meets the requirements of 40 CFR 63.6612(b), the permittee shall conduct an initial performance test within 180 days after the compliance date or no later than 11/3/13, to demonstrate compliance with the CO limitation in the NESHAP. The appropriate tests methods from Table 4 to Subpart ZZZZ shall be conducted based on the option chosen for compliance, i.e., the part per million concentration or percent reduction. The appropriate emission and/or operating limitations, required per 40 CFR 63.6630 and identified in Table 5, shall be established and compliance demonstrated during each performance test.

The temperature at the inlet to the catalyst shall be monitored during the performance test and maintained between 450 °F and 1350 °F. The 3-hour block average temperature at the inlet to the catalyst shall be documented during performance tests and the pressure drop shall be recorded to establish the operating range for the pressure drop across the catalyst. Per 63.6640(b), if the catalyst is changed or the control device replaced, a new performance test must be conducted to demonstrate compliance with the emission limitation and to reestablish the values for or compliance with the operating parameters.

Each performance test shall consist of 3 separate test runs and each test run shall last a minimum of 1 hour and shall be conducted during normal operations. The engine percent load, during the performance test, shall be determined by documenting the calculations, assumptions, and measurement devices used to

measure or estimate the percent load and the estimated percent load shall be included in the notification of compliance.

A compliant performance test shall demonstrate that either the CO emissions have been reduced by 70% or that the average CO concentration is less than or equal to 23 ppmvd, corrected to 15 percent O₂ on a dry basis, and from three 1-hour or longer performance test runs.

If demonstrating compliance with the 70% control requirement for CO, the permittee may use a portable CO and O₂ analyzer at the inlet and outlet of the control device and use ASTM Method D6522-00 to meet the performance testing requirement in Table 4 to Subpart ZZZZ. The CO concentrations at the inlet and outlet of the control device must be normalized to a dry basis and to 15% oxygen, or an equivalent percent CO₂, as required in 40 CFR 63.6620(e).

The following test methods shall be employed to demonstrate compliance with the emission limitation for CO or may be used to demonstrate compliance with the control requirement for CO:

- i. Method 1 or 1A of 40 CFR Part 60, Appendix A to select the sampling port location and the number of traverse points
- ii. Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A or ASTM Method D6522-00 to measure O₂ at the inlet and outlet of the control device to normalize the CO concentration(s).
- iii. Method 4 of 40 CFR Part 60, Appendix A; or Method 320 of 40 CFR Part 63, Appendix A; or ASTM D6348-03 to measure the moisture content at the inlet and outlet of the control device if demonstrating compliance through the percent control or to measure the moisture content of the stationary RICE exhaust.
- iv. Method 10 of 40 CFR Part 60, Appendix A; or Method 320 of 40 CFR Part 63, Appendix A; or ASTM D 6348-03 to measure CO at the inlet and outlet of the control device if demonstrating compliance through the percent control or to measure CO at the exhaust of the stationary RICE.
- v. The following equation shall be used to normalize the CO concentrations to a dry basis and to 15 percent oxygen (O₂)^{**}:

$$C_{adj} = C_d (5.9 / 20.9 - \% O_2)$$

Where:

C_{adj} = calculated CO concentration adjusted to 15 percent O₂.

C_d = measured concentration of CO, uncorrected.

5.9 = 20.9 percent O₂ – 15 percent O₂, the defined O₂ correction value, percent.

%O₂ = measured O₂ concentration, dry basis, percent.

** Optionally, the pollutant concentrations can be corrected to 15% O₂ using a CO₂ correction factor, by calculating the fuel factor (F_o value) using Method 19 results obtained during the performance test (40 CFR 63.6620(e)(2)).

- vi. If compliance is demonstrated for the control efficiency for CO, the following equation shall be used to determine the percent reduction:

$$R = (C_i - C_o) / C_i \times 100$$

Where:

C_i = concentration of CO at the control device inlet,

C_o = concentration of CO at the control device outlet, and

R = percent reduction of CO emissions.

If using CEMS to monitor and comply with the CO concentration limitation or requirement to reduce CO emissions, the permittee shall conduct annual relative accuracy test audits (RATA) using Performance Specifications 3 and 4A of 40 CFR Part 60 Appendix B and daily and periodic data quality checks in accordance with 40 CFR Part 60, Appendix F, Procedure 1.

If using a CPMS to demonstrate compliance, the permittee shall conduct subsequent performance tests for CO (concentration or % reduction) every 8,760 hours of operation or every 3 years, whichever comes first.

The permittee shall notify the Director (appropriate Ohio EPA Division of Air Pollution Control District Office or local air agency) in writing of each scheduled performance test date or RATA for the CEMS at least 60 calendar days before it is scheduled, to allow the agency time to review and approve the site-specific test plan and to arrange for an observer to be present during the compliance demonstration.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the engine and the testing procedures provide a valid characterization of the emissions from the engine and/or the performance of the control equipment.

[40 CFR 63.7(a)(2), (b)(1), and (e)(3)], [40 CFR 63.6603(a)], [40 CFR 63.6612],[40 CFR 63.6615], [40 CFR 63.6620],[40 CFR 63.6630], [40 CFR 63.6640(a) and (b)], [40 CFR 63.6645(a)(2)],[Part 63, Subpart ZZZZ, Table 2d #3; Table 2b; Table3 #4; Table 4 #1 or #3;Table 5 #1, #2, #5, or #6; and Table 6 #3 or #10], and [OAC rule 3745-15-04(A)]

- f. Emission Limitations:

0.09 lb VOC/MMBtu

2.78tonsVOC/rolling 12-months for the facility

Applicable Compliance Method:

The VOC emissions limits based on using the AP-42 emission factor of 0.09 lb VOC/MMBtu from Chapter 3.4, Table 3.4-1, "Gaseous Emission Factors for Large Stationary Diesel and All Stationary Dual-Fuel Engines".

Compliance with the ton per rolling 12-month VOC emissions limitation shall be determined by the following calculation:

Where:

Gi = Gallons of diesel fuel used per rolling 12-month period for engine type i.

EFi = AP-42 emission factor from Chapter 3.4, Table 3.4-1, 0.09 lb VOC/MMBtu.

E = Total tons of VOC/rolling 12-month period emitted.

$$E = \sum_{i=1}^n \left(Gi \frac{\text{Gallons}}{\text{Rolling 12 - months}} \right) \left(\frac{137,000 \text{ Btu} *}{\text{Gallon}} \right) \left(EFi \frac{\text{lb}}{\text{MMBtu}} \right) \left(\frac{\text{Ton}}{2000 \text{ lb}} \right)$$

If required, the permittee shall demonstrate compliance with the emission limitations through exhaust emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25, as appropriate.

[OAC rule 3745-31-05(D)]

g. Sulfur Content Limitations for Diesel Fuel:

Sulfur content 15 ppm or \leq 0.0015% by weight sulfur

Applicable Compliance Method:

Compliance shall be demonstrated through the record keeping requirements for the sulfur content of each shipment of diesel oil received. If meeting the standards in 40 CFR 80.510(b), this calculates to approximately 0.0015 lb SO₂/MMBtu.

[40 CFR 63.6604] and [40 CFR 80.510(b)]

h. Emission Limitations:

0.047 tons of SO₂/rolling 12-month period for the facility where limited to 451,642 gallons

0.052 tons of SO₂/rolling 12-month period for the facility where limited to 500,000 gallons

Applicable Compliance Method:

Compliance with the ton per rolling 12-month SO₂ emissions limitation shall be determined by the following calculation from AP-42 Table 3.4-1:

Where:

G = Gallons of diesel fuel burned in the engine during each rolling 12-month period.

S = Sulfur content of the fuel used. Since the sulfur content limit for the fuel is 0.0015%, use the value 0.0015 in the formula.

E = Total tons of SO₂/rolling 12-month period emitted.

$$E = \left(G \frac{\text{Gallons}}{\text{Rolling 12 - months}} \right) \left(\frac{137,000 \text{ Btu} *}{\text{Gallon}} \right) \left((1.01)(S) \frac{\text{lb SO}_2}{\text{mmBtu}} \right) \left(\frac{\text{Ton}}{2000 \text{ lbs}} \right)$$

[OAC rule 3745-31-05(D)]

* The heating value of the diesel fuel may be adjusted to that provided by the supplier.

g) Miscellaneous Requirements

- (1) At the discretion and following the approval of the Director (the appropriate Ohio EPA District Office or local air agency), the permittee may relocate the portable source within the State of Ohio without first obtaining a permit-to-install and operate (PTIO) or 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:
- a. The approval to relocate the portable source shall be acquired in accordance the permanent exemption for portable sources in OAC rule 3745-31-03(A)(1)(p):
 - i. the diesel engine (portable source) is certified to limits that meet the applicable New Source Performance Standard (NSPS) limitations, according to the rated power and model year;
 - ii. the portable source is operated in compliance with any applicable best available technology (BAT) determination issued in a permit and all applicable state and/or federal rules and laws;
 - iii. the portable source is operating pursuant to a currently effective PTIO or PTI and/or permit to operate (PTO) and continues to comply with the requirements of the permit;
 - iv. all of the qualifying criteria for the relocated engine can be and will continue to be met at the new location;
 - v. 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;

- vi. 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 and would be acceptable under OAC rule 3745-15-07;
- vii. upon relocation, the permittee maintains records of the diesel fuel burned in the engine according to its rated power and model year, along with any other engines at the facility with the same NSPS limits; and
- viii. the Director has issued a "Notice of Site Approval", stating that the proposed site is acceptable 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.

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

- b. The Director may issue a "Notice of Site Approval" if the portable source meets the requirements of OAC rule 3745-31-05(H), as follows:
 - i. the diesel engine (portable source) is certified to limits that meet the applicable New Source Performance Standard (NSPS) limitations, according to the rated power and model year;
 - ii. the portable source is operating pursuant to a currently effective permit-to-install (PTI), permit-to-install and operate (PTIO), or has been approved for registration status and continues to comply with the requirements of the permit and any applicable state and/or federal rules;
 - iii. the portable source has been issued a PTIO or PTI and the permittee continues to comply with the requirements of the permit, including any applicable best available technology (BAT) determination;
 - iv. all of the qualifying criteria for the relocated engine can be and will continue to be met at the new location;
 - v. the portable source owner has identified and submitted the proposed site to the Ohio EPA;
 - vi. the permitting District Office/local air agency and the District Office/local air agency having jurisdiction over the new site (if different) have determined that the portable source will have an acceptable environmental impact at the proposed site;
 - vii. a public notice, meeting the requirements OAC rule 3745-47, is published in the county where the proposed site is located;
 - viii. the owner of the proposed site (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;

- ix. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation; and
- x. upon relocation, the permittee maintains records of the diesel fuel burned in the engine according to its rated power and model year, along with any other engines at the facility with the same NSPS limits.

The portable source can be relocated upon receipt of the Director's "Notice of Site Approval" for the site. Any site approval issued by the Ohio EPA, pursuant to OAC rule 3745-31-05(H), is subject to expiration and renewal. Pursuant to OAC rule 3745-31-07(C)(3), any site approval for a portable source shall be issued for a period of time determined to be appropriate by the Director and the renewal will be reevaluated and subject to the same requirements above.

[OAC rule 3745-31-03(A)(1)(p)(i)] or [OAC rule 3745-31-03(A)(1)(p)(ii)], [OAC rule 3745-31-05(H)], [OAC rule 3745-31-07(C)(3)], and [ORC 3704.03(G)]

- (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 PTIO or PTI (as applicable) 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.

[OAC rule 3745-31-03(A)(1)(p)(i)], [OAC rule 3745-31-03(A)(1)(p)(ii)], and [OAC rule 3745-31-05(H)]



2. P901, Morbark 1300 Tub Grinder

Operations, Property and/or Equipment Description:

Tub grinder with less than 950 tons per hour throughput capacities with emissions controlled using wet suppression

a) 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.

b. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) [Best Available Technology]	Visible particulate emissions from any fugitive dust source shall not exceed twenty percent opacity as a three-minute average. 6.2 tons PM10/Year
b.	OAC rule 3745-31-05(F) [Voluntary limits on allowable emissions]	Work practices and operational restriction to minimize or eliminate emissions of fugitive dust See b)(2)a., b)(2)b., and c)(1).
c.	OAC rule 3745-17-07(B)(1) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	The visible particulate emission limitation specified by this rule is equivalent to the visible particulate emission limitation established pursuant to ORC 3704.03(T).
d.	OAC rule 3745-17-08(B) (applicable only if this emissions unit	The reasonably available control measures specified by this rule are equivalent to the voluntary control



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	is located in an area identified in Appendix A of OAC rule 3745-17-08)	measures established pursuant to OAC rule 3745-31-05(F).

(2) Additional Terms and Conditions

- c. The permittee has committed to employing best available control measures for the tub grinder, and loading and unloading activities associated with the tub grinder, for the purpose of ensuring compliance with the visible particulate emission limitation established in this permit.

The permittee shall employ continuous water sprays and other watering or wetting activities on an "as needed" basis to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures instead of, or in addition to, water sprays, including the processing of materials with inherent moisture sufficient to meet the visible particulate emission limitation of this permit.

The above-identified control measures 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 measures are necessary to ensure compliance with the visible particulate emissions requirement. Any required implementation of the control measures shall continue until further observation and documentation demonstrates that use of the control measures is unnecessary.

c) Operational Restrictions

- (1) The maximum operating hours for this emissions unit shall not exceed 4,500 hours per calendar year.
- (2) The permittee shall process only the following materials in this emissions unit:
 - (a) yard waste*
 - (b) agricultural waste*
 - (c) animal waste*
 - (d) processed and / or unprocessed vegetables, fruits, or grains*
 - (e) non-asbestos (Category I or Category II) containing construction and demolition debris in this emissions unit.

*Feedstock types A, B, C, D, and D1 for composting facilities from OAC rule 3745-27-40

d) Monitoring and/or Recordkeeping 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:

<u>grinding and material handling operations</u>	<u>minimum inspection frequency</u>
All	Each day of operation

The purpose of the inspections is to determine the need for implementing the above-mentioned additional control measures for emissions of fugitive dust. The inspections shall be performed during representative, normal operating conditions. No inspection shall be necessary for this grinding and material handling operation if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements, including ORC 3704.03(T).

- (2) The permittee shall maintain monthly records of the hours of operation of this emissions unit.
- (3) The permittee shall maintain a record of each instance any material other than those permitted in c)(2) was processed.

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal (<http://ebiz.epa.ohio.gov>); or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

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

d. Emission limitation:

Visible particulate emissions from any fugitive dust source shall not exceed twenty per cent opacity as a three-minute average.

Applicable compliance method:

If required, the permittee shall determine compliance with this limitation through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

e. Emission limitation:

6.2 tons PM10/Year

Applicable compliance method:

The permittee shall determine compliance with this limitation by using the following calculation:

$(x \text{ tons material processed/year})(0.024 \text{ lb PE/ton material processed})(0.60 \text{ lb PM}_{10}/\text{lb PE})(1 \text{ ton}/2000 \text{ lbs}) = y \text{ tons PM}_{10}/\text{year}$

Where:

x = Tons of material processed in the year

y = annual PM10 emission rate

g) Miscellaneous Requirements

(3) Sample emissions calculations for fee reporting purposes:

Uncontrolled potential emissions (assume 60% of PE is PM₁₀):

$(950 \text{ TPH} * 0.024 \text{ lb of PE/ton of material processed} * 8,760 \text{ hours per year}) / 2,000 \text{ pounds per ton} = 99.9 \text{ tons per year of PE.}$

Controlled emissions using water sprays (80% efficient):

$99.9 \text{ TPY} * (1 - 0.80) = 20 \text{ TPY of PE}$

Controlled emissions with unit operating for 4,500 hours per year

$20 \text{ TPY} * (4,500 \text{ hours} / 8,760 \text{ hours}) = 10.3 \text{ TPY PE and } 6.2 \text{ TPY PM}_{10}$

(4) At the discretion and following the approval of the Director (the appropriate Ohio EPA District Office or local air agency), the permittee may relocate the portable source within the State of Ohio without first obtaining a permit-to-install and operate (PTIO) or 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:

a. Where future locations of the proposed portable source are unknown, the approval to relocate the portable source shall be acquired in accordance the permanent exemption for portable sources in OAC rule 3745-31-03(A)(1):

i. the portable source is operated in compliance with any applicable best available technology (BAT) determination issued in a permit and all applicable state and/or federal rules and laws;

ii. the portable source is operating pursuant to a currently effective PTIO or PTI and/or permit to operate (PTO) and continues to comply with the requirements of the permit;

- 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 by submitting a "Notice of Intent to Relocate a Portable Source";
- iv. 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 and would be acceptable under OAC rule 3745-15-07; and
- v. the Director has issued a "Notice of Site Approval", stating that the proposed site is acceptable 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.

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

or

- b. As the alternative for any pre-disclosed location, the Director may issue a "Notice of Site Approval" if the portable source meets the requirements of OAC rule 3745-31-05(H), as follows:
 - i. the portable source is operating pursuant to a currently effective permit-to-install (PTI), permit-to-install and operate (PTIO), or has been approved for registration status and continues to comply with the requirements of the permit and any applicable state and/or federal rules;
 - ii. the portable source has been issued a PTIO or PTI and the permittee continues to comply with the requirements of the permit, including any applicable best available technology (BAT) determination;
 - iii. the portable source owner has identified and submitted the proposed site to the Ohio EPA prior to the scheduled relocation using the "Notice of Intent to Relocate a Portable Source" form;
 - iv. the permitting District Office/local air agency and the District Office/local air agency having jurisdiction over the new site (if different) have determined that the portable source will have an acceptable environmental impact at the proposed site;
 - v. a public notice, meeting the requirements OAC rule 3745-47, is published in the county where the proposed site is located;
 - vi. the owner of the proposed site (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; 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 issued by the Ohio EPA, pursuant to OAC rule 3745-31-05(H), is subject to expiration and renewal. Pursuant to OAC rule 3745-31-07(C)(3), any site approval for a portable source shall be issued for a period of time determined to be appropriate by the Director and the renewal will be reevaluated and subject to the same requirements above.

- (5) 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 PTIO or PTI (as applicable) 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.

- (4) The "Notice of Intent to Relocate a Portable Source" 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.