



Environmental Protection Agency

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

4/2/2012

Kenneth Rankin
Ohio Concrete Recycling LLC
3525 Broadway Ave.
Louisville, OH 44641

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1677011119
Permit Number: P0109787
Permit Type: Initial Installation
County: Summit

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	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 DAPCWeb 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
Ohio Concrete Recycling LLC**

Facility ID:	1677011119
Permit Number:	P0109787
Permit Type:	Initial Installation
Issued:	4/2/2012
Effective:	4/2/2012
Expiration:	10/5/2019



Division of Air Pollution Control
Permit-to-Install and Operate
for
Ohio Concrete Recycling LLC

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4
2. Who is responsible for complying with this permit? 4
3. What records must I keep under this permit? 4
4. What are my permit fees and when do I pay them?..... 4
5. When does my PTIO expire, and when do I need to submit my renewal application? 4
6. What happens to this permit if my project is delayed or I do not install or modify my source? 5
7. What reports must I submit under this permit? 5
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? 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ... 5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? 6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? 6
13. Can I transfer this permit to a new owner or operator?..... 7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? 7
15. What happens if a portion of this permit is determined to be invalid? 7
B. Facility-Wide Terms and Conditions..... 8
C. Emissions Unit Terms and Conditions 10
1. P001, Diesel-fired Generator..... 11

Authorization

Facility ID: 1677011119
Application Number(s): A0044176
Permit Number: P0109787
Permit Description: PTIO for a diesel-fired electrical generator.
Permit Type: Initial Installation
Permit Fee: \$400.00
Issue Date: 4/2/2012
Effective Date: 4/2/2012
Expiration Date: 10/5/2019
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Ohio Concrete Recycling LLC
1 General St
Akron, OH 44304

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

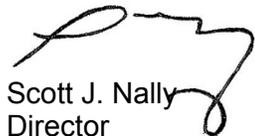
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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: P0109787

Permit Description: PTIO for a diesel-fired electrical generator.

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

Emissions Unit ID:

Company Equipment ID:

Superseded Permit Number:

General Permit Category and Type:

P001

Diesel Fred Generator

Compression Ignition Internal Combustion Engine - Pre-2007 model year, commenced construction before 6/12/06, < 10 liters/cylinder, > 300 HP and < or = 500 HP (GP 9.10)

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. P001, Diesel-fired Generator

Operations, Property and/or Equipment Description:

Stationary compression ignition (CI) internal combustion engine (ICE); less than 10 liters per cylinder and greater than 300 brake HP and less than or equal to 500 brake HP; complying with 40 CFR 63, Subpart ZZZZ Table 2d, #2.; 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

(2) 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
	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.

	<p>40 CFR 63.6603(a) Table 2d #2 to Subpart ZZZZ</p>	<p>Following the compliance date of 5/3/13, emissions of carbon monoxide (CO) shall not exceed 49 ppmvd at 15% O₂ or emissions of CO shall be reduced by 70% or more, using an oxidation catalyst.</p>
	<p>OAC rule 3745-31-05(A)(3), as effective 11/30/01 (AP-42 emission factors)</p>	<p>The exhaust emissions from this engine shall not exceed:</p> <p>0.95 pound of carbon monoxide per million British thermal unit (0.95 lb CO/MMBtu) until 5/3/13;</p> <p>0.36 pound of volatile organic compounds per million Btu (0.36 lb VOC/MMBtu); and</p> <p>4.41 pounds of nitrogen oxides per million Btu (4.41 lbsNO_x/MMBtu).</p> <p>See term b)(2)a.</p>
	<p>OAC rule 3745-17-11(B)(5)(a)</p>	<p>Particulate emissions (PE) shall not exceed 0.310 lb/MMBtu of actual heat input</p>
	<p>40 CFR 63.6604 40 CFR 80.510(b) OAC rule 3745-31-05(A)(3), as effective 11/30/01</p>	<p>The sulfur content of the diesel fuel burned in this engine shall not exceed 15 ppm or 0.0015% sulfur by weight.</p> <p>See terms b)(2)a, b)(2)d, and d)(1).</p>
	<p>OAC rule 3745-17-07(A)(1)</p>	<p>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.</p>
	<p>OAC rule 3745-31-05(D) OAC rule 3745-31-05(A)(3), as effective 11/30/01</p>	<p>Particulate emissions (PE) shall not exceed 6.96 tons per rolling 12-month period from all diesel-fired engines combined located at this facility.</p> <p>Nitrogen oxide (NO_x) emissions shall not exceed 99.0 tons per rolling 12-month period from all diesel-fired engines combined located at this facility.</p> <p>Carbon monoxide (CO) emissions shall not exceed 21.33 tons per rolling 12-month period from all diesel-fired engines combined located at this facility.</p>



Table with 2 columns and 2 rows. Row 1: Empty cell, Empty cell, VOC emissions shall not exceed 8.08 tons per rolling 12-month period... Sulfur dioxide (SO2) emissions shall not exceed 0.052 tons per rolling 12-month period... For the pollutants under 10 tons per rolling 12-month period, PE, VOC, and SO2, see term b)(2)a. Row 2: OAC rule 3745-31-05(A)(3), as effective 12/01/06, For pollutants above having a potential-to-emit less than 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).

(3) 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 oxidation catalyst control device. The permittee shall either limit the concentration of CO to 49 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(a)], [40 CFR 63.6640(a)], and [Subpart ZZZZ Table 2d #2]

- 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 of oil.

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 #2; performance test methods in Table 4 #1 or #3; initial compliance demonstration in Table 5 #12 or #13; 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 #2 (limit CO to 49 ppmvd at 15% O ₂ or reduce CO by 70%) to Part 63 Subpart ZZZZ.
40 CFR 63.6603; 40 CFR 63.6612; and 40 CFR 63.6620	Conduct an initial performance test to demonstrate compliance with the CO emission standards according to the requirements specified in Tables 4 and 5 to the subpart within 180 days following the compliance date or by 11/3/13.
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 327,722 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.

d) Monitoring and/or Recordkeeping Requirements

- (1) 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)]

- (2) 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]

- (3) 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:

Table with 3 columns: Month(s), 1. Maximum Allowable Cumulative Diesel Usage (gallons), 2. Maximum Allowable Cumulative Diesel Usage (gallons). Rows range from 1 to 1-12.

- 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)]

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

Table with 2 columns: Applicable Rule, Requirement. Rows include 40 CFR 63.6635 and 40 CFR 63.6655(a).

	corrective actions taken during each period of malfunction to minimize emissions and restore normal operations; 4. records of performance tests and performance evaluations; and 5. all required maintenance performed on air pollution control and monitoring equipment.
40 CFR 63.6604 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

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

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

- (2) 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)]

- (3) 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)]

- (4) 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 in Table 2d was 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 63.6645(g)	Submit a Notification of Intent to conduct a performance test at least 60 days before the test is scheduled to begin, as required by 63.7(b)(1).
40 CFR 63.6645(h); 40 CFR 63.6630(c); and OAC rule 3745-15-04(A)	Submit a Notification of Compliance Status for each initial compliance demonstration required in Table 5 to Subpart ZZZZ, including the performance test 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)	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).

f) Testing Requirements

(1) 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:

0.310 lb PE/MMBtu

6.96 tons PE/rolling 12-months for the facility

Applicable Compliance Method:

The particulate 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.

E_{Fi} = the particulate emission limitation from OAC rule 3745-17-11(B)(5)(a) for stationary small internal combustion engines less than or equal to 600 horsepower, 0.310 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)(a)]

c. Emission Limitations:

4.41 lbNO_x/MMBtu

99.0 tons NO_x/rolling 12-months for the facility

Applicable Compliance Method:

The NO_x emissions limit is based on using the AP-42 emission factor of 4.41 lbsNO_x/MMBtu from Chapter 3.3, Table 3.3-1, "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines".

Compliance with the ton per rolling 12-month NOx 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 3.3, Table 3.3-1, 4.41 lbsNOx/MMBtu.

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

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

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:

0.95 lb CO/MMBtu

21.33 tons CO/rolling 12-months for the facility

Applicable Compliance Method:

The carbon monoxide emissions limit is based on using the AP-42 emission factor of 0.95 lb CO/MMBtu from Chapter 3.3, Table 3.3-1, "Emission Factors for Uncontrolled Gasoline and Diesel Industrial 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:

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

EFi = AP-42 emission factor from Chapter 3.3, Table 3.3-1, 0.95 lb CO/MMBtu.

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

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

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:

49 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 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.

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 if demonstrating compliance through the percent control of CO or to determine the O₂ concentration of the stationary RICE exhaust to normalize the CO concentration.
- 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.

The permittee shall notify the Director (appropriate Ohio EPA Division of Air Pollution Control District Office or local air agency) in writing of the scheduled performance test date 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 63.6620], [40 CFR 63.6630], [40 CFR 63.6645(a)(2)], [Part 63, Subpart ZZZZ, Table 2d #2; Table 4 #1 or 3; and Table 5 #12 or #13], and [OAC rule 3745-15-04(A)]

f. Emission Limitations:

0.36 lb VOC/MMBtu

8.08 tons VOC/rolling 12-months for the facility

Applicable Compliance Method:

The VOC emissions limit is based on using the AP-42 emission factor of 0.36 lb VOC/MMBtu from Chapter 3.3, Table 3.3-1, "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines".

Compliance with the ton per rolling 12-month VOC 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 .

EF_i = AP-42 emission factor from Chapter 3.3, Table 3.3-1, 0.36 lb VOC/MMBtu.

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

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

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 0.0015lb SO₂/MMBtu.

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

h. Emission Limitations:

0.034 tons of SO₂/rolling 12-month period for the facility where limited to 327,722 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)]