3/14/2014

Certified Mail

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

Steven Pyles
WELLINGTON MUNICIPAL UTILITIES - WEST STATION
115 Willard Memorial Square
Wellington, OH 44090

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0247170911
Permit Number: P0116351
Permit Type: Renewal
County: Lorain

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) 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. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTIO 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
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

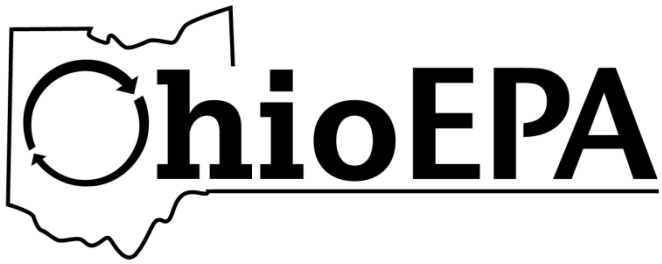
If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,

Michael W. Ahern

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

Cc: Ohio EPA-NEDO



FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
WELLINGTON MUNICIPAL UTILITIES - WEST STATION

Facility ID:	0247170911
Permit Number:	P0116351
Permit Type:	Renewal
Issued:	3/14/2014
Effective:	3/14/2014
Expiration:	3/14/2024

Division of Air Pollution Control
Permit-to-Install and Operate
for
WELLINGTON MUNICIPAL UTILITIES - WEST STATION

Table of Contents

Authorization

Facility ID:	0247170911
Application Number(s):	A0050135
Permit Number:	P0116351
Permit Description:	PTIO renewal for a 1525 HP / 1050 KW Diesel Electric Generator.
Permit Type:	Renewal
Permit Fee:	$0.00
Issue Date:	3/14/2014
Effective Date:	3/14/2014
Expiration Date:	3/14/2024

Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

WELLINGTON MUNICIPAL UTILITIES - WEST STATION
300 Erie St
Wellington, OH 44090

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

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

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

Craig W. Butler
Director

Authorization (continued)

Permit Number: P0116351
Permit Description: PTIO renewal for a 1525 HP / 1050 KW Diesel Electric Generator.

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:	1525 HP/1050 KW Diesel-Electric Generator Set
Superseded Permit Number:	P0085540
General Permit Category and Type:	Not Applicable

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. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. 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 of this permit 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 [DO/LAA] 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 submitting 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 emission 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 beingpermanently shut down without first applying for and obtaining a permit pursuantto OAC Chapter 3745-31.

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.

2. The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines at Area Sources. Although Ohio EPA has determined that this Generally Available Control Technology NESHAP (GACT) applies, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised, that all requirements associated with this rule are in effect and shall be enforced by U.S. EPA. For more information on the area source rules, please refer to the following U.S. EPA website: http://www.epa.gov/ttn/atw/area/arearules.html.

C. Emissions Unit Terms and Conditions

1. B001, 1525 HP/1050 KW Diesel-Electric Generator Set

Operations, Property and/or Equipment Description:

G.M.Electromotive Div. Model 8-645-E4, 1525 HP, 1050 KW, No. 2 Diesel-fueled, 2-stroke stationary compression ignition (CI) internal combustion engine (ICE); less than 10 liters per cylinder, electric generator set with a Miratech NSCR; 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. 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.	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 internal combustion engine (ICE) subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines.	The existing stationary compression ignition (CI) reciprocating internal combustion engine (RICE), located at an area source for hazardous air pollutants (HAPs), shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	40 CFR 63.6603(a) Table 2d #3 to Subpart ZZZZ	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.
c.	OAC rule 3745-31-05(A)(3) (AP-42 emission factors)	The exhaust emissions from this engine shall not exceed: 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).
d.	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.062 lb/MMBtu of actual heat input from ICE greater than 600 horsepower (HP).
e.	40 CFR 63.6604 40 CFR 80.510(b)	The sulfur content of the diesel fuel burned in this emissions unit shall not exceed 15 ppm or 0.0015% sulfur by weight.
f.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
g.	OAC rule 3745-31-05(A)(3)	Compliance with the applicable requirements of 40 CFR Part 63, Subpart ZZZZ Particulate emissions (PE) shall not exceed 0.17 ton per year. Nitrogen oxide (NOx) emissions shall not exceed 8.88 tons per year. Volatile organic compound (VOC) emissions shall not exceed 0.25 ton per year. Sulfur dioxide (SO_2) emissions shall not exceed 0.004 ton per year.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 5 percent opacity, as a six-minute average, except for a one hour period during the start-up of the engine. Visible emissions during this one hour start-up period shall not exceed 20 percent opacity, as a six-minute average.

(2) Additional Terms and Conditions

a. The stationary compression ignition (CI) reciprocating internal combustion engine (RICE) is subject to and shall be operated in compliance with the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines. Requirements of the NESHAP include: performance testing to demonstrate compliance with the carbon monoxide (CO) limit or the control requirement identified in #3 of Table 2d to the subpart; and demonstrating continuous compliance (through the options in Table 6) by monitoring and maintaining either a record of the concentration of CO using a CEMS in accordance with 40 CFR 63.6625(a); or monitoring and maintaining the pressure drop across the catalyst and continuously monitoring the temperature at the catalyst inlet and recording the average 4-hour rolling temperature using a continuous parameter monitoring system (CPMS) in accordance with 40 CFR 63.6625(b).

[40 CFR 63.6585], [40 CFR 63.6590(a)(1)(iii)], [40 CFR 63.6595(a)(1)], [40 CFR 63.6603(a)], [40 CFR 63.6625], and [40 CFR 63.6640(a)]

b. 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 23 ppmvd or less at 15% O_2 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]

c. The quality of the diesel fuel burned in this emissions unit 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)]

d. As required by 40 CFR 63.6612 and 6615, the permittee of the existing RICE shall demonstrate compliance with the CO emission standards specified in Subpart ZZZZ through the following methods:

i. 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; or

ii. if a performance test is conducted in no more than 2 years before the compliance date (on/after 11/3/11), submit records of the performance test results for CO from the exhaust stack; and the stack test results and RICE must meet the following requirements to validate compliance:

(a) The performance test must document a concentration of no more than 23 ppmvd CO at 15% O_2 or demonstrate a minimum of 70% reduction of CO across the control device;

(b) the performance test was conducted for the RICE within the last 2 years using the same test methods as those required in 40 CFR 63.6620 and specified in Table 4 to the subpart;

(c) there have been no process or equipment changes made to the RICE or control device since the test was performed or it can be demonstrated that such a change would not affect the CO emissions; and

(d) the performance test results are reviewed and approved by the appropriate District office or local air agency; and

iii. where using CEMS to monitor and comply with the CO concentration limitation or requirement to reduce CO emissions, 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; or

iv. where using a CPMS to demonstrate compliance, conduct subsequent performance tests every 8760 hours of operation or every 3 years, whichever comes first.

[40 CFR 63.6612], [40 CFR 63.6615], [40 CFR 63.6620], [40 CFR 63.6625 (a) or (b)], and [Part 63, Subpart ZZZZ Table 2d #3; Table 2b; Table 3 #4; Table 4 #1 or #3; Table 5 #1, #2, #5, or #6; and Table 6 #3 or #10]

e. The permittee shall install either a continuous emissions monitoring system (CEMS) to directly monitor CO and O_2 or CO_2 at the inlet and outlet of the control device if demonstrating compliance with the control requirement or at the outlet of the control device if choosing to comply with the CO concentration limit; or install a continuous parameter monitoring system (CPMS) to measure and collect the inlet temperature of the catalyst to the control device. And the pressure drop across the catalyst shall be monitored and recorded monthly using either compliance method.

[40 CFR 63.6603], [40 CFR 63.6640(a)], and [Subpart ZZZZ Tables 2b, 5, and 6]

f. If demonstrating compliance using CPMS, a site-specific monitoring plan must be prepared for the CPMS that addresses the monitoring system design, data collection, and the quality assurance and control requirements, as identified in 40 CFR 63.6625(b); the plan shall include:

i. The performance criteria and design specifications for the monitoring system, including the sample interface, the detector signal analyzer, and data acquisition and calculations;

ii. the thermocouple location, assuring it will provide representative measurements and an accurate temperature for the inlet of the catalyst control device;

iii. equipment performance evaluation and/or system accuracy audits and procedures;

iv. ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1) and (c)(3); and

v. ongoing reporting and recordkeeping procedures in accordance with the provisions in 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

The permittee shall conduct performance evaluations and/or system accuracy audits for the CPMS in accordance with the site-specific monitoring plan and prior to the compliance demonstration with the NESHAP. The CPMS shall be maintained in continuous operation according to 40 CFR 63.8 and the CPMS must be checked daily to assure it is accurately measuring the catalyst inlet temperature.

[40 CFR 63.6625(b)]

g. A performance evaluation of each CMS shall be conducted in accordance with the site-specific performance evaluation test plan. The site-specific CMS (CEMS or CPMS) performance evaluation test plan shall demonstrate the precision and accuracy of the equipment and completeness of the data collected. The site-specific performance evaluation test plan shall require all CMS (systems required by rule) to be maintained in continuous operation during process operations and shall include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external quality assurance (QA) program.

i. The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of CMS performance.

ii. The external QA program shall include, at a minimum, provisions for systems audits and validation of instrument calibration, data collection, sample logging, and documentation of quality control data and field maintenance activities and must also address the following requirements:

(a) each CMS (parameter monitor or sampling probe) shall be installed at a location that accurately measures the exhaust emissions representative of the emissions unit (e.g., on or downstream of the last control device) and accurately measures the process and/or the control device parameters;

(b) performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

(c) performance evaluation procedures and acceptance criteria, including calibration frequency, results, and records.

The permittee shall submit the site-specific performance evaluation test plan to the appropriate District or local office of the Ohio EPA Division of Air Pollution Control (DAPC), and a second copy of any CEMS performance evaluation test plan to the Ohio EPA DAPC Central Office, at least 60 days before the performance test or performance evaluation is scheduled to begin, or by a mutually agreed upon (by DAPC Central Office) date. The DAPC may request additional relevant information following the review of a site-specific performance evaluation test plan. All CMS shall be installed, operated, and the data verified, as specified in the NESHAP, either prior to or in conjunction with conducting performance tests required under 40 CFR 63.7.

[40 CFR 63.6625(a)] and [40 CFR 63.8(e)(1), (2), and (3)]

h. In order to maintain ongoing data quality assurance for the continuous monitoring system (CMS), the permittee shall develop and implement a CMS quality control program. As part of the quality control program the permittee shall develop, and submit for approval, a site-specific performance evaluation test plan for the CMS,

as required by 40 CFR 63.8(e) and this permit. The quality control program shall also include a written protocol that describes procedures for each of the following operations:

i. initial and any subsequent calibration of the CMS;

ii. determination and adjustment of the calibration drift of the CMS;

iii. preventive maintenance of the CMS, including spare parts inventory;

iv. data recording, calculations, and reporting;

v. accuracy audit procedures, including sampling and analysis methods; and

vi. program of corrective action for a malfunctioning CMS.

The permittee shall keep these written procedures on record for the life of the emissions unit or until it is no longer subject to the NESHAP or other requirement for maintaining the system. The CMS quality control program shall be made available for inspection by the Director or his/her representative upon request. If the performance evaluation plan is revised, it shall be retained as a facility record for a period of 5 years following its revision.

[40 CFR 63.8(d)]

i. If the stationary RICE is not equipped with a closed crankcase ventilation system, the permittee shall install either a closed crankcase ventilation system or an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals. The open or closed crankcase ventilation system shall be operated and maintained according to the manufacturer's specifications, to include the frequency of crankcase filter replacement.

[40 CFR 63.6625(g)]

c) Operational Restrictions

(1) The stationary CI ICE shall be installed, operated, and maintained according to the manufacturer's specifications, written instructions, and procedures; and/or according to a maintenance plan developed by the permittee, which shall provide for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. Thepermittee shall operate and maintain the stationary CI ICE to achieve the CO emission standards from #3 in Table 2d to Part 63, Subpart ZZZZ, as required per 40 CFR 63.6603(a).

[40 CFR 63.6595(a)(1)], [40 CFR 63.6603(a)], [40 CFR 63.6605], and [Table 2d to Subpart ZZZZ of Part 63, #3]

(2) The permittee shall minimize the engine's time spent at idle and shall minimize the startup time to a period needed for appropriate safe loading of the engine, not to exceed 30 minutes, after which the non-startup CO emission limitations apply.

[40 CFR 63.6625(h)]

(3) 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. The temperature measurement device must meet the following requirements:

a. the temperature sensor shall be located in a position that provides an accurate reading of the exhaust gas temperature at the inlet to the catalyst of the control device;

b. the temperature sensor shall have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 1% of the temperature value, whichever is larger; and

c. an equipment performance evaluation or system accuracy audit shall be conducted for the temperature measurement device on an annual basis.

System accuracy audits could include redundant temperature sensors or a temperature gauge may be inserted in a thermal well co-located with the CPMS sensor. Records of the results of each inspection, performance evaluation, and/or accuracy audit for the CPMS shall be maintained for a period of 5 years.

[40 CFR 63.6603], [40 CFR 63.6640(a)], [40 CFR 63.6625(b)], [40 CFR 63.6660], and [Subpart ZZZZ Table 2b #1]

(4) Where demonstrating continuous compliance through the use of a continuous parameter monitoring system (CPMS), the rolling 4-hour average temperature of the stationary RICE exhaust at the inlet of the oxidation catalyst shall be monitored and 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 and monitored and recorded monthly.

[40 CFR 63.6603], [40 CFR 63.6640(a)], and [Subpart ZZZZ Table 2b #1; Table 5 #1 or #2; and Table 6 #10]

(5) Where demonstrating continuous compliance through the use of a continuous emissions monitoring system (CEMS), the 1-hour average CO concentration shall not exceed 23 ppmvd, corrected to 15% O_2 or the equivalent CO_2 correction factor, or CO shall be reduced by 70% between the inlet and the outlet of the oxidation catalyst control device.

[40 CFR 63.6603], [40 CFR 63.6640(a)], and [Subpart ZZZZ Table 5 #5 or #6 and Table 6 #3]

(6) All continuous monitoring systems (CMS) shall be installed, operated, and the data verified either prior to or in conjunction with conducting performance tests as required per 40 CFR 63.7, 63.8, 40 CFR 63.6625, and the site-specific monitoring plan. The permittee shall maintain and operate each CMS as specified in this permit and as follows:

a. The permittee shall maintain and operate each CMS in a manner consistent with safety and good air pollution control practices for minimizing emissions, as specified in 40 CFR 63.6(e)(1) and as reflected in the operations and maintenance requirements of this permit.

b. The permittee shall keep the necessary parts for routine repairs and maintenance of the CMS equipment readily available.

c. The permittee shall develop a written startup, shutdown, and malfunction plan (SSMP) for each/all CMS(s) as specified in 40 CFR 63.6(e)(3), and as reflected in this permit through the requirements for the SSMP [requirement from 40 CFR 63.8(c)(1)(iii)].

d. All continuous emissions monitoring system (CMS) must be installed at a location that accurately measures the exhaust emissions representative of the emissions unit (e.g., downstream of the last control device) and according to the procedures documented in the applicable performance specification; and any continuous parameter monitoring system (CPMS) shall be installed to accurately measure the process and/or the control device parameters.

e. Verification of the operational status of each CMS shall include the completion of the manufacturer's written specifications or the recommendations for installation, operation, and calibration of the system.

f. The read out, (the visual display or measured record of the CMS) or other indication of operation, from any CMS required for compliance with the emission standard, shall be readily accessible and visible for monitoring and recording by the operator of the equipment.

g. Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, all CMS shall be maintained in continuous operation.

h. All CEMS used for measuring CO emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive minute of operations, with an average recorded for each 15-minute period. Data from the CEMS (excluding that collected during calibration, quality assurance, or maintenance activities, out-of-control periods, and/or CEMS breakdown) shall be reduced to 1-hour averages, computed from the four 15-minute averages.

[40 CFR 63.8(c)(1),(2),(3), and (4)] and [40 CFR 63.8(g)(2)]

(7) Diesel fuel burned in the CI ICE shall not exceed the limit for sulfur as specified by 40 CFR 80.510(b), i.e., the maximum sulfur content of diesel fuel shall not exceed 15 ppm or 0.0015% sulfur by weight.

[40 CFR 63.6604], [40 CFR 80.501(a)] and [40 CFR 80.510(b)]

(8) The total annual operating hours for this source, measured on a rolling 365-day cumulative total basis, shall not exceed 2000.

d) Monitoring and/or Recordkeeping Requirements

(1) If a CPMS is selected as the method of compliance, the permittee shall install, operate, and maintain the CPMS to measure and collect the catalyst inlet temperature according to the requirements of 40 CFR 63.8, 40 CFR 63.6625(b), and the site-specific monitoring plan. The permittee shall continuously monitor the catalyst inlet temperature at all times the unit is in operation and reduce the data to 4-hour rolling averages. The CPMS shall collect data at least every 15-minutes.

For purposes of calculating data averages, data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities shall not be used in calculating the rolling 4-hour average catalyst inlet temperature. The data collected during all other periods of operation shall be used in assessing compliance.

The engine is in compliance when the rolling 4-hour average temperature of the stationary RICE exhaust at the inlet of the catalyst is greater than or equal to 450 degrees Fahrenheit and less than or equal to 1,350 degrees Fahrenheit. Each record must be maintained for a period of 5 years.

[40 CFR 63.6640(a)], [40 CFR 63.6625(b)(2) through (5)], [40 CFR 63.6635], [40 CFR 63.6660], and [Subpart ZZZZ Table 2b #1, Table 5 #1 or #2, and Table 6 #10]

(2) If a CEMS is selected as the method of compliance, the permittee shall conduct an initial performance evaluation of each CEMS and an annual relative accuracy test audit (RATA) using Performance Specifications 3 and 4A of 40 CFR Part 60, Appendix B according to the requirements of 40 CFR 63.8, as well as, daily and periodic data quality checks in accordance with 40 CFR Part 60, Appendix F, procedure 1. Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period of operations. A valid hourly average shall consist of at least two data points, with each representing a different 15-minute average.Data from the CEMS (excluding that collected during calibration, quality assurance, or maintenance activities, out-of-control periods, and/or CEMS breakdown) shall be reduced to 1-hour averages, computed from the four 15-minute averages. The CEMS data averages shall be recorded in parts per million at 15 percent oxygen or the equivalent CO_2 concentration. A demonstration that the catalyst achieves compliance with the required percent reduction of CO or CO concentration limit is determined using the 4-hour average. Each record must be maintained for a period of 5 years.

[40 CFR 63.6640(a)], [40 CFR 63.6625(a)], [40 CFR 63.6660], [Subpart ZZZZ Table 5 #5 or #6 and Table 6 #3], [40 CFR 63.8(c)(4)(ii)], and [40 CFR 63.8(g)(2)]

(3) For each shipment of oil received for burning in this emissions unit, 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 this RICE during each calendar year. The fuel oil usage can be calculated at the end of each year using the best method available to estimate the annual throughput which might include, but shall not be limited to: any flow meter installed on the engine, records of the volume of diesel fuel oil received with each delivery, the fuel oil levels recorded from the diesel storage tank, and/or the recorded or estimated hours of operation along with the manufacture's documentation of the fuel flow rate.

(5) Except during malfunctions, repairs, and required quality assurance and/or control activities, the permittee shall continuously monitor that the stationary RICE is operating; and all valid data (not recorded during malfunctions, repairs, or required quality assurance or control activities) shall be used in calculations used to report emissions or operating levels.

[40 CFR 63.6635]

(6) The permittee shall keep the following records as required by 40 CFR 63.6655:

a. a copy of each notification and report submitted to comply with the NESHAP, Subpart ZZZZ;

b. records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment, where applicable;

c. records of performance tests as required per 40 CFR 63.10(b)(2)(viii);

d. records of all required maintenance performed on the air pollution control and monitoring equipment, where applicable;

e. records of actions taken during periods of malfunction to minimize emissions in accordance with 63.6605(b), including corrective actions to restore the malfunctioning process and/or control equipment to normal operations;

f. records of performance tests conducted to demonstrate compliance;

g. a record of each idle and/or startup time that exceeded 30 minutes;

h. the records required in Table 6 to Part 60, Subpart ZZZZ; and

i. for each CEMS or CPMS:

i. the records identified in 40 CFR 63.10(b)2(vi) through (xi);

ii. previous (superseded) versions of the performance evaluation plan, required per 40 CFR 63.8(d)(3); and

iii. records of the request and approval of alternatives to the relative accuracy test for CEMS or CPMS as required per 40 CFR 63.8(f)(6), if applicable.

The records shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6655(a), (b), and (d)], [40 CFR 63.6660], [40 CFR 63.6625(h)], and [40 CFR 63.10(b)(1) and (2)]

(7) The permittee shall maintain the following records for the continuous monitoring system (CMS) in accordance with the general requirements of 40 CFR 63.10(c):

a. all required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods);

b. the date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;

c. the date and time identifying each period during which the CMS was out of control;

d. the specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the NESHAP, that occurs during startups, shutdowns, and malfunctions of the emissions unit;

e. the specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the NESHAP, that occurs during periods other than startups, shutdowns, and malfunctions of the emissions unit;

f. the nature and cause of any malfunction (if known);

g. the corrective action taken or preventive measures adopted;

h. the nature of the repairs or adjustments to the CMS whenever it/they is/are inoperative or out of control;

i. the total process operating time during the reporting period; and

j. all records of the procedures that are required as part of a quality control program, developed and implemented for the CMS under 40 CFR 63.8(d), as reflected in this permit.

The records shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.10(c)]

(8) The permittee shall record the pressure drop across the oxidation catalyst at least once per month and the control device shall be maintained so that the pressure drop across the catalyst does not change by more than 2 inches of water, plus or minus 10% of the pressure drop measured during the initial or any subsequent performance test operating at 100% load. The requirement to monitor and maintain the pressure drop according to these requirements shall be included in the site-specific monitoring plan.

[40 CFR 63.6640(a)], [40 CFR 63.6625(b)], and [Subpart ZZZZ Table 2b #1 and Table 6 #10]

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 annual permit evaluation report and semiannual report any period of time (date and number of hours) that the quality of oil burned in this emissions unit did not meet the requirements established in 40 CFR 80.510(b), based upon the required fuel records; and the amount of non-compliant fuel burned on each such occasion.

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

(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 submit an initial notification to the appropriate Ohio EPA Division of Air Pollution Control District Office or local air agency, in writing, indicating that the RICE is subject to the Subpart ZZZZ NESHAP standards in 40 CFR Part 63. The initial notification report shall be submitted no later than 120 calendar days after the effective date of the NESHAP (or 9/3/13 for existing units), which shall provide the following information:

a. the facility name, address, facility ID number, and emission unit number(s) identified in the report;

b. the address (i.e., physical location) of the emissions unit;

c. an identification of the relevant standard (Part 63, Subpart ZZZZ), the applicable limitation(s) or other requirement(s) that is/are the basis of the notification, and the emission unit's compliance date;

d. a brief description of the nature, size, design, and method of operation of the RICE, and an identification of the emission unit(s) subject to the NESHAP and types of hazardous air pollutants emitted; and

e. a statement of whether the emissions unit is a major source or an area source.

[40 CFR 63.9(b)(2)] and [40 CFR 63.6645(a)(2)]

(5) The permittee shall submit semiannual compliance reports that identify any exceedance of the emission limitation, CO reduction requirement, and/or deviation from the operating limitations on the temperature and pressure drop of the oxidation catalyst control. The semiannual compliance report shall contain the following information:

a. the facility name, address, facility ID number, and emission unit number(s) identified in the report;

b. a statement by a responsible official certifying the accuracy of the content of the report;

c. the date of report and beginning and ending dates of the reporting period;

d. a brief description of the stationary RICE, at a minimum, the horsepower, year of manufacturer, and use;

e. each instance in which the general provisions identified in Table 8 of Part 63, Subpart ZZZZ were not met;

f. the number, duration, cause, and description of each exceedance, deviation, and/or malfunction which caused or may have caused an exceedance of the emission limitation or a deviation from the operating limitations for the temperature and pressure drop monitored for the control device;

g. the corrective actions taken during each/any deviation or exceedance to minimize emissions and to correct the malfunction;

h. the total operating time of the stationary RICE if an exceedance or deviation occurred during the reporting period that did not involve a continuous monitoring system (CMS);

i. if there is/are no exceedance(s) or deviation(s) from the emission limitations or operating limitations during the reporting period, a statement to that effect;

j. if there were no periods of time during which the CMS was out-of-control during the reporting period, a statement to that effect;

k. for each exceedance of the emission limitation or percent reduction for CO recorded by the CEMS or for each deviation from operating limitation for the temperature at the inlet of the catalyst recorded by the CPMS, the following information:

i. identification of the CMS, i.e., the type, model, and manufacturer, and the exact location of the probe;

ii. the date and time that each malfunction started and stopped;

iii. the date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks;

iv. the date, time, and duration that each CMS was out-of-control (including the information in 40 CFR 63.8(c);

v. the date and time each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;

vi. a summary of the total duration of the deviation during the reporting period, and the total duration of the deviation as a percent of the engine's total operating time during the reporting period;

vii. a breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, and other know or unknown causes;

viii. a summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent to the total operating time of the stationary engine during the reporting period;

ix. the date of the latest certification or audit of the temperature CMS; and

x. description of any changes to the engine, CMS, processes, or controls since the last reporting period.

The semiannual compliance reports shall cover the reporting periods from January 1 through June 30 and July 1 through December 31 of each year and shall be postmarked or delivered no later than July 31 or January 31 following each reporting period.

[40 CFR 63.6640(b) and (e)], [40 CFR 63.6650(a), (b), (c), (d), and (e)] and [Part 63, Subpart ZZZZ, Table 7]

(6) The permittee shall collect and submit required CMS performance evaluation results to the Director (appropriate Ohio EPA Division of Air Pollution Control District Office or local air agency) as follows:

a. A written report of the results of each CMS performance evaluation shall be submitted simultaneously with the results of the performance test within 30 days of completion of the performance evaluation and compliance demonstration. The written report shall include the raw data from the performance evaluation with the report of the results.

b. Monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments shall not be included in any data average reported.

[40 CFR 63.10(e)(1) and (2)(i)] and [40 CFR 63.8(e)(5)]

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 emissions unit shall not exceed 5 percent opacity, as a six-minute average, except for a one hour period during the start-up of the engine. Visible emissions during this one hour start-up period shall not exceed 20 percent opacity, as a six-minute average.

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

0.17 ton PE/year

Applicable Compliance Method:

The particulate emission limitation is from OAC rule 3745-17-11(B)(5) for large stationary internal combustion engines.

Compliance with the ton per year PE emissions limitation shall be determined by the following calculation:

Where:

G = Gallons of diesel fuel burned in the engine during the year.

EF = 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/year emitted.

$$E = \sum_{i=1}^{n} \left(G \frac{Gallons}{year}\right)\left(\frac{137{,}000\ Btu}{Gallon}\right)\left(EF \frac{lb}{MMBtu}\right)\left(\frac{Ton}{2000\ lb}\right)$$

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 3745-17-11(B)(5)(b)]

c. Emission Limitations:

3.2 lbNOx/MMBtu

8.88 tons NOx/year

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 year NOx emissions limitation shall be determined by the following calculation:

Where:

G = Gallons of diesel fuel burned in the engine during the year.

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

E = Total tons of NOx/year emitted.

$$E = \sum_{i=1}^{n} \left(G \frac{Gallons}{year}\right)\left(\frac{137{,}000\ Btu}{Gallon}\right)\left(EF \frac{lb}{MMBtu}\right)\left(\frac{Ton}{2000\ lb}\right)$$

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(A)(3)]

d. Emission Limitations:

23 ppmvd CO at 15% O_2 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 1,350 °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 O_2 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 O_2 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 CO_2, 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 O_2 at the inlet and/or 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 ICE.

v. The following equation shall be used to normalize the CO concentrations to a dry basis and to 15 percent oxygen (O_2)**:

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

Where:

C_{adj}= calculated CO concentration adjusted to 15 percent O_2.

C_d= measured concentration of CO, uncorrected.

5.9 = 20.9 percent O_2 − 15 percent O_2, the defined O_2 correction value, percent.

$\%O_2$ = measured O_2 concentration, dry basis, percent.

** Optionally, the pollutant concentrations can be corrected to 15% O_2 using a CO_2 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 emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit 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; Table 3 #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)]

e. Emission Limitations:

0.09 lb VOC/MMBtu

0.25 ton VOC/year

Applicable Compliance Method:

The VOC emissions limit is 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 year VOC emissions limitation shall be determined by the following calculation:

Where:

G = Gallons of diesel fuel burned in the engine during the year.

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

E = Total tons of VOC/year emitted.

$$E = \sum_{i=1}^{n} \left(G \frac{Gallons}{year}\right)\left(\frac{137{,}000\ Btu}{Gallon}\right)\left(EF \frac{lb}{MMBtu}\right)\left(\frac{Ton}{2000\ lb}\right)$$

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(A)(3)]

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

f. Sulfur Content Limitations for Diesel Fuel:

Sulfur content 15 ppm or ≤ 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 SO_2/MMBtu.

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

g. Emission Limitation:

0.004 ton SO_2/year

Applicable Compliance Method:

Compliance with the ton per year SO_2 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 the year.

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 SO_2/year emitted.

$$E = \left(G\ \frac{Gallons}{year}\right)\left(\frac{137{,}000\ Btu}{Gallon}\right)\left((1.01)(S)\frac{lb\ SO2}{mmBtu}\right)\left(\frac{Ton}{2000\ lbs}\right)$$

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

g) Miscellaneous Requirements

(1) None.