



1/5/2015

RANDY MEYER
OMEGA JV2 Jackson Center Peaking
1111 Schrock Road, Suite 100
COLUMBUS, OH 43229

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

Facility ID: 0575010227
Permit Number: P0118086
Permit Type: OAC Chapter 3745-31 Modification
County: Shelby

Certified Mail

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

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, Sidney Daily News. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically 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. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

| | | |
|---|-----|---|
| Andrew Hall Permit Review/Development Section Ohio EPA, DAPC 50 West Town Street Suite 700 PO Box 1049 Columbus, Ohio 43216-1049 | and | Ohio EPA DAPC, Southwest District Office 401 East Fifth Street Dayton, OH 45402 |
|---|-----|---|

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Southwest District Office at (937)285-6357.

Sincerely,

Erica R. Engel-Ishida, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 Via E-Mail Notification
Ohio EPA-SWDO; Indiana

PUBLIC NOTICE

1/5/2015 Issuance of Draft Air Pollution Permit-To-Install and Operate

OMEGA JV2 Jackson Center Peaking
North SR 65,
Jackson Center, OH 45334
Shelby County

FACILITY DESC.: Fossil Fuel Electric Power Generation

PERMIT #: P0118086

PERMIT TYPE: OAC Chapter 3745-31 Modification

PERMIT DESC: Chapter 31 permit modification to remove the generator from a PBR status and to comply with RICE requirements.

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the permit # or: Craig Osborne, Ohio EPA DAPC, Southwest District Office, 401 East Fifth Street, Dayton, OH 45402. Ph: (937)285-6357



Permit Strategy Write-Up
OMEGA JV2 Jackson Center Peaking
Permit Number: P0118086
Facility ID: 0575010227



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

American Municipal Power, Inc. (AMP) owns and operates an existing power generation facility located in Jackson Center, Shelby County. This federally enforceable permit-to-install and operate (FEPTIO) covers 1 existing diesel-fired generator engine, each rated at 20.02 million BTU per hour, which has been in operation at this facility since May of 1999. This engine is currently being managed as emergency use engine subject to the Permit-by-Rule (PBR) for emergency generators because the company decided it was not cost effective to retrofit these engines to meet the applicable requirements of 40 CFR Part 63, Subpart ZZZZ prior to the compliance deadline for that rule. However, AMP is now requesting to change the use of this engine back to peaking engine because market conditions have pushed power prices to the point where substantial savings can be realized through peak shaving. At the same time, the cost to retrofit existing CI diesel engines for RICE NESHAP compliance has fallen significantly. Therefore, AMP has decided to proceed with retrofitting this CI engine with diesel oxidation catalyst for RICE NESHAP compliance and re-permit it with a restriction on hours of operation to avoid major stationary source and major Title V source status as well as state modeling and BAT requirements for NO_x.

3. Facility Emissions and Attainment Status:

Shelby is in attainment or unclassifiable for all criteria pollutants. In the absence of the requested federally enforceable restrictions on operating hours for the generator engine, the potential to emit of NO_x from the engine would exceed the Title V threshold of 100 tons per year at 181.51 tons per year. With the imposition of the restriction to 300 operating hours per rolling, 12-month period per engine, the facility-wide potential to emit of NO_x is restricted to 6.22 tons per rolling 12-month period, and AMP will not be subject Title V requirements.

4. Source Emissions:

This permit authorizes up to 6.22 tons of NO_x emissions per rolling, 12-month period from the engine based on limiting hours of operation to no more than 300 hours of operation per rolling, 12-month period per engine and using the company-supplied emission factor (based on stack testing) of 2.07 NO_xlbs/MMBtu as documented in the FEPTIO. Compliance with the operational restriction will be documented by monthly tracking of operating hours and monthly calculations of the rolling, 12-month NO_x emissions.

5. Conclusion:

The operational restrictions, emissions limits, monitoring and record keeping requirements in this permit are sufficient to limit the federally enforceable potential to emit for NO_x from this facility to 6.22 tons per rolling, 12-month period. As a result, this facility will avoid being classified as a major Title V source and the state criteria pollutant modeling and BAT requirements.



6. Please provide additional notes or comments as necessary:

None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

| <u>Pollutant</u> | <u>Tons Per Year</u> |
|---------------------|----------------------|
| NO _x | 6.22 |
| CO | 0.11 |
| SO ₂ | 0.01 |
| PE/PM ₁₀ | 0.23 |
| VOC | 0.19 |



DRAFT

**Division of Air Pollution Control
Permit-to-Install and Operate
for
OMEGA JV2 Jackson Center Peaking**

| | |
|----------------|-----------------------------------|
| Facility ID: | 0575010227 |
| Permit Number: | P0118086 |
| Permit Type: | OAC Chapter 3745-31 Modification |
| Issued: | 1/5/2015 |
| Effective: | To be entered upon final issuance |
| Expiration: | To be entered upon final issuance |



**Division of Air Pollution Control
Permit-to-Install and Operate**
for
OMEGA JV2 Jackson Center Peaking

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Draft Permit-to-Install and Operate

OMEGA JV2 Jackson Center Peaking

Permit Number: P0118086

Facility ID: 0575010227

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0575010227
Application Number(s): A0052277
Permit Number: P0118086
Permit Description: Chapter 31 permit modification to remove the generator from a PBR status and to comply with RICE requirements.
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: \$2,000.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 1/5/2015
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

OMEGA JV2 Jackson Center Peaking
North SR 65
Jackson Center, OH 45334

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, Southwest District Office
401 East Fifth Street
Dayton, OH 45402
(937)285-6357

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



Draft Permit-to-Install and Operate

OMEGA JV2 Jackson Center Peaking

Permit Number: P0118086

Facility ID: 0575010227

Effective Date: To be entered upon final issuance

Authorization (continued)

Permit Number: P0118086

Permit Description: Chapter 31 permit modification to remove the generator from a PBR status and to comply with RICE requirements.

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: | Engine No. 1 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |



Draft Permit-to-Install and Operate
OMEGA JV2 Jackson Center Peaking
Permit Number: P0118086
Facility ID: 0575010227
Effective Date: To be entered upon final issuance

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 Ohio EPA DAPC, Southwest District Office 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 being permanently shut down without first applying for and obtaining a permit pursuant to 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.



Draft Permit-to-Install and Operate
OMEGA JV2 Jackson Center Peaking
Permit Number: P0118086
Facility ID: 0575010227
Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



Draft Permit-to-Install and Operate

OMEGA JV2 Jackson Center Peaking

Permit Number: P0118086

Facility ID: 0575010227

Effective Date: To be entered upon final issuance

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, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines. At this time the Ohio EPA is not accepting the delegating authority to enforce NESHAP standards for area sources. The requirements of this rule, that are applicable to the area source (for hazardous air pollutants) identified in this permit, shall be enforceable by U.S. EPA. Region 5. The complete requirements of this rule (including the Part 63 General Provisions) may be accessed via the Internet from the Electronic code of Federal Regulations (e-CFR) website <http://www.ecfr.gov> or by contacting the appropriate Ohio EPA District Office or Local Air Agency.



Draft Permit-to-Install and Operate
OMEGA JV2 Jackson Center Peaking
Permit Number: P0118086
Facility ID: 0575010227
Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. B001, Engine No. 1

Operations, Property and/or Equipment Description:

20.2 mmBTU/hour diesel fired generator (1825 KW output)

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)d, c)(1), d)(1), e)(3) and f)(1)c.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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. | OAC rule 3745-31-05(A)(3) June 30, 2008 | For carbon monoxide (CO) and sulfur dioxide (SO ₂): The Best Available Technology (BAT) requirement for CO and SO ₂ emissions established pursuant to this rule are equivalent to the requirements established pursuant to 40 CFR Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary reciprocating internal combustion engines (RICE) [for each emissions unit]. See b)(2)a., c. and d. below. For volatile organic compounds (VOC) and particulate matter 10 microns or less in diameter (PM ₁₀): |



Draft Permit-to-Install and Operate

OMEGA JV2 Jackson Center Peaking

Permit Number: P0118086

Facility ID: 0575010227

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| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|--|
| | | <p>VOC emissions from each emissions unit shall not exceed 38.5 pounds per month, averaged over a rolling, 12-month period.</p> <p>PM₁₀ emissions from each emissions unit shall not exceed 31.0 pounds per month, averaged over a rolling, 12-month period.</p> <p>See b)(2)a. and e. below.</p> |
| b. | <p>OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008</p> | <p>The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the SO₂, VOC, and PM₁₀ emissions from this air contaminant source since the potential to emit is each less than 10 tons per year.</p> <p>The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the CO emissions from this air contaminant source taking into account the federally enforceable rule requirement of 23 ppmvd at 15% O₂ or emissions of CO reduced by 70% or more pursuant to 40 CFR Part 63, Subpart ZZZZ</p> <p>See b)(2)b. below.</p> |
| c. | <p>ORC 3704.03(T)</p> | <p>The nitrogen oxides (NO_x) emission limitation established pursuant to this rule is equivalent to the NO_x emission limitation established under OAC rule 3745-31-05(D).</p> |
| d. | <p>OAC rule 3745-31-05(D) – synthetic minor to avoid Title V status and/or major stationary source status under NSR June 30, 2008</p> | <p>NO_x emissions from each emissions unit shall not exceed 6.22 tons per rolling, 12-month period.</p> <p>See c)(1) below.</p> |
| e. | <p>OAC rule 3745-17-07(A)(1)</p> | <p>Visible particulate emissions (PE) from the exhaust stacks serving each of these emission units shall not exceed 20 percent opacity, as a six-minute average, except as provided by rule.</p> |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|---|--|
| f. | OAC rule 3745-17-11(B)(5)(b) | PE shall not exceed 0.062 lb/MMBtu of actual heat input from each RICE greater than 600 horsepower (HP). |
| g. | OAC rule 3745-110-03(F)(3) | Exempt, pursuant to OAC rule 3745-110-03(K)(17). |
| h. | OAC rule 3745-18-06(G) | The SO ₂ emission limitation specified by this rule is less stringent than the SO ₂ limitation established pursuant to 40 CFR Part 63, Subpart ZZZZ and 40 CFR 80.510(b). [The SO ₂ emission limitation specified by this rule is 0.5 lb/MMBtu actual heat input.] |
| i. | 40 CFR Part 63, Subpart ZZZZ 40 CFR 63.6603(a) | See b)(2)c. and d. below. |
| j. | 40 CFR 63.6604 40 CFR 80.510(b) | See b)(2)c. below. |

(2) Additional Terms and Conditions

- a. The BAT emission limits apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than ten tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than ten tons per year BAT exemption) into the Ohio SIP.
- c. The permittee shall control the emissions of 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% 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.
- d. The quality of the diesel fuel burned in this emissions unit shall meet the following specifications on an "as received" basis:



Effective Date: To be entered upon final issuance

- 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; and
- ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

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.

e. All PE is assumed to be PM₁₀.

c) Operational Restrictions

- (1) The maximum annual operating hours for each emissions unit shall not exceed 300 hours per rolling, 12-month period.

During the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, where 11 months of number of hours of operation records are not available, the permittee shall not exceed the monthly cumulative operating hours restrictions for each emissions unit as specified in the following table:

| <u>Month(s)</u> | <u>Maximum Allowable Cumulative Operating Hours)</u> |
|-----------------|--|
| 1 | 75 |
| 1-2 | 150 |
| 1-3 | 225 |
| 1-4 | 300 |
| 1-5 | 300 |
| 1-6 | 300 |
| 1-7 | 300 |
| 1-8 | 300 |
| 1-9 | 300 |
| 1-10 | 300 |
| 1-11 | 300 |
| 1-12 | 300 |

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual operating hours restriction shall be based upon a rolling, 12-month summation of the monthly operating hours.

- (2) The stationary CIRICE and any control device shall be installed, operated, and maintained according to the manufacturer's emission-related written instructions and the permittee shall only change those emission-related settings that are allowed by the manufacturer.
- (3) The permittee shall burn only diesel fuel, containing no greater than 0.0015% sulfur by weight, in each emissions unit.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for each emissions unit:
 - a. the total number of hours of operation;
 - b. during the first 12 months of operation following the issuance of this permit, the monthly cumulative operating hours;
 - c. beginning after the first 12 months of operation following the issuance of this permit, the rolling, 12-month summation of the monthly operating hours; and
 - d. the rolling, 12-month summation for NO_x emissions, in tons.
- (2) The permittee shall maintain documents provided by the oil supplier for each shipment of #2 fuel oil to demonstrate compliance with the Ultra-Low Sulfur Diesel (ULSD) requirement. These documents must include the receipt or bill of lading that includes confirmation that the fuel meets the #2 diesel fuel ULSD standard or fuel analyses confirming ULSD by a certified laboratory.
- (3) For each day during which the permittee burns a fuel other than diesel fuel, or burns diesel fuel containing greater than 0.0015 percent sulfur by weight, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.



- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitation that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, recordkeeping and/or testing requirements in this permit:
 - i. the rolling, 12-month operating hours restriction; and
 - ii. the rolling, 12-month NO_x emission limitation, in tons.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective action that was taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the appropriate Ohio EPA District Office or local air agency.

- (4) 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.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE from the exhaust stacks serving each of these emission units shall not exceed 20 percent opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

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



A and OAC rule 3745-17-03(B)(1).

b. Emission Limitations:

PE shall not exceed 0.062 lb/MMBtu of actual heat input from each RICE greater than 600 horsepower (HP).

PM₁₀ emissions from each emissions unit shall not exceed 31.0 pounds per month, averaged over a rolling, 12-month period.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the allowable PE emission limitation through exhaust emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(7).

The monthly PM₁₀ limitation (averaged over a rolling, 12-month period) was established by the following calculation:

$$E = Hi \left(\text{Max. rated heat input capacity} \frac{\text{MMBtu}}{\text{hr}} \right) \left(\text{EF}_i \frac{0.062 \text{ lb}}{\text{MMBtu}} \right) \left(\frac{1}{12} \right)$$

Where:

Hi = number of hours of operation per rolling, 12-month period for engine type i.

EF_i = the PE 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 pounds of PE/PM₁₀ per month as rolling, 12-month average.

Therefore, as long as compliance with the lb PE/MMBtu emission limitation and the operating hours restriction is maintained, compliance with the pounds of PM₁₀ per month, averaged over a rolling, 12-month period shall also be demonstrated.

c. Emission Limitation:

NO_x emissions from each emissions unit shall not exceed 6.22 tons per rolling, 12-month period.

Applicable Compliance Method:

The rolling, 12-month NO_x emission limitation shall be demonstrated as follows:

$$E = Hi \left(\text{Max. rated heat input capacity} \frac{\text{MMBtu}}{\text{hr}} \right) \left(\text{EF}_i \frac{2.07 \text{ lbs}}{\text{MMBtu}} \right)$$

Where:



H_i = number of hours of operation per rolling, 12-month period for engine type i .

E_{Fi} = Company-supplied emission factor (based on stack testing) of 2.07 NOx lbs/MMBtu.

E = Total tons of NO_x/rolling, 12-month period.

Therefore, as long as compliance with the operating hours restriction is maintained, compliance with the tons NO_x/rolling, 12-month limitation shall also be demonstrated.

If required, verification of the 2.07 lbsNO_x/MMBtu emission factor shall be determined through exhaust emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7, 7A, 7C, 7D, or 7E, as appropriate.

d. Emission Limitation:

Emissions of CO shall not exceed 23 ppmvd at 15% O₂ or emissions of CO shall be reduced by 70% or more (for each emissions unit)

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 as specified in f)(2), to demonstrate compliance with the CO limitation. The appropriate tests methods from Table 4 to Subpart ZZZZ shall be conducted based on the option chosen for compliance, i.e., the part per million concentration or percent reduction. The appropriate emission and/or operating limitations, required per 40 CFR 63.6630 and identified in Table 5, shall be established and compliance demonstrated during each performance test.

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

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



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

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

The permittee shall notify the Director (the appropriate Ohio EPA 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.

e. Emission Limitations:

VOC emissions from each emissions unit shall not exceed 38.5 pounds per month, averaged over a rolling, 12-month period.

Applicable Compliance Method:

The monthly VOC emission limitation (averaged over a rolling, 12-month period) was established by the following calculation:

$$E = H_i \left(\text{Max. rated heat input capacity} \frac{\text{MMBtu}}{\text{hr}} \right) \left(E_{Fi} \frac{0.077 \text{ lb}}{\text{MMBtu}} \right) \left(\frac{1}{12} \right)$$

Where:

H_i = number of hours of operation per rolling, 12-month period for engine type i

E_{Fi} = Company-supplied emission factor (established based on emission testing) of 0.077 lb VOC/MMBtu

E = Total pounds of VOC per month as a rolling, 12-month average

Therefore, as long as compliance with the rolling, 12-month operating hours restriction is maintained, compliance with the monthly VOC emissions limitation (averaged over a rolling, 12-month period) shall also be demonstrated.



If required, verification of the 0.077 lb VOC/MMBtu emission factor shall be determined through exhaust emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18, 25, or 25A, as appropriate.

f. Emission Limitation:

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; and
- ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

Applicable Compliance Method:

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.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emissions testing shall be conducted within 180 days of completion of construction of the diesel oxidation catalyst control device and in accordance with 40 CFR Part 63 Subpart ZZZZ.
- b. The emission testing shall be conducted to demonstrate compliance with the 23 ppmvd CO at 15% O₂ or reduce CO by 70% emissions limitation.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
 - i. Method 1 or 1A of 40 CFR Part 60, Appendix A to select the sampling port location and the number of traverse points
 - ii. Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A or ASTM Method D6522-00 to measure O₂ at the inlet and outlet of the control device to normalize the CO concentration(s).
 - iii. Method 4 of 40 CFR Part 60, Appendix A; or Method 320 of 40 CFR Part 63, Appendix A; or ASTM D6348-03 to measure the moisture content at the inlet and outlet of the control device if demonstrating compliance through the percent control or to measure the moisture content of the stationary RICE exhaust.
 - iv. Method 10 of 40 CFR Part 60, Appendix A; or Method 320 of 40 CFR Part 63, Appendix A; or ASTM D 6348-03 to measure CO at the inlet and



outlet of the control device if demonstrating compliance through the percent control or to measure CO at the exhaust of the stationary RICE.

- v. The following equation shall be used to normalize the CO concentrations to a dry basis and to 15 percent oxygen (O₂)**:

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

Where:

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

C_d= measured concentration of CO, uncorrected.

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

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

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

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

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

Where:

C_i= concentration of CO at the control device inlet,

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

R = percent reduction of CO emissions.

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

If using 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.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.



- d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
 - e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
 - f. 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.
 - g. A comprehensive written report on the results of the emissions test(s) 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.
- g) Miscellaneous Requirements
- (1) None.