Ohio Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

8/1/2016

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
Yes	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

Norman Troyer
Troy Ridge Manufacturing, Ltd.
3998 County Road 168
Millersburg, OH 44654

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0238062025
Permit Number: P0119914
Permit Type: Initial Installation
County: Holmes

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**
- **What should you do if you notice a spill or environmental emergency?**

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.

What should you do if you notice a spill or environmental emergency?

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Ohio EPA DAPC, Northeast District Office at (330)963-1200 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,

Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: Ohio EPA-NEDO

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
Troy Ridge Manufacturing, Ltd.

Facility ID:	0238062025
Permit Number:	P0119914
Permit Type:	Initial Installation
Issued:	8/1/2016
Effective:	8/1/2016
Expiration:	8/1/2026

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
Troy Ridge Manufacturing, Ltd.

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Authorization

Facility ID: 0238062025
Application Number(s): A0054832
Permit Number: P0119914
Permit Description: Initial PTIO for a 280 horsepower 4SLB stationary SI ICE manufactured in 2015 used to provide power.
Permit Type: Initial Installation
Permit Fee: $25.00
Issue Date: 8/1/2016
Effective Date: 8/1/2016
Expiration Date: 8/1/2026
Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

Troy Ridge Manufacturing, Ltd.
3998 CR 168
Millersburg, OH 44654

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)963-1200

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: P0119914
Permit Description: Initial PTIO for a 280 horsepower 4SLB stationary SI ICE manufactured in 2015 used to provide power.

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

Emissions Unit ID:	**P002**
Company Equipment ID:	Cummins Natural Gas Engine
Superseded Permit Number:	
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.

3. The following emissions unit contained in this permit are subject to 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines: P002. The complete NSPS requirements may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoacess.govor by contacting the Ohio EPA Northeast District Office.

C. Emissions Unit Terms and Conditions

1. P002, Cummins Natural Gas Engine

Operations, Property and/or Equipment Description:

Cummins 280 HP stationary natural gas spark ignition (SI) internal combustion engine (ICE) manufactured on or after 1/1/11, burning natural gas, and certified to the exhaust emission standards identified in Table 1 to Part 60, Subpart JJJJ used as primary power source.

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 60, Subpart JJJJ In accordance with 40 CFR 60.4230, this emissions unit is subject to the New Source Performance Standards (NSPS) for Stationary Spark Ignition (SI) Internal Combustion Engines (ICE). 40 CFR 60.4233(e) 40 CFR 60.4231(e)-mfg. Table 1 to Part 60, Subpart JJJJ	The exhaust emissions from this engine shall not exceed: 1.0 grams of nitrogen oxides per horsepower hour (1.0 g NOx/HP-hr) or 82 ppmvd at 15% O_2. 2.0 grams of carbon monoxide per horsepower hour (2.0 g CO/HP-hr) or 270 ppmvd at 15% O_2. 0.7 grams of volatile organic compounds per horsepower hour (0.7 g VOC/HP-hr) or 60 ppmvd at 15% O_2.
b.	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions (PE) shall not exceed 0.310 lb/MMBtu of actual heat

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		input from ICE less than or equal to 600 horsepower (HP).
c.	OAC rule 3745-18-06(G)	Pursuant to OAC rule 3745-18-06(A), this stationary internal combustion engine is exempt from the sulfur dioxide (SO_2) emission limitation specified by this rule during any calendar day in which natural gas is the only fuel burned.
d.	OAC rule 3745-17-07(A)(1)	Visible PE from the exhaust stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as specified by rule.
e.	OAC rule 3745-31-05(A)(3) June 30, 2008	PE shall not exceed 0.08 ton/month averaged over a rolling, 12-month period. NOx emissions shall not exceed 0.23 ton/month averaged over a rolling, 12-month period. CO emissions shall not exceed 0.45 ton/month averaged over a rolling, 12-month period. VOC emissions shall not exceed 0.16 ton/month averaged over a rolling, 12-month period. Compliance with 40 CFR Part 60, Subpart JJJJ See b)(2)a.
f.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE, NOx, CO and VOC emissions from this air contaminant source since the potential to emit is less than 10 tons/year. See b)(2)b.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
g.	40 CFR 63 Subpart ZZZZ 40 CFR 63.6590(c)(1)	A newor reconstructed area source operating in compliance with Part 60 Subpart JJJJ is the demonstration of compliance for 40 CFR 63 Subpart ZZZZ.

(2) Additional Terms and Conditions

a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 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 10 tons per year BAT exemption) as part of the Ohio SIP.

c. The stationaryspark ignition (SI) internal combustion engine (ICE) is subject to and shall be operated in compliance with the requirements of 40 CFR Part 60, Subpart JJJJ, the standards of performance for stationary SI ICE.

d. The stationary SI ICE has been or shall be purchased certified by the manufacturer to emission standards as stringent as those identified in 40 CFR 60.4233(e)and found in Table 1 of Part 60, Subpart JJJJ for engines greater than or equal to 100 HP and less than 500 HP and manufactured on or after 1/1/11.

c) Operational Restrictions

(1) The stationary SI ICE shall be installed, operated, and maintained according to the manufacturer's specifications, written instructions, and procedures over the entire life of the engine. The permittee shall operate and maintain the stationary SI ICE to achieve the emission standards identified in 40 CFR 60.4233(e) and found in Table 1 of NSPS Subpart JJJJover the entire life of the engine. The air-to-fuel ratio controllers shall be set by the manufacturer and/or according to the operations manual, to ensure proper operation of the engine and control device and to minimize emissions.

(2) During emergency conditions the permittee may operate this engine using propane for a maximum of 100 hours per year as an alternative fuel and if records are maintained for such use. If the engine is not certified to burn propane the permittee shall conduct a performance test to demonstrate compliance with the emission standards in 40 CFR 60.4233.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain a record of the natural gas burned in this ICE during each calendar year. The natural gas 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: readings from the facility's natural gas meter, the facility's natural gas bill, the recorded or estimated hours of operation along with the manufacture's documentation on the maximum natural gas fuel flow rate.

(2) The permittee shall maintain the engine and catalytic converter manufacturers' warranty and/or emissions test data on site or at a central location for all facility engines and it shall be made available for review upon request. If the manufacturer's warranty and/or emissions test data is not kept on site, the permittee shall maintain a log for the location of each engine and it shall identify the agency-assigned emissions unit number, the manufacturer's identification number, and the emissions test data or warranty of emissions. The manufacturer's operations manual and maintenance records shall be maintained at the same location as the engine(s); or if the engine(s) is/are leased or serviced by personnel visiting (not stationed at) the site, these records shall be maintained by the facility or staff personnel who is responsible for maintaining the engine(s) in compliance. This information shall be made available to the Director or his/her representative upon request.

(3) The permittee shall maintain the following recordsand make them available upon request:

a. all notifications submitted to comply with and all documentation supporting compliance with Part 60 Subpart JJJJ;

b. records of all maintenance conducted on the engine;

c. the emissions warranty from the manufacturer of the engine and/or catalytic control device, documenting that the engine meets the emission standards identified in 40 CFR 60.4231(e); and a record of the settings at which the engine was maintained to support the emissions warranty;

d. where meeting the requirements of 40 CFR 60.4243(b)(2), the testing results from the initial performance test; and

e. the information identified in 40 CFR parts 90, 1048, 1054, and/or 1060 that is required to be provided by the manufacturer to the operator/owner, as applicable to the model year and horsepower of the engine(s).

The permittee or owner/operator (if leased) of the engines shall keep the above records and a maintenance plan for the engines, and shall maintain documentation that the engine is maintained and operated according the manufacturer's emission-related instructions.

e) Reporting Requirements.

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA Northeast District Office 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 twelvemonths 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.

(2) The permittee shall identify in the PER:

a. each SI engine located (and operated) at the facility during the year, identified by the model year, serial number, horsepower, and type engine (4SRB, 4SLB, 2SLB);

b. identification of each engine that did not meet the applicable emission standards and requirements identified in Part 60, Subpart JJJJ; and

c. for each engine not meeting the applicable emission limitations, identification of the engine (horsepower, model year, and type), the pollutant limitation that was exceeded, the measured emissions, the estimated hours of operation of the engine(s) identified as out of compliance, and information on the resolution to bringing the engine(s) back into compliance.

(3) The permittee shall submit a copy of the results of the initial performance test within 30 days following the completion of each test, in accordance with OAC rule 3745-15-04(A)*, and for each natural gas SI ICE greater than or equal to 25 HP that is not certified to the applicable emission standards identified in 40 CFR Part 60 Subpart JJJJ and/or is not operated in accordance with the emissions warranty, and is subject to the performance testing requirements of 40 CFR 60.4243(b)(2).

*40 CFR 60.4245(d) allows 60 days, an extension can be granted by the field office

f) Testing Requirements

(1) If the natural gas engine was purchased without an EPA certificate of conformity or is not operated as identified in the certificate of conformity or warranty for the emissions, the engine(s) will need to meet the performance testing requirements of 40 CFR 60.4243(b)(2)(i) and the permittee will be required to conduct an initial performance test to demonstrate compliance with the emission limits from Part 60 Subpart JJJJ.

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

a. <u>Opacity Limitation</u>:

Visible PE from the exhaust stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as specified by rule.

Applicable Compliance Method:

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

b. Emission Limitations:

0.310 lb PE/MMBtu from ICE less than or equal to 600 HP

PE shall not exceed 0.08 ton/month averaged over a rolling, 12-month period.

Applicable Compliance Method:

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

The following calculation could be used in order to estimate annual emissions for reporting purposes based on the annual hours of operation:

0.310 lb PE/MMBtu x 0.71 MMBtu/hr = 0.22lb PE/hr

0.22lb PE/hr x 8760 hours/year x 1 ton/2000 lbs = 0.96 ton PE/year

0.96 tonPE/year x 1 year/12 months = 0.08 ton PE/month averaged over a rolling, 12-month period.

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

c. Emission Limitations:

1.0 grams NOx/HP-hr or 82 ppmvd at 15% O_2

NOx emissions shall not exceed 0.23 ton/month averaged over a rolling, 12-month period.

Applicable Compliance Method:

Compliance with the emission limitationsshall be based on the manufacturer's certification to the emission standards identified in 40 CFR 60.4231(e) and by maintaining the engine according to the manufacturer's emissions warranty or through performance tests conducted in accordance with 40 CFR 60.4243(b) and 40 CFR 60.4244. The g/HP-hrlimitis the emission limitation fromTable 1 to Part 60 Subpart JJJJ, the exhaust emission standards for natural gas engines greater than or equal to 100 HP and less than 500 HP, manufactured on/after 1/1/11.

The following calculation could be used in order to estimate annual emissions for reporting purposes based on the annual hours of operation. The measured gram per horse power-hour emissions can be used to replace the NSPS limit, where

the emissions test data has been collected within the last 8760 hours of operation (and must be used if the test data exceeds the emission standard); or the manufacturer's emissions warranty can be used as the emissions factor, where the engine is maintained in accordance with the warranty and its duration of coverage.

1.0 g NOx/HP-hr x 1 lb/453.6 g x 280 HP = 0.62 lb NOx/hr

0.62 lb NOx/hr x 8760 hours/year x 1 ton/2000 lbs = 2.70 tons NOx/year

2.70 tons NOx/year x 1 year/12 months = 0.23 ton NOx/month averaged over a rolling, 12-month period.

Where there is no certificate of conformity or the engine(s) is/are not set or operated in accordance with the emissions warranty, the permittee shall demonstrate compliance with the NOx limitation according the requirements of 40 CFR 60.4244, using the applicable test methods in Table 2 to Part 60 Subpart JJJJ.

d. Emission Limitations:

2.0 grams CO/HP-hr or 270 ppmvd at 15% O_2

CO emissions shall not exceed 0.45 ton/month averaged over a rolling, 12-month period.

Applicable Compliance Method:

Compliance with the emission limitationsshall be based on the manufacturer's certification to the emission standards identified in 40 CFR 60.4231(e) and by maintaining the engine according to the manufacturer's emissions warranty or through performance tests conducted in accordance with 40 CFR 60.4243(b) and 40 CFR 60.4244. The g/HP-hrlimitis the emission limitation fromTable 1 to Part 60 Subpart JJJJ, the exhaust emission standards for natural gas engines greater than or equal to 100 HP and less than 500 HP, manufactured on/after 1/1/11.

The following calculation could be used in order to estimate annual emissions for reporting purposes based on the annual hours of operation. The measured gram per horse power-hour emissions can be used to replace the NSPS limit, where the emissions test data has been collected within the last 8760 hours of operation (and must be used if the test data exceeds the emission standard); or the manufacturer's emissions warranty can be used as the emissions factor, where the engine is maintained in accordance with the warranty and its duration of coverage.

2.0 g CO/HP-hr x 1 lb/453.6 g x 280 HP = 1.23 lbs CO/hr

1.23 lbs CO/hr x 8760 hours/year x 1 ton/2000 lbs = 5.41 tons CO/year

5.41 tons CO/year x 1 year/12 months = 0.45 ton CO/month averaged over a rolling, 12-month period.

Where there is no certificate of conformity or the engine(s) is/are not set or operated in accordance with the emissions warranty, the permittee shall demonstrate compliance with the CO limitation according the requirements of 40 CFR 60.4244, using the applicable test methods in Table 2 to Part 60 Subpart JJJJ.

e. Emission Limitations:

0.7 grams VOC/HP-hr or 60 ppmvd at 15% O_2

VOC emissions shall not exceed 0.16 ton/month averaged over a rolling, 12-month period.

Applicable Compliance Method:

Compliance with the emission limitationsshall be based on the manufacturer's certification to the emission standards identified in 40 CFR 60.4231(e) and by maintaining the engine according to the manufacturer's emissions warranty or through performance tests conducted in accordance with 40 CFR 60.4243(b) and 40 CFR 60.4244. The g/HP-hrlimitis the emission limitation fromTable 1 to Part 60 Subpart JJJJ, the exhaust emission standards for natural gas engines greater than or equal to 100 HP and less than 500 HP, manufactured on/after 1/1/11.

The following calculation could be used in order to estimate annual emissions for reporting purposes based on the annual hours of operation. The measured gram per horse power-hour emissions can be used to replace the NSPS limit, where the emissions test data has been collected within the last 8760 hours of operation (and must be used if the test data exceeds the emission standard); or the manufacturer's emissions warranty can be used as the emissions factor, where the engine is maintained in accordance with the warranty and its duration of coverage.

0.7 g VOC/HP-hr x 1 lb/453.6 g x 280 HP = 0.43 lb VOC/hr

0.43 lb VOC/hr x 8760 hours/year x 1 ton/2000 lbs = 1.89 tons VOC/year

1.89 tons VOC/year x 1 year/12 months = 0.16 ton VOC/month averaged over a rolling, 12-month period.

Where there is no certificate of conformity or the engine(s) is/are not set or operated in accordance with the emissions warranty, the permittee shall demonstrate compliance with the VOC limitation according the requirements of 40 CFR 60.4244, using the applicable test methods in Table 2 to Part 60 Subpart JJJJ.

* The heating value of natural gas may be adjusted to that provided by the supplier.

g) Miscellaneous Requirements

(1) Any amendment to Part 60 Subpart JJJJ shall supersede the Subpart JJJJ compliance limitations and/or compliance options contained in this permit.