



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

7/16/2013

NELSON TROYER  
Y&T WOODCRAFT  
10861 LAUTENSCHLAGER RD  
APPLECREEK, OH 44606

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

Facility ID: 0285000418  
Permit Number: P0114850  
Permit Type: Initial Installation  
County: Wayne

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, The Daily Recorder. 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](http://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  
122 South Front Street  
Columbus, Ohio 43215

and Ohio EPA DAPC, Northeast District Office  
2110 East Aurora Road  
Twinsburg, OH 44087

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, Northeast District Office at (330)425-9171.

Sincerely,

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

Cc: U.S. EPA Region 5 Via E-Mail Notification  
Ohio EPA-NEDO; Canada





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

The Y&T Woodcraft Inc. facility is a wood furniture manufacturer and coating operation. This is an initial installation of a 212 HP natural gas RICE engine for primary facility power (P003).

3. Facility Emissions and Attainment Status:

The facility is located in Apple Creek, Wayne County, which is currently in attainment for all criteria pollutants. The facility currently emits PE and VOCs. The facility wide potential to emit has been limited below Title V thresholds by federally enforceable limitations.

4. Source Emissions:

Currently the facility has a potential to emit of VOC of 88.5 tons per year from emissions units R001 and R002. P003 will add an additional 1.43 tons of VOC per year. Therefore the total annual VOC would increase to 89.93 tons per year.

5. Conclusion:

The emissions limitations, operational restrictions, and recordkeeping are sufficiently federally enforceable to maintain the facility a minor source for VOCs, thus avoiding Title V.

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>
VOC	89.93



PUBLIC NOTICE  
7/16/2013 Issuance of Draft Air Pollution Permit-To-Install and Operate

Y&T WOODCRAFT  
10861 LAUTENSCHLAGER RD,  
APPLE CREEK, OH 44606  
Wayne County  
FACILITY DESC.: Nonupholstered Wood Household Furniture Manufacturing  
PERMIT #: P0114850  
PERMIT TYPE: Initial Installation  
PERMIT DESC: PTIO for 212 HP natural gas RICE engine for primary facility power.

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





**DRAFT**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Y&T WOODCRAFT**

Facility ID:	0285000418
Permit Number:	P0114850
Permit Type:	Initial Installation
Issued:	7/16/2013
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  
Y&T WOODCRAFT

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**Draft Permit-to-Install and Operate**  
Y&T WOODCRAFT

**Permit Number:** P0114850

**Facility ID:** 0285000418

**Effective Date:** To be entered upon final issuance

## Authorization

Facility ID: 0285000418  
Application Number(s): A0047944  
Permit Number: P0114850  
Permit Description: PTIO for 212 HP natural gas RICE engine for primary facility power.  
Permit Type: Initial Installation  
Permit Fee: \$200.00 *DO NOT send payment at this time, subject to change before final issuance*  
Issue Date: 7/16/2013  
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:

Y&T WOODCRAFT  
10861 LAUTENSCHLAGER RD  
APPLE CREEK, OH 44606

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

Scott J. Nally  
Director



**Draft Permit-to-Install and Operate**  
Y&T WOODCRAFT

**Permit Number:** P0114850

**Facility ID:** 0285000418

**Effective Date:** To be entered upon final issuance

## Authorization (continued)

Permit Number: P0114850

Permit Description: PTIO for 212 HP natural gas RICE engine for primary facility power.

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

<b>Emissions Unit ID:</b>	<b>P003</b>
Company Equipment ID:	Natural Gas Engine #1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



**Draft Permit-to-Install and Operate**  
Y&T WOODCRAFT  
**Permit Number:** P0114850  
**Facility ID:** 0285000418  
**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. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

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



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

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

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

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

**7. What reports must I submit under this permit?**

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

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

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

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

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

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



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

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Northeast 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<sup>1</sup> a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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



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

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

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

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

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

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



**Draft Permit-to-Install and Operate**  
Y&T WOODCRAFT  
**Permit Number:** P0114850  
**Facility ID:** 0285000418  
**Effective Date:** To be entered upon final issuance

## **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 units contained in this permit are subject to 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines: P003. The complete NSPS requirements may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Ohio EPA Northeast District Office.



**Draft Permit-to-Install and Operate**

Y&T WOODCRAFT

**Permit Number:** P0114850

**Facility ID:** 0285000418

**Effective Date:** To be entered upon final issuance

## **C. Emissions Unit Terms and Conditions**



**1. P003, Natural Gas Engine #1**

**Operations, Property and/or Equipment Description:**

212 HP PSI, Stationary spark ignition (SI), 4 stroke rich burn (4SRB), internal combustion engine (ICE) greater than or equal to 100 HP and less than 500 HP, manufactured on or after 1/1/11, burning natural gas, and certified to the exhaust emission standards identified in Table 1 to 40 CFR Part 60, Subpart JJJJ.

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 40 CFR Part 60, Subpart JJJJ	The exhaust emissions from this 4SRB engine shall not exceed: 1.0 gram of nitrogen oxides per horsepower hour (1.0 g NO <sub>x</sub> /HP-hr) or 82 ppmvd at 15% O <sub>2</sub> . 2.0 grams of carbon monoxide per horsepower hour (2.0 g CO/HP-hr) or 270 ppmvd at 15% O <sub>2</sub> . 0.7 gram of volatile organic compounds per horsepower hour (0.7 g VOC/HP-hr) or 60 ppmvd at 15% O <sub>2</sub> . See b)(2)c and b)(2)d.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions (PE) shall not exceed 0.310 lb/MMBtu of actual heat input from an ICE less than or equal to 600 horsepower (HP).
c.	OAC rule 3745-18-04(F)(4)	The sulfur dioxide (SO <sub>2</sub> ) emission rate from natural gas shall be considered to be equal to 0.0 lb/MMBtu.
d.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as specified by the rule.
e.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>Compliance with the applicable requirements of 40 CFR Part 60, Subpart JJJJ.</p> <p>Particulate emissions (PE) from this emissions unit shall not exceed 0.50 pound per hour and 2.19 tons per year.</p> <p>Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 0.47 pound per hour and 2.05 tons per year.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.93 pound per hour and 4.09 tons per year.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 0.33 pound per hour and 1.43 tons per year.</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 0.000588 lb/MMBtu and 0.0042 ton per year.</p> <p>See b)(2)a.</p>
f.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)b.i and b)(2)b.ii.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
g.	OAC rule 3745-18-06(G)	See b)(2)e.
h.	40 CFR 63 Subpart ZZZZ 40 CFR 63.6590(c)(4)	A new or reconstructed major source operating in compliance with 40 CFR Part 60, Subpart JJJJ is the demonstration of compliance for 40 CFR Part 63, Subpart ZZZZ.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply: b)(1)e, b)(2)a, f)(2)b.ii, f)(2)c.ii, f)(2)d.ii, f)(2)e.ii and f)(2)f.
- b. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).
  - i. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO<sub>x</sub> and CO from this emissions unit since the “controlled” potential to emit is less than ten tons per year.
  - ii. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to VOC, SO<sub>2</sub> and particulate emissions from this emission unit since the “uncontrolled” potential to emit is less than 10 tons per year.
- c. The stationary spark 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.

[40 CFR 60.4230(a)]



- 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.

[40 CFR 60.4233(e)] and [40 CFR 60.4231(e)]

- e. In accordance with OAC rule 3745-18-06(A), this emissions unit is exempt from OAC rule 3745-18-06(G) during any calendar day in which natural gas is the only fuel burned.

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 JJJJ over 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.

[40 CFR 60.4234], [40 CFR 60.4243(b)(1)], and [40 CFR 60.4243(g)]

- (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.

[40 CFR 60.4243(e)]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain the manufacturer's certification on site or at a central location for all facility ICE and it shall be made available for review upon request. If the manufacturer's certification is not kept on site, the permittee shall maintain a log for the location of each ICE and it shall identify the agency-assigned emissions unit number, the manufacturer's identification number, and the identification number of the certificate. The manufacturer's operations manual shall be maintained at the same location as the ICE.

[40 CFR 60.4243(b)(1)]

- (2) The permittee shall maintain the following records and make them available upon request:

- a. all notifications submitted to comply with and all documentation supporting compliance with 40 CFR Part 60, Subpart JJJJ;
- b. records of all maintenance conducted on the engine;



- c. the certification from the manufacturer, documenting that the engine is certified to meet the emission standards identified in 40 CFR 60.4231(e); and
- d. 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.

[40 CFR 60.4245(a)]

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 3745-15-03(B)(2) and (D)]

- (2) The permittee shall submit a copy of the results of the initial performance test, within 60 days after the test has been completed, 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 subject to the performance testing requirements of 40 CFR 60.4243(b)(2).

[40 CFR 4245(d)]

f) Testing Requirements

- (1) If the natural gas engine was purchased without an EPA certificate of conformity, the engines 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 40 CFR Part 60, Subpart JJJJ.

[60.4243(b)(1) and (2)]

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



Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

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

b. Emission Limitations:

- i. PE shall not exceed 0.310 lb/MMBtu of actual heat input from an ICE less than or equal to 600 HP.
- ii. PE from this emissions unit shall not exceed 0.50 pound per hour and 2.19 tons per year.

Applicable Compliance Method:

The particulate emission limitation, in lb/MMBtu, is from OAC rule 3745-17-11(B)(5)(a) for stationary internal combustion engines.

Compliance with the pound per hour and ton per year PE emission limitations shall be determined by the following calculations:

$$0.310 \text{ lb PE/MMBtu} \times 1.61 \text{ MMBtu/hr} = 0.50 \text{ lb PE/hr; and}$$

$$0.50 \text{ lb PE/hr} \times 8760 \text{ hours/year} \times 1 \text{ ton}/2000 \text{ lbs} = 2.19 \text{ tons PE/year.}$$

If required, the permittee shall demonstrate compliance with the short-term emission limitations through exhaust emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

[OAC rule 3745-17-11(B)(5)]

c. Emission Limitations:

- i. The exhaust emissions from this 4SRB engine shall not exceed 1.0 g NO<sub>x</sub>/HP-hr or 82 ppmvd at 15% O<sub>2</sub>.
- ii. NO<sub>x</sub> emissions shall not exceed 0.47 pound per hour and 2.05 tons per year.

Applicable Compliance Method:

Compliance with the emission limitations shall 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 specifications. The g/HP-hr limit is the emission limitation from Table 1 to 40 CFR 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.



Compliance with the pound per hour and ton per year NO<sub>x</sub> emission limitations shall be determined by the following calculations:

$$2.2 \text{ E-03 lbNO}_x/\text{HP-hr} \times 212 \text{ HP} = 0.47 \text{ lbNO}_x/\text{hr}; \text{ and}$$

$$0.47 \text{ lbNO}_x/\text{hr} \times 8760 \text{ hours/year} \times 1 \text{ ton}/2000 \text{ lbs} = 2.05 \text{ tons NO}_x/\text{year}.$$

Where there is no certificate of conformity, the permittee shall demonstrate compliance with the NO<sub>x</sub> limitation according the requirements of 40 CFR 60.4244, using the applicable test methods in Table 2 to 40 CFR Part 60, Subpart JJJJ.

[40 CFR 60.4233(e)], [40 CFR 60.4244], and [Table 1 to 40 CFR Part 60, Subpart JJJJ]

d. Emission Limitations:

- i. The exhaust emissions from this 4SRB engine shall not exceed 2.0 g CO/HP-hr or 270 ppmvd at 15% O<sub>2</sub>.
- ii. CO emissions shall not exceed 0.93 pound per hour and 4.09 tons per year.

Applicable Compliance Method:

Compliance with the emission limitations shall 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 specifications. The g/HP-hr limit is the emission limitation from Table 1 to 40 CFR 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.

Compliance with the pound per hour and ton per year CO emission limitations shall be determined by the following calculations:

$$2.0 \text{ g CO}/\text{HP-hr} \times 212 \text{ HP}/\text{hr} = 424 \text{ g CO}/\text{hr} \times 4.39\text{E-}02 = 18.6 \text{ lb}/\text{hr} \times .05^* = 0.93 \text{ lbs CO}/\text{hr}; \text{ and}$$

$$0.93 \text{ lbs CO}/\text{hr} \times 8760 \text{ hours/year} \times 1 \text{ ton}/2000 \text{ lbs} = 4.09 \text{ tons CO}/\text{year}.$$

\*Control equipment, per vendor data, is 90% efficient.

Where there is no certificate of conformity, 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 40 CFR Part 60, Subpart JJJJ.

[40 CFR 60.4233(e)], [40 CFR 60.4244], and [Table 1 to 40 CFR Part 60, Subpart JJJJ]



e. Emission Limitations:

- i. The exhaust emissions from this 4SRB engine shall not exceed 0.7 g VOC/HP-hr or 60 ppmvd at 15% O<sub>2</sub>.
- ii. VOC emissions shall not exceed 0.33 pound per hour and 1.43 tons per year.

Applicable Compliance Method:

Compliance with the emission limitations shall 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 specifications. The g/HP-hr limit is the emission limitation from Table 1 to 40 CFR 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.

Compliance with the pound per hour and ton per year VOC emission limitations shall be determined by the following calculations:

$$4.09 \text{ lb VOC/mm btu} \times 1.61 \text{ mm btu/hr} \times 0.05^* = 0.33 \text{ lb VOC/hr; and}$$

$$0.33 \text{ lb VOC/hr} \times 8760 \text{ hours/year} \times 1 \text{ ton/2000 lbs} = 1.43 \text{ tons VOC/year.}$$

\*Control equipment, per vendor data, is 70% efficient.

Where there is no certificate of conformity, 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 40 CFR Part 60, Subpart JJJJ.

[40 CFR 60.4233(e)], [40 CFR 60.4244], and [Table 1 to 40 CFR Part 60, Subpart JJJJ]

f. Emission Limitations:

SO<sub>2</sub> emissions shall not exceed 0.000588 lb/MMBtu and 0.0042 ton per year.

Applicable Compliance Method:

The short-term SO<sub>2</sub> emission limit is based on using the AP-42 emission factor of 0.000588 lb SO<sub>2</sub>/MMBtu from Chapter 3.2 for Natural Gas-fired Reciprocating Engines, Table 3.2-1 through 3, "Uncontrolled Emission Factors for all natural gas Engines".

Compliance with the ton per year SO<sub>2</sub> emission limitation shall be determined by the following calculation:

$$0.000588 \text{ lb SO}_2/\text{MMBtu} \times 1.61 \text{ MMBtu/hr} = 0.00095 \text{ lb SO}_2/\text{hr}$$

$$0.00095 \text{ lb SO}_2/\text{hr} \times 8760 \text{ hours/year} \times 1 \text{ ton/2000 lbs} = 0.0042 \text{ ton SO}_2/\text{year}$$



**Draft Permit-to-Install and Operate**

Y&T WOODCRAFT

**Permit Number:** P0114850

**Facility ID:** 0285000418

**Effective Date:** To be entered upon final issuance

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

† The average brake-specific fuel consumption of 7,000 Btu/HP-hr was taken from AP-42 Table 3.3-1. This factor can be adjusted as suggested by the manufacturer.

g) Miscellaneous Requirements

(1) None.