



Environmental Protection Agency

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

4/19/2011

Ernie Hershberger  
Dutch Design  
8216 State Route 241  
Fredericksburg, OH 44627

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 0238000203  
Permit Number: P0084809  
Permit Type: Renewal  
County: Holmes

Certified Mail

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

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at [www.epa.ohio.gov/dapc/permitsurvey.aspx](http://www.epa.ohio.gov/dapc/permitsurvey.aspx) and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, OH 43215

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc), by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: Ohio EPA-NEDO





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Dutch Design**

Facility ID:	0238000203
Permit Number:	P0084809
Permit Type:	Renewal
Issued:	4/19/2011
Effective:	4/19/2011
Expiration:	10/7/2013





Division of Air Pollution Control
Permit-to-Install and Operate
for
Dutch Design

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## Authorization

Facility ID: 0238000203  
Application Number(s): A0015378, A0015379  
Permit Number: P0084809  
Permit Description: PTIO Renewal for 225 hp diesel engine and 286 hp diesel engine  
Permit Type: Renewal  
Permit Fee: \$0.00  
Issue Date: 4/19/2011  
Effective Date: 4/19/2011  
Expiration Date: 10/7/2013  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Dutch Design  
8216 State Route 341  
Fredericksburg, OH 44627

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

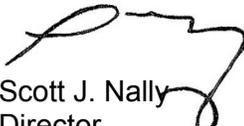
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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

## Authorization (continued)

Permit Number: P0084809  
Permit Description: PTIO Renewal for 225 hp diesel engine and 286 hp diesel engine

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>P001</b>
Company Equipment ID:	Diesel engine #1
Superseded Permit Number:	02-22328
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P002</b>
Company Equipment ID:	Diesel engine #2
Superseded Permit Number:	02-22328
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. 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.

## **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 may be applicable to the requirements of an area source MACT/GACT rule that the Ohio EPA does not have the delegated authority to implement. Although Ohio EPA has determined that an area source MACT (also known as the GACT) may apply, 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 these rules are in effect and are enforceable by U.S. EPA. For more information on the area source rules, please refer to the following U.S. EPA website:

<http://www.epa.gov/ttn/atw/area/arearules.html>

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



1. P001, Diesel engine #1

Operations, Property and/or Equipment Description:

225 HP John Deere non-road diesel engine

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.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	0.49 lb/hr and 2.14 TPY of particulate emissions (PE)/PM less than 10 microns in diameter (PM-10)  0.69 lb/hr and 3.02 TPY of sulfur dioxide emissions (SO2) [See Section c)(1)below.]  2.19 lbs/hr and 9.60 TPY of nitrogen oxide emissions (NOx)  0.56 lb/hr and 2.47 TPY of organic compound emissions (OC)  1.5 lbs/hr and 6.6 TPY of carbon monoxide emissions (CO)  Visible particulate emissions from the stack serving this emissions unit shall not exceed 10% opacity, as a six-minute



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		average, except during acceleration.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11(B)(5)(a). See (2)a below.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/2006	See (2)b below.
c.	OAC rule 3745-17-11(B)(5)(a)	0.310 lb/mmBtu of particulate emissions (PE)
d.	OAC rule 3745-17-07(A)(1)	The opacity limitation specified in this rule is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-18-06(G)	This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B).
f.	40 CFR Part 60, Subpart IIII	None [see b)(2)c]

(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 pollutant less than ten tons per year. However, that rule revision has not yet been approved by US EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the US EPA approves the revisions to OAC rule 3745-31-05(A)(3), the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once US EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures for particulate, sulfur dioxide, nitrogen oxides, and organic compounds in b)(1)a, c)(1), d)(2), e)(1), f)(1)a, f)(1)b, f)(1)c, f)(1)d, f)(1)e, and f)(1)f no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan.  
  
The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions of particulate, sulfur dioxide, nitrogen oxides, and organic compounds specified in b)(1)a from this air contaminant source since the uncontrolled potentials to emit for the emissions of particulate, sulfur dioxide, nitrogen oxides, and organic compounds are less than 10 tons per year.
- c. This stationary compression ignition (CI) internal combustion engine (ICE) was manufactured before April 1, 2006. In accordance with 40 CFR §60.4200(a), this emissions unit is not subject to 40 CFR Part 60, Subpart IIII.

- c) Operational Restrictions
- (1) The permittee shall use only diesel fuel/number 2 fuel oil with a maximum sulfur content of 0.5 percent by weight for combustion in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
- (1) For each day during which the permittee burns a fuel other than diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
  - (2) The permittee shall maintain documentation of the sulfur content of all fuels received.
- e) Reporting Requirements
- (1) The permittee shall submit deviation (excursion) reports that identify each day during which a fuel other than diesel fuel with a maximum sulfur content of 0.5 percent by weight was burned in this emissions unit. Each report shall be submitted within 30 days of the deviation.
  - (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the Director 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.
- f) Testing Requirements
- (1) Compliance with the emission limitations specified in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitations:  
  
0.49 lb/hr and 2.14 TPY of particulate emissions (PE)/PM less than 10 microns in diameter (PM-10)  
  
Applicable Compliance Methods:  
  
Compliance with the hourly emission limitation and annual emission limitation is based upon compliance with the emission limitation specified in OAC rule 3745-17-11(B)(5)(a).
    - b. Emission Limitations:  
  
0.69 lb/hr and 3.02 TPY of sulfur dioxide emissions (SO<sub>2</sub>)  
  
Applicable Compliance Methods:  
  
Compliance with the hourly emission limitation shall be determined by the following equation:

$(0.34 \text{ lb fuel/hp-hr}) \times (225 \text{ hp}) \times (S) \times (64 \text{ SO}_2/32 \text{ S}) \times (0.9 \text{ conversion})$

Where:

0.34 lb fuel/hp-hr = manufacturer supplied fuel consumption;

225 hp = de-rated horsepower;

S = decimal fraction of sulfur in the fuel, (0.005);

64 = molecular mass of sulfur dioxide;

32 = molecular mass of sulfur; and

0.9 = 90% conversion of sulfur to sulfur dioxide

Compliance with the annual emission limitation shall be determined by multiplying the maximum hourly emission rate determined above by the maximum hours of operation, 8760 hours/year, and dividing by 2000 lbs/ton.

c. Emission Limitations:

2.19 lbs/hr and 9.60 TPY of nitrogen oxide emissions (NO<sub>x</sub>)

Applicable Compliance Methods:

Compliance with the hourly emission limitation shall be determined by multiplying 0.00974 lb/hp-hr, the emission factor for NO<sub>x</sub> + non-methane hydrocarbons from the California Air Resources Board exhaust certification level for engine family 5JDXL06.803, by 225 hp, the power output rating of this unit.

Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate determined above by the maximum hours of operation, 8760 hours/year, and dividing by 2000 lbs/ton.

d. Emission Limitations:

0.56 lb/hr and 2.47 TPY of organic compound emissions (OC)

Applicable Compliance Methods:

Compliance with the hourly emission limitation shall be determined by multiplying 0.00251 lb/hp-hr, the emission factor for OC from AP-42, Table 3.3-1 (10/96), by 225 hp, the power output rating of this unit.

Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate determined above by the maximum hours of operation, 8760 hours/year, and dividing by 2000 lbs/ton.

e. Emission Limitations:

1.5 lbs/hr and 6.6 TPY of carbon monoxide emissions (CO)

## Applicable Compliance Methods:

Compliance with the hourly emission limitation shall be determined by multiplying 0.00668 lb/hp-hr, the emission factor for CO from AP-42, Table 3.3-1 (10/96), by 225 hp, the power output rating of this unit.

Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate determined above by the maximum hours of operation, 8760 hours/year, and dividing by 2000 lbs/ton.

## f. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 10% opacity, as a six-minute average, except during acceleration.

## Applicable Compliance Method:

If required, compliance with the visible particulate emission limitation shall be demonstrated based upon visible emission observations performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.

## g. Emission Limitation:

0.310 lb/mmBtu of particulate emissions

## Applicable Compliance Method:

Compliance with the emission limitation above shall be determined by the following equation:

$$(0.18 \text{ g/kW-hr}) \times (\text{lb}/453.59 \text{ g}) \times (0.749 \text{ kW/hp-hr}) \times (\text{hp-hr}/7000 \text{ Btu}) \times (10^6 \text{ Btu/mmBtu})$$

Where:

0.18 g/kW-hr = emission factor from the California Air Resources Board exhaust certification level for engine family 5JDXL06.803

If required, compliance shall be determined according to OAC rule 3745-17-03(B)(10), (Method 5, 40 CFR Part 60, Appendix A).

## g) Miscellaneous Requirements

(1) None.



2. P002, Diesel engine #2

Operations, Property and/or Equipment Description:

286 HP John Deere non-road diesel engine

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.

Table with 3 columns: Label, Applicable Rules/Requirements, and Applicable Emissions Limitations/Control Measures. Rows include references to OAC rules (3745-31-05(A)(3), 3745-31-05(A)(3), 3745-17-11(B)(5)(a), 3745-17-07(A)(1), 3745-18-06(G)) and 40 CFR parts (60, Subpart IIII; 63, Subpart ZZZZ).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		the demonstration of compliance for 40 CFR Part 63, Subpart ZZZZ.

(2) Additional Terms and Conditions

- a. Nitrogen oxide (NOx) emissions shall not exceed 9.2 g/KW-hr.
- b. Hydrocarbon (HC) emissions shall not exceed 1.3 g/KW-hr.
- c. Carbon monoxide (CO) emissions shall not exceed 11.4 g/KW-hr.
- d. Particulate (PM) emissions shall not exceed 0.54 g/KW-hr.
- e. 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 per gallon of oil or 0.0015% sulfur by weight;
  - ii. A cetane index of 40 or an aromatic content of 35 volume percent; and
  - iii. Greater than 135,000 Btu/gallon of oil.

Compliance with the above-mentioned specifications shall be determined by using the analytical results provided by the permittee or oil supplier for each shipment of oil.

- f. Particulate matter emissions less than 10 microns in diameter (PM-10) shall not exceed 0.63 lb/hr and 2.8 TPY.
- g. Sulfur dioxide emissions (SO2) shall not exceed 0.59 lb/hr and 2.6 TPY.
- h. Organic compound emissions (OC) shall not exceed 0.72 lb/hr and 3.14 TPY.
- i. Carbon monoxide emissions (CO) shall not exceed 1.9 lbs/hr and 8.37 TPY.
- j. Nitrogen oxides emissions (NOx) shall not exceed 4.75 lbs/hr and 20.79 TPY.
- k. 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

pollutant less than ten tons per year. However, that rule revision has not yet been approved by US EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the US EPA approves the revisions to OAC rule 3745-31-05(A)(3), the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once US EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures for particulate, sulfur dioxide, nitrogen oxides, and organic compounds in b)(1)a, b)(2)f, b)(2)g, b)(2)h, b)(2)i, b)(2)j, b)(2)k, f)(1)h, f)(1)i, f)(1)j, and f)(1)k no longer apply.

- I. This rule paragraph applies once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled organic compounds [OC (as HC)], CO, PM, and sulfur dioxide (SO<sub>2</sub>) emissions from this air contaminant source since the potentials to emit for OC, CO, PM, and SO<sub>2</sub> are less than ten tons per year.

c) Operational Restrictions

- (1) The stationary compression ignition internal combustion engine (CI ICE) shall be installed, operated, and maintained according to the manufacturer's specifications, written instructions, and procedures, and/or according to procedures developed by the permittee that have been approved by the engine manufacturer in writing, over the entire life of the engine. The permittee shall operate and maintain the stationary CI ICE to achieve the Tier 1 emission standards from Table 1 of NSPS Subpart IIII, as required per 40 CFR 60.4204(a).

d) Monitoring and/or Recordkeeping Requirements

- (1) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of the diesel oil received and the oil supplier's (or permittee's) analyses for sulfur content, in parts per million per-gallon (40 CFR 80.510) or percent by weight. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR 80.580, using the appropriate ASTM methods. These records shall be retained for a minimum of 5 years and shall be available for inspection by the Director or his/her representative.
- (2) The permittee shall maintain the manufacturer's certification or performance test data for this internal combustion engine (ICE) or for a similar ICE, that adequately demonstrates compliance with the applicable emission standards in Table 1 to Subpart IIII, on site or at a central location for all facility CI ICE and it shall be made available for review upon request. If the manufacturer's certification or the compliance test data 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 specific test data used to demonstrate compliance or the certificate identification number. If test data from a similar engine is used to demonstrate compliance, the test results shall identify the model year, the cylinder displacement and rated power of the tested ICE, the test methods and procedures followed, and the percent(s) of maximum torque/power and speed(s) (rpm) maintained or attained during the emissions test. The manufacturer's operations manual and any written instructions or procedures developed

by the permittee and approved by the manufacturer shall be maintained at the same location as the ICE.

- (3) The permittee shall maintain records of the following information:
- a. a copy of all notifications submitted to comply with 40 CFR Part 60, Subpart III, and the documentation supporting the report;
  - b. maintenance conducted on the engine; and
  - c. documentation from the manufacturer that the engine meets the emission standards in CFR 89.112; or
  - d. documentation that the engine meets the emission standards in 40 CFR Part 60, Subpart III, Table 1, as required by 40 CFR 60.4211(b).
- (4) The permittee shall perform weekly checks, when the emissions unit is in operation venting to atmosphere and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operation log:
- a. The color of the emissions;
  - b. Whether the emissions are representative of normal operations;
  - c. If the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. The total duration of any visible emission incident; and
  - e. Any corrective actions taken to eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d above or continue the weekly check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the Director 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.

- (2) The Annual PER shall include the following information:
- a. Identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
  - b. Describe the cause of the emissions and any corrective actions taken to minimize or eliminate the visible particulate emissions;
  - c. Identify any record which shows the fuel burned in this emissions unit did not meet the requirements established in 40 CFR 80.510, based upon the required fuel records; and the amount of non-compliant fuel burned on each such occasion; and
  - d. States that the engine was operated and maintained according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer.
- f) Testing Requirements
- (1) Compliance with the emission limitations specified in Sections b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitations:  
  
Nitrogen oxides emissions (NO<sub>x</sub>) shall not exceed 4.75 lbs/hr and 20.79 TPY.  
  
Applicable Compliance Methods:
    - i. Compliance with the hourly emission limitation above shall be determined by multiplying 5.7 g/KW-hr times 234 KW, the standby power output rating of this unit, and dividing by 453.59 grams per pound.
    - ii. Compliance with the annual emission limitation above shall be determined by multiplying 5.7 g/KW-hr times 234 KW, the standby power output rating of this unit, and by the maximum hours of operation per year (8760) and dividing by 453.59 grams per pound and 2000 pounds per ton.
  - b. Emission Limitation:  
  
Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.  
  
Applicable Compliance Methods:  
  
If required, compliance with the visible particulate emission limitation shall be demonstrated based upon the visible emission observations performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.

c. Emission Limitation:

Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 9.2 g/KW-hr.

Applicable Compliance Methods:

Compliance shall be demonstrated by the US EPA JDX-NR5-05-18 certificate for engine family 5JDXL06.8049 model year 2005 which certifies the emissions of nitrogen oxide and non-methane hydrocarbon at 5.7 g/KW-hr.

d. Emission Limitation:

Hydrocarbon (HC) emissions shall not exceed 1.3 g/KW-hr.

Applicable Compliance Methods:

Compliance shall be demonstrated by John Deere emissions test results which certify the emissions of non-methane hydrocarbon at 0.17 g/KW-hr.

e. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 11.4 g/KW-hr.

Applicable Compliance Methods:

Compliance shall be demonstrated by the US EPA JDX-NR5-05-18 certificate for engine family 5JDXL06.8049 model year 2005 which certifies the emissions of carbon monoxide and non-methane hydrocarbon at 0.9 g/KW-hr.

f. Emission Limitation:

Particulate (PM) emissions shall not exceed 0.54 g/KW-hr.

Applicable Compliance Methods:

Compliance shall be demonstrated by the US EPA JDX-NR5-05-18 certificate for engine family 5JDXL06.8049 model year 2005 which certifies the emissions of particulate at 0.12 g/KW-hr.

g. Sulfur Content Limitations for Diesel Fuel:

Sulfur content 15 ppm per-gallon or  $\leq$  0.0015% by weight

Applicable Compliance Method:

Compliance shall be demonstrated through the record keeping requirements for the sulfur content of each shipment of diesel oil received. If meeting the standards in 40 CFR 80.510, this calculates to approximately 0.0015 lb/MMBtu.

h. Emission Limitation:

Carbon monoxide emissions (CO) shall not exceed 1.9 lbs/hr and 8.37 TPY.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying 0.00668 lb/hp-hr, the emission factor for CO from AP-42, Table 3.3-1 (10/96), by 286 hp, the power output rating of this unit.

Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate determined above by the maximum hours of operation, 8760 hours/year, and dividing by 2000 lbs/ton.

i. Emission Limitation:

Sulfur dioxide emissions (SO<sub>2</sub>) shall not exceed 0.59 lb/hr and 2.6 TPY.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying 0.00205 lb/hp-hr, the emission factor for SO<sub>2</sub> from AP-42, Table 3.3-1 (10/96), by 286 hp, the power output rating of this unit.

Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate determined above by the maximum hours of operation, 8760 hours/year, and dividing by 2000 lbs/ton.

j. Emission Limitation:

Particulate matter emissions less than 10 microns in diameter (PM-10) shall not exceed 0.63 lb/hr and 2.8 TPY.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying 0.0022 lb/hp-hr, the emission factor for PM-10 from AP-42, Table 3.3-1 (10/96), by 286 hp, the power output rating of this unit.

Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate determined above by the maximum hours of operation, 8760 hours/year, and dividing by 2000 lbs/ton.

k. Emission Limitation:

Organic compound emissions (OC) shall not exceed 0.72 lb/hr and 3.14 TPY.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying 0.00251 lb/hp-hr, the emission factor for OC from AP-42, Table 3.3-1 (10/96), by 286 hp, the power output rating of this unit.

Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate determined above by the maximum hours of operation, 8760 hours/year, and dividing by 2000 lbs/ton.

- g) Miscellaneous Requirements
  - (1) None.