



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

1/29/2013

Mr. John Girven
Marcellus Energy Services Portable
415 Cass Street
Traverse City, MI 49684

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0641065001
Permit Number: P0111012
Permit Type: Initial Installation
County: Belmont

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
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

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

How to appeal this permit

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

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



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

Cc: Ohio EPA-SEDO



FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
Marcellus Energy Services Portable

Facility ID:	0641065001
Permit Number:	P0111012
Permit Type:	Initial Installation
Issued:	1/29/2013
Effective:	1/29/2013
Expiration:	12/12/2022



Division of Air Pollution Control
Permit-to-Install and Operate
for
Marcellus Energy Services Portable

Table of Contents

Authorization	1
A. Standard Terms and Conditions	3
1. What does this permit-to-install and operate ("PTIO") allow me to do?.....	4
2. Who is responsible for complying with this permit?	4
3. What records must I keep under this permit?	4
4. What are my permit fees and when do I pay them?.....	4
5. When does my PTIO expire, and when do I need to submit my renewal application?	4
6. What happens to this permit if my project is delayed or I do not install or modify my source?	5
7. What reports must I submit under this permit?	5
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?	5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ...	5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?	6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?	6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently?	6
13. Can I transfer this permit to a new owner or operator?.....	7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?	7
15. What happens if a portion of this permit is determined to be invalid?	7
B. Facility-Wide Terms and Conditions.....	8
C. Emissions Unit Terms and Conditions	10
1. P901, RBT Transloader	11
2. P001, Diesel Generator.....	20



Final Permit-to-Install and Operate
Marcellus Energy Services Portable
Permit Number: P0111012
Facility ID: 0641065001
Effective Date: 1/29/2013

Authorization

Facility ID: 0641065001
Application Number(s): A0045531
Permit Number: P0111012
Permit Description: Initial installation PTIO for a RBT Transloader and associated generator engine set used to unload frac sand from railcars and load into trucks for distribution.
Permit Type: Initial Installation
Permit Fee: \$400.00
Issue Date: 1/29/2013
Effective Date: 1/29/2013
Expiration Date: 12/12/2022
Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

Marcellus Energy Services Portable
4102 Jefferson Street
Bellaire, OH 43917

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

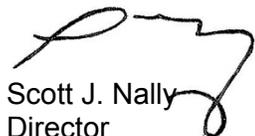
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138
(740)385-8501

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



Final Permit-to-Install and Operate
Marcellus Energy Services Portable
Permit Number: P0111012
Facility ID: 0641065001
Effective Date: 1/29/2013

Authorization (continued)

Permit Number: P0111012
Permit Description: Initial installation PTIO for a RBT Transloader and associated generator engine set used to unload frac sand from railcars and load into trucks for distribution.

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

Emissions Unit ID:	P001
Company Equipment ID:	Diesel Generator
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P901
Company Equipment ID:	RBT Transloader
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
Marcellus Energy Services Portable
Permit Number: P0111012
Facility ID: 0641065001
Effective Date: 1/29/2013

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, Southeast 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 submitting¹ 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.

¹ 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.



Final Permit-to-Install and Operate
Marcellus Energy Services Portable
Permit Number: P0111012
Facility ID: 0641065001
Effective Date: 1/29/2013

B. Facility-Wide Terms and Conditions



Final Permit-to-Install and Operate

Marcellus Energy Services Portable

Permit Number: P0111012

Facility ID: 0641065001

Effective Date: 1/29/2013

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 for 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>



Final Permit-to-Install and Operate
Marcellus Energy Services Portable
Permit Number: P0111012
Facility ID: 0641065001
Effective Date: 1/29/2013

C. Emissions Unit Terms and Conditions



1. P901, RBT Transloader

Operations, Property and/or Equipment Description:

Portable 250 TPH RBT Transloader - including railcar load-out and truck load-in with transloader, powered by diesel generator set (EU P001), controlled by a Unimaster dust collector with 95% capture efficiency and 98% control efficiency; maximum annual throughput of 360,000 tons of sand per year.

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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>Fugitive particulate emissions (PE) shall not exceed 0.51 tons per year.</p> <p>Stack PE shall not exceed 0.04 lb/hr and 0.19 ton per year.</p> <p>Fugitive and stack visible PE shall not exceed 10% opacity as a 3-minute average.</p> <p>Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust.</p> <p>See b)(2)a., and b)(2)d. through b)(2)f. below.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(C), as effective 12/01/06	See b)(2)b. below.
c.	OAC rule 3745-17-07(A) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average. This emission limitation is less stringent than the limitation listed under OAC rule 3745-31-05(A)(3), until such time as U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.
d.	OAC rule 3745-17-07(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	Visible PE of fugitive dust shall not exceed 20% opacity as a 3-minute average. This emission limitation is less stringent than the limitation listed under OAC rule 3745-31-05(A)(3), until such time as U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.
e.	OAC rule 3745-17-08(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	Control equipment shall achieve an outlet emission rate of not greater than 0.030 gr/dscf of PE or no visible PE from the exhaust stacks, whichever is less stringent. Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)a. and b)(2)d. through b)(2)f.
f.	OAC rule 3745-17-11(B)(1)	PE from the stack serving the transloader shall not exceed 2.83 lbs/hr. This emission limitation is less stringent than the limitation listed under OAC rule 3745-31-05(A)(3), until such time as U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.



(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 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 OAC rule 3745-31-05, the requirements 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. This rule paragraph applies once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP.

Permit to Install and Operate P0111012 for this air contaminant source takes into account the following voluntary restrictions (including the use of any air pollution control equipment) as proposed by the permittee for the purposes of avoiding BAT requirements under OAC rule 3745-31-05(A)(3) for Particulate Emissions.

- i. RBT transloader throughput shall not exceed 360,000 tons per year.
- ii. This emissions unit shall not operate without the associated Unimaster dust collector with 95% capture efficiency and 98% control efficiency.
- iii. 0.7 TPY limit for combined fugitive and stack PE
- c. The fugitive emissions from material handling operations that are covered by this permit and subject to the requirements of OAC rule 3745-31-05, 3745-17-07 and 3745-17-08 are listed below:

RBT Transloader

- d. The permittee shall employ the following control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

<u>Material handling operations:</u> RBT transloader	<u>Control measures:</u> do not overload transloader, minimize drop height, dust collection system with fabric filter with 95% capture efficiency and 98% control efficiency
---	--

- e. For each material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as



a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures are unnecessary.

f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05, 3745-17-07(B) and 3745-17-08(B).

c) Operational Restrictions

(1) The maximum annual RBT transloader throughput rate shall not exceed 360,000 tons per year.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, the permittee shall perform inspections for visible fugitive particulate emissions of each material handling operation in accordance with the following frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
RBT Transloader	daily

(2) The above-mentioned inspections shall be performed during representative, normal operating conditions

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) 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 operations log:

- a. the location and 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 emissions incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions 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.

- (4) The permittee shall maintain monthly records of the amount of frac sand throughput for each month, in tons.
 - (5) The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement (an) additional control measure(s)
 - c. the dates the additional control measure(s) was (were) implemented; and
 - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.
- e) Reporting Requirements
- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
 - (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 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. Emissions Limitation:

Fugitive PE shall not exceed 0.51 tons per year.

Applicable Compliance Method:

Compliance with the annual fugitive emissions limitation shall be demonstrated by the following calculations based on the emission factors in AP-42 sections 13.2.4 (11/06) and 11.19.2 (8/04) and the ; and the actual annual throughput as recorded in d)(4).



RBT Transloader:

$$EF = k(0.0032)[(U/5)^{1.3}/(M/2)^{1.4}] = \text{lbs PE/ton}$$

Where:

EF= emission factor expressed in pounds per ton (lbs/ton)

k= particle size multiplier for TSP (dimensionless)= 0.74

U= 16 mph, mean wind speed, (from USA.com)

M= 1% moisture content, (as submitted in application)

Therefore, EF= 0.028348 lb PE/ton

$$PE = [(2 \text{ Load-in/Load-out})(0.028348 \text{ lb/ton})(\text{actual throughput})] / 2,000 \text{ lbs/ton}$$

=TPY uncontrolled PE

Assume 95% capture efficiency for the Unimaster dust collector (Engineering estimate of permittee per manufacturer's specifications)
 (TPY uncontrolled PE)(1-0.95) = **TPY fugitive PE**

b. Emissions Limitation:

Stack PE shall not exceed 0.04 lb/hr and 0.19 tons per year.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the lb/hr stack emissions limitation by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

Compliance with the annual stack emissions limitation shall be demonstrated by the following calculations based on the emission factors in AP-42 sections 13.2.4 (11/06) and 11.19.2 (8/04) and the actual annual throughput as recorded in d)(4).

RBT Transloader:

$$EF = k(0.0032)[(U/5)^{1.3}/(M/2)^{1.4}] = \text{lbs PE/ton}$$

Where:

EF= emission factor expressed in pounds per ton (lbs/ton)

k= particle size multiplier for TSP (dimensionless)= 0.74

U= 16 mph, mean wind speed, (from USA.com)

M= 1% moisture content, (as submitted in application)



Therefore, $EF = 0.028348 \text{ lb PE/ton}$

$PE = [(2 \text{ Load-in/Load-out})(0.028348 \text{ lb/ton})(\text{actual throughput})] / 2,000 \text{ lbs/ton}$
=TPY PE uncontrolled

Assume 95% capture efficiency for the Unimaster dust collector (Engineering estimate of permittee per manufacturer's specifications)
 $(\text{TPY uncontrolled PE})(0.95) = \text{TPY captured PE}$

Assume 98% control efficiency for the Unimaster dust collector (Engineering estimate of permittee per manufacturer's specifications)
 $(\text{TPY captured PE})(1-0.98) = \text{TPY stack PE}$

c. Emissions Limitation:

Fugitive and stack visible PE of fugitive dust shall not exceed 10% opacity as a 3-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

d. Emissions Limitation:

Stack visible PE shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

e. Emissions Limitation:

Visible PE of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

f. Emissions Limitation:

Control equipment shall achieve an outlet emission rate of not greater than 0.030 gr/dscf of PE or no visible PE from the exhaust stacks.

Applicable Compliance Method:

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60



"Standards of Performance for New Stationary Sources" and/or USEPA Method 22, and the procedures specified in OAC rule 3745-17-03(B)(7).

g. Emissions Limitation:

Stack PE shall not exceed 2.83 lbs/hr.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

g) Miscellaneous Requirements

- (1) At the discretion and following the approval of the director, the permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install and Operate (PTIO) providing the appropriate exemption requirements have been met. The director may issue a "Notice of Site Approval" for either of the following situations: the permittee notifies the director a minimum of 30 days prior to relocating pursuant to OAC rule 3745-31-03(A)(1)(p)(i); or the permittee identifies pre-disclosed location(s) that meet the criteria found in OAC rule 3745-31-05(H).
- (2) Pursuant to OAC rules 3745-31-03(A)(1)(p)(i), 3745-31-03(A)(1)(p)(ii), and 3745-31-05(H), the following criteria must be met for all portable facilities seeking approval for relocation:
 - a. the portable source must possess an issued permit to install (PTI) or permit to install and operate (PTIO) and demonstrate continuing compliance with any applicable best available technology determination and state and/or federal air pollution rule or law; and,
 - b. the portable source is operating pursuant to a currently effective PTI, PTIO and/or any applicable permit to operate (PTO) and demonstrates continuing compliance with the requirements of the permit(s).
- (3) In order to relocate a portable source in accordance with OAC rule 3745-31-03(A)(1)(p)(i) (i.e. the 30-day option), the following additional criteria must be met:
 - a. the permittee has provided proper notice of intent to relocate the portable source to the permitting District Office/Local air agency a minimum of thirty days prior to the scheduled relocation;
 - b. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the emissions would not cause a nuisance in violation of OAC rule 3745-15-07, and that the relocation of the portable source would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site; and



- c. the director has issued a "Notice of Site Approval", stating that the proposed site is acceptable under OAC rule 3745-15-07, and that the relocation will not result in the installation or the modification of a major stationary source.

Using the 30-day option, the portable source may only be relocated upon receipt of the "Notice of Site Approval".

- (4) In order to relocate a portable source in accordance with OAC rules 3745-31-03(A)(1)(p)(ii) and 3745-31-05(H) (i.e. the 15-day option), the following additional criteria must be met:

- a. the portable source owner has identified the proposed site(s) to the permitting District Office/Local air agency;
- b. the owner of the proposed site(s) (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site(s);
- c. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the portable source will have an acceptable environmental impact at the proposed site(s);
- d. a public notice, consistent with OAC Chapter 3745-47, has been published in the county where the proposed site(s) is/are located;
- e. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation.

Using the 15-day option, the portable source may only be relocated upon receipt of the "Notice of Site Approval", and following submittal of the 15-day written notice of the relocation. Any site approvals issued pursuant to OAC rule 3745-31-05(H) shall be valid for no longer than 3 years and are subject to renewal. Also, pursuant to OAC rule 3745-31-07(D)(2), the director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

- (5) Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.
- (6) When a portable source is co-located at a stationary source, or is co-located with multiple portable sources, potential emissions from the portable source may be required to be combined for facility potential to emit calculations for Title V and PSD applicability. If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01 (LLL) and (JJJ), the permittee shall submit an application and obtain a PTI for the new location prior to moving the portable source. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745- 77-01, must also meet all applicable requirements under the Title V program contained in OAC Chapter 3745-77, which may include the requirement to apply for a Title V permit.



2. P001, Diesel Generator

Operations, Property and/or Equipment Description:

Portable Generator Set - 66HP John Deere CJDXL03.0208 USEPA certified diesel-fired 4-stroke reciprocating internal combustion (RICE) engine (model year 2012) with a displacement of less than 30 liters per cylinder controlled by electronic direct injection, turbocharger, charge air cooler, smoke puff limiter and electronic control module used to power EU P901 (transloader)

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. g)(1).

(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 operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>Nitrogen oxides (NO_x) emissions shall not exceed 0.35 pounds per hour and 1.53 tons per year.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.44 pounds per hour and 1.9 tons per year.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.14 pounds per hour and 0.6 tons per year.</p> <p>Volatile organic compound (VOC) emissions shall 0.17 pounds per hour and 0.7 tons per year.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Particulate emissions (PE) shall not exceed 0.03pounds per hour and 0.13 tons per year.</p> <p>There shall be no visible PE from the stack serving this EU.</p> <p>The requirements of this rule also include compliance with the requirements of 40 CFR 60.4200 – 60.4219.</p> <p>See b)(2)a. below.</p>
b.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)b. below.
	<p>40 CFR Part 60, Subpart IIII (40 CFR 60.4200 - 60.4219)</p> <p>[In accordance with 40 CFR 60.4200(a)(2)(i), this emissions unit is a stationary compression ignition internal combustion engine manufactured after April 1, 2006 subject to the emissions limitations specified in this section.]</p>	<p>Emissions shall not exceed: 4.7 grams NOx + NMHC/kW-hr 0.30 gram particulate matter (PM)/kW-hr 5.0 grams CO/kW-hr</p> <p>[40 CFR 60.4201(a), 40 CFR 60.4204(b), and Table 3 of 40 CFR 1039.102, Interim Tier 4]</p> <p>This CO emission limitation is less stringent than the limitation listed under OAC rule 3745-31-05(A)(3), until such time as U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.</p> <p>Exhaust opacity must not exceed: 20% opacity during the acceleration mode, 15% opacity during the lugging mode, and 50% opacity during the peaks in either the acceleration or lugging modes.</p> <p>[40 CFR 60.4201(a), 40 CFR 60.4204(b), and 40 CFR 1039.105]</p> <p>These emission limitations are equivalent to or less stringent than the limitation listed under OAC rule 3745-31-05(A)(3), until such time as U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Implementation Plan. See b)(2)c. below.
	40 CFR 60.1-19 (pursuant to 40 CFR 60.4218)	Table 8 of Subpart IIII of 40 CFR Part 60 – Applicability of General Provisions to Subpart IIII, specifies the provisions of Subpart A that apply to owners and operators of affected facilities subject to this subpart or that apply with certain exceptions.
c.	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by 40 CFR Part 60 Subpart IIII. This emission limitation is less stringent than the limitation listed under OAC rule 3745-31-05(A)(3), until such time as U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.
d.	OAC rule 3745-17-11(B)(5)(a)	PE shall not exceed 0.310 pound/million Btu of actual heat input. This emission limitation is less stringent than the limitation listed under 40 CFR Part 60 Subpart IIII.
e.	OAC rule 3745-18-06(G)	This emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) pursuant to OAC rule 3745-18-06(B).
f.	OAC rule 3745-110-03(F)	This emissions unit is exempt from the requirements of OAC rule 3745-110-03(F) pursuant to OAC rule 3745-110-03(J)(3).

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 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 regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by 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 revision to 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 OAC rule 3745-31-05, then these emission limits/control measures 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 SIP.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the SO₂ and VOC emissions from this air contaminant source since the uncontrolled potential to emit for SO₂ and VOC are less than 10 tons/yr.

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

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO_x, CO and PE from this air contaminant source since the calculated annual emission rate for NO_x, CO and PE are less than 10 tons/yr taking into account the federally enforceable rule limit under 40 CFR 60 Subpart IIII.

c) Operational Restrictions

- (1) The permittee shall burn only diesel fuel, containing no greater than 0.5% sulfur content by weight, in this emissions unit.
- (2) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR Part 60, Subpart IIII, including the following sections:

40 CFR 60.4206	duration of subjectivity
40 CFR 80.510(b) [after October 1, 2010, pursuant 40 CFR 60.4207(b)]	fuel sulfur and cetane content
40 CFR 60.4211	(a)(1)-(3): operation and maintenance Or (g)(1): operation and maintenance
40 CFR 60.4211(c)	engine certification requirement

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than diesel fuel, containing greater than 0.5% sulfur content by weight, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.



e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (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 emissions limitations and control requirements in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations:

NO_x emissions shall not exceed 0.35 lbs/hr and 1.53 tons/yr.

Applicable Compliance Method:

Compliance with the lb/hremissions limitation shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The lb/hr limit is equivalent to the g NO_x + NMHC/kW-hr emission limitation from Table 3 of 40 CFR 89.112, the Interim Tier 4 exhaust emission standards for diesel engines between 50 and 75 horsepower (37 and 56 kilowatts).

The NO_x limits shall be calculated using a ratio of 74.6% NO_x to 25.4% VOC. This ratio is based upon the linear relationship of NO_x to NMHC from Table 1 of Subpart IIII, Table 1 from 40 CFR 89.112, to Tables 4, 5, and 6 from 40 CFR 1039.102:

$$4.7 \text{ g NO}_x + \text{NMHC/kW-hr} \times 74.6\% \text{ NO}_x = 3.5 \text{ grams NO}_x/\text{kW-hr}$$

If required, organic compound emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the ton per year NO_x emissions limitation is demonstrated by multiplying 8,760 hours of operation and the lb/hr emission limitation for NO_x of 0.35 lb/hr, then dividing by 2,000 lbs/ton.



b. Emissions Limitations:

CO emissions shall not exceed 0.44 lbs/hr and 1.9 tons/yr.

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the AP-42 sections 3.3-1 (10/96) emission factor for CO of 0.00668 lb/HP-hr by the maximum rated capacity of P001 (60 HP).

If required, organic compound emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual tons/yr emission limitation shall be demonstrated by multiplying the maximum annual hours of operation (8760) by the lb/hr emission limitation, then dividing by 2,000 lbs/ton.

c. Emissions Limitations:

SO₂ emissions shall not exceed 0.14 pound per hour and 0.6 tons per year.

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the AP-42 sections 3.3-1 (10/96) emission factor for SO₂ of 0.00205 lb/HP-hr by the maximum rated capacity of P001 (60 HP).

If required, organic compound emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual tons/yr emission limitation shall be demonstrated by multiplying the maximum annual hours of operation (8760) by the lb/hr emission limitation, then dividing by 2,000 lbs/ton.

d. Emissions Limitations:

VOC emissions shall not exceed 0.17 pound per hour and 0.7 tons per year.

Applicable Compliance Method:

Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the AP-42 sections 3.3-1 (10/96) emission factor for VOC of 0.00251 lb/HP-hr by the maximum rated capacity of P001 (60 HP).



If required, organic compound emissions shall be determined according to test Methods 1 - 4, and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the annual tons/year emission limitation shall be demonstrated by multiplying the maximum annual hours of operation (8760) by the lb/hr emission limitation, then dividing by 2,000 lbs/ton.

e. Emissions Limitations:

PE shall not exceed 0.03 pound per hour and 0.13 tons per year.

Applicable Compliance Method:

Compliance with the lb/hr emissions limitation shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The lb/hr limit is equivalent to the g PM/kW-hr emission limitation from Table 3 of 40 CFR 89.112, the Interim Tier 4 exhaust emission standards for diesel engines between 50 and 75 horsepower (37 and 56 kilowatts).

If required, organic compound emissions shall be determined according to test Methods 1 – 5 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the ton per year PE limitation is demonstrated by multiplying 8,760 hours of operation and the lb/hr emission limitation for PE of 0.03 lb/hr, then dividing by 2,000 lbs/ton.

f. Emissions Limitation:

There shall be no visible PE from the stack serving this EU.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined according to USEPA Method 22.

g. Emissions Limitation:

NOx + NMHC emissions shall not exceed 4.7 grams/kW-hr

Applicable Compliance Method:

Compliance with the emission limitations shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The g/kW-hr limits are the emission limitation from Table 3 of 40



CFR 89.112, Interim Tier 4 exhaust emission standards for diesel engines between 50 and 75 horsepower (37 and 56 kilowatts).

If required, NO_x + NMHC emissions shall be determined according to test Methods 1 - 4, 7 and 18, 25 or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

h. Emissions Limitation:

PE shall not exceed 0.30 grams/kW-hr

Applicable Compliance Method:

Compliance with the emission limitations shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The g/kW-hr limits are the emission limitation from Table 3 of 40 CFR 89.112, Interim Tier 4 exhaust emission standards for diesel engines between 50 and 75 horsepower (37 and 56 kilowatts).

If required, PE shall be determined according to test Methods 1 - 5 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

i. Emissions Limitation:

CO emissions shall not exceed 5.0 grams/kW-hr

Applicable Compliance Method:

Compliance with the emission limitations shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The g/kW-hr limits are the emission limitation from Table 3 of 40 CFR 89.112, Interim Tier 4 exhaust emission standards for diesel engines between 50 and 75 horsepower (37 and 56 kilowatts).

If required, CO emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

j. Emissions Limitations:

Visible PE from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by 40 CFR Part 60, Subpart IIII: Exhaust opacity must not exceed: 20% opacity during the acceleration mode,



15% opacity during the lugging mode, and 50% opacity during the peaks in either the acceleration or lugging modes.

Applicable Compliance Method:

If required, compliance with the visible PE limitations shall be determined according to USEPA Method 9.

k. Emissions Limitation:

PE shall not exceed 0.310 pound/mmBTU of actual heat input.

Applicable Compliance Method:

Compliance shall be based upon an emission factor of 0.310lb/million BTU. This emission factor is specified in AP-42 Table 3.3-1 (10/96).

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources", and the procedures specified in OAC rule 3745 17 03(B)(10). Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

- (2) If the certified diesel-fired engine and/or control devices are not installed, configured, operated and/or maintained according to the manufacturer's emission-related written instructions, or emission-related settings are altered in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance with the emissions standards in Table 3 of 40 CFR 1039.102 in accordance with 40 CFR 60.4201(a) and 60.4204(b) within 1 year of such action pursuant to 40 CFR 60.4211(g)(1).
- (3) If required, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The test(s) shall be conducted in accordance with 40 CFR 60.4212(a) and (b) and 40 CFR Part 1039 Subpart F.
 - b. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
 - c. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the



proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

- d. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- e. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) **Miscellaneous Requirements**

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745 114 01, will be less than 1.0 ton per year. OAC Chapter 3745 31 requires a permittee to apply for and obtain a new or modified permit to install and operate (PTIO) prior to making a "modification" as defined by OAC rule 3745 31 01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.
- (2) At the discretion and following the approval of the director, the permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install and Operate (PTIO) providing the appropriate exemption requirements have been met. The director may issue a "Notice of Site Approval" for either of the following situations: the permittee notifies the director a minimum of 30 days prior to relocating pursuant to OAC rule 3745-31-03(A)(1)(p)(i); or the permittee identifies pre-disclosed location(s) that meet the criteria found in OAC rule 3745-31-05(H).
- (3) Pursuant to OAC rules 3745-31-03(A)(1)(p)(i), 3745-31-03(A)(1)(p)(ii), and 3745-31-05(H), the following criteria must be met for all portable facilities seeking approval for relocation:
 - a. the portable source must possess an issued permit to install (PTI) or permit to install and operate (PTIO) and demonstrate continuing compliance with any applicable best available technology determination and state and/or federal air pollution rule or law; and,



- b. the portable source is operating pursuant to a currently effective PTI, PTIO and/or any applicable permit to operate (PTO) and demonstrates continuing compliance with the requirements of the permit(s).
- (4) In order to relocate a portable source in accordance with OAC rule 3745-31-03(A)(1)(p)(i) (i.e. the 30-day option), the following additional criteria must be met:
- a. the permittee has provided proper notice of intent to relocate the portable source to the permitting District Office/Local air agency a minimum of thirty days prior to the scheduled relocation;
 - b. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the emissions would not cause a nuisance in violation of OAC rule 3745-15-07, and that the relocation of the portable source would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site; and
 - c. the director has issued a "Notice of Site Approval", stating that the proposed site is acceptable under OAC rule 3745-15-07, and that the relocation will not result in the installation or the modification of a major stationary source.

Using the 30-day option, the portable source may only be relocated upon receipt of the "Notice of Site Approval".

- (5) In order to relocate a portable source in accordance with OAC rules 3745-31-03(A)(1)(p)(ii) and 3745-31-05(H) (i.e. the 15-day option), the following additional criteria must be met:
- a. the portable source owner has identified the proposed site(s) to the permitting District Office/Local air agency;
 - b. the owner of the proposed site(s) (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site(s);
 - c. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the portable source will have an acceptable environmental impact at the proposed site(s);
 - d. a public notice, consistent with OAC Chapter 3745-47, has been published in the county where the proposed site(s) is/are located;
 - e. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation.

Using the 15-day option, the portable source may only be relocated upon receipt of the "Notice of Site Approval", and following submittal of the 15-day written notice of the relocation. Any site approvals issued pursuant to OAC rule 3745-31-05(H) shall be valid for no longer than 3 years and are subject to renewal. Also, pursuant to OAC rule 3745-31-07(D)(2), the director may modify the site approval



to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

- (6) Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.
- (7) When a portable source is co-located at a stationary source, or is co-located with multiple portable sources, potential emissions from the portable source may be required to be combined for facility potential to emit calculations for Title V and PSD applicability. If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01 (LLL) and (JJJ), the permittee shall submit an application and obtain a PTI for the new location prior to moving the portable source. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745- 77-01, must also meet all applicable requirements under the Title V program contained in OAC Chapter 3745-77, which may include the requirement to apply for a Title V permit.