Ohio Environmental Protection Agency

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

10/19/2016

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

Mr. Justin Brown
MPR Sand Terminals, LLC
5310 Guernsey Street
Bellaire, OH 43906

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0607025012
Permit Number: P0121515
Permit Type: Initial Installation
County: Belmont

Dear Permit Holder:

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

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**
- **What should you do if you notice a spill or environmental emergency?**

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

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

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

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

Sincerely,

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

Cc: Ohio EPA-SEDO

Ohio Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
MPR Sand Terminals, LLC

Facility ID:	0607025012
Permit Number:	P0121515
Permit Type:	Initial Installation
Issued:	10/19/2016
Effective:	10/19/2016
Expiration:	9/7/2026

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
MPR Sand Terminals, LLC

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. F002, Barge Unloading 11
2. F003, Frac Sand Storage Piles 16
3. P901, Truck Loading 20

Authorization

Facility ID:	0607025012
Application Number(s):	A0056702
Permit Number:	P0121515
Permit Description:	Initial install for frac sand barge unloading, conveying, storage piles, silos and truck loading operation.
Permit Type:	Initial Installation
Permit Fee:	$7,500.00
Issue Date:	10/19/2016
Effective Date:	10/19/2016
Expiration Date:	9/7/2026

Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

MPR Sand Terminals, LLC
5330 Guernsey Street
Bellaire, OH 43906

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

Craig W. Butler
Director

Authorization (continued)

Permit Number: P0121515
Permit Description: Initial install for frac sand barge unloading, conveying, storage piles, silos and truck loading operation.

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

Emissions Unit ID:	**F002**
Company Equipment ID:	F002
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F003**
Company Equipment ID:	F003
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P901**
Company Equipment ID:	F004
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee.This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee.Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

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

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

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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

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

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

(1) None.

C. Emissions Unit Terms and Conditions

1. F002, Barge Unloading

Operations, Property and/or Equipment Description:

Barge Unloading, maximum throughput 4,169,760 TPY frac sand. (Includes hopper load-in covered conveyers, and conveyers inside building.)

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 3745-17-07(B)(1)	Visible emissions of fugitive dust shall not exceed 20 percent opacity as a three-minute average.
b.	OAC rule 3745-17-08(B)	Reasonable available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)a.. below.
c.	ORC 3704.03(T) and OAC Rule 3745-31-05(A)(3)	Develop and implement a site-specific work practice plan designed as described in paragraph d)(2) through d)(4) below to minimize or eliminate fugitive dust emissions.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measure on barge unloading for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee shall employ covered conveyors and minimized drop heights in order to minimize or eliminate visible particulate emissions of fugitive dust at the point of capture to the extent possible so as to be capable of meeting the applicate requirements. Nothing in this paragraph shall prohibit the permittee from employing additional control measures to ensure compliance.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the hopper load-in, outside covered conveyors, or egress points of the building serving this emissions unit. The presence or absence of any visible fugitive 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.

(2) Work Practice Plan

The permittee shall develop and implement a site-specific Work Practice Plan designed to minimize or eliminate fugitive dust from the barge unloading operation. This Work Practice Plan shall include, at a minimum, the following elements:

a. An identification of each piece of barge unloading equipment for which the Work Practice Plan applies;

b. A determination of the frequency that each piece of barge unloading equipment will be inspected to determine if additional control measures are needed;

c. The identification of the record keeping form and/or record that will be used to track the inspections and treatment of each portion of the barge unloading operation. This form/record should include, at a minimum, the following elements:

i. piece of equipment inspected;

ii. date inspected;

iii. name of the employee who either did the inspection or who can verify that the inspection was completed;

iv. results of the inspection (needs treatment or does not need treatment);

v. a description of why no treatment was needed;

vi. date treated;

vii. name of the employee who either treated the material handling operation or who can verify that the treatment occurred; and

viii. the treatment method used to reduce the emissions.

d. A description of how and where the records shall be maintained.

The permittee shall begin using the Work Practice Plan within 30 days from the date Ohio EPA approved the initial plan. As needs warrant, the permittee can modify the Work Practice Plan. The permittee shall submit a copy of proposed revisions to the Work Practice Plan to Southeast District Office (SEDO) for review and approval. The permittee can begin using the revised Work Practice Plan once SEDO has approved its use.

(3) Work Practice Plan Inspections

Except as otherwise provided in this section, the permittee shall perform inspections of each piece of barge unloading equipment at frequencies described

in the Work Practice Plan. The purpose of the inspections is to determine the need for implementing control measures. The inspections shall be performed during representative, normal operation conditions. No inspection shall be necessary if the barge unloading operation is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

(4) Work Practice Plan Record Keeping

The permittee shall maintain records of the following information:

a. The records required to be collected under the Work Practice Plan, and

b. The date and reason any element of the Work Practice Plan was not implemented.

The permittee shall maintain these records in accordance to the Standard Terms and Conditions of Part I of this permit.

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.

(3) Within 30 days from the final issuance of this permit, the permittee shall submit their proposed Work Practice Plan to the Southeast District Office.

(4) The permittee shall submit annual deviation reports concerning any failure to implement the Work Practice Plan. These reports shall be submitted as part of the annual PER.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified

in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9, with the modifications found in OAC rule 3745-17-03(B)(3)(a) and (b).

g) Miscellaneous Requirements

(1) None.

2. F003, Frac Sand Storage Piles

Operations, Property and/or Equipment Description:

Frac Sand Storage Piles, 4,169,760 TPY throughput. (Located inside building.)

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 3745-17-07(B)(6)	Visible emissions of fugitive dust shall not exceed 13-minutes during any sixty-minute observation period.
b.	OAC rule 3745-17-08(B)	Reasonable available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)a through b)(2)d.
c.	ORC 3704.03(T) and OAC Rule 3745-31-05(A)(3)	Develop and implement a site-specific work practice plan designed as described in paragraph d)(2) through d)(4) below to minimize or eliminate fugitive dust emissions.

(2) Additional Terms and Conditions

a. The permittee shall employ reasonably available control measures on all load-in and load-out operations associated with the storage piles for the purpose of

ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to maintaining building enclosure, controlling rate load-in/out of piles, and maintaining minimal drop heights in order to ensure compliance.

b. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.

c. The permittee shall employ reasonably available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the application, the permittee has committed to maintaining building enclosures to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

d. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Work Practice Plan

The permittee shall develop and implement a site-specific work practice plan designed to minimize or eliminate fugitive dust from the permittees material storage piles. This work practice plan shall include, at a minimum, the following elements:

a. An identification of each storage pile or each storage pile area for which the plan applies.

b. A determination of the frequency that each storage pile or each storage pile area will be inspected to determine if additional control measures are needed. The

frequency of inspection can either be common for all storage piles or may be identified separately for various storage pile areas.

c. The identification of the record keeping form/record that will be used to track the inspection and treatment of the storage piles. This form/record should include, at a minimum, the following elements:

i. Storage pile or storage pile area inspected;

ii. Date inspected;

iii. Name of employee responsible for the inspection

iv. Result of the inspection (needs treated or does not need treated);

v. A description of why no treatment was needed;

vi. Date treated;

vii. Name of employee responsible for treatment of the storage pile or storage pile area; and

viii. Method used to treat the storage pile or storage pile area.

(2) A description of how and where the records shall be maintained.

The permittee shall begin using the Work Practice Plan within 30 days from the date Ohio EPA approved the initial plan. As needs warrant, the permittee can modify the Work Practice Plan. The permittee shall submit a copy of proposed revisions to the Work Practice Plan to the appropriate District Office or local air agency (DO/LAA) for review and approval. The permittee can begin using the revised Work Practice Plan once the appropriate DO/LAA has approved its use.

(3) Work Practice Plan Inspections

Except as otherwise provided in this section, the permittee shall perform inspections of each of the storage piles or storage pile areas at frequencies described in the Work Practice Plan. The purpose of the inspections is to determine the need for implementing control measures. The inspections shall be performed during representative, normal storage pile operating conditions. No inspection shall be necessary for a storage pile or storage pile area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

a. The permittee shall maintain records of the following information:

i. The records required to be collected under the Work Practice Plan, and

ii. The date and reason any element of the Work Practice Plan was not 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) Within 30 days from the final issuance of this permit, the permittee shall submit their proposed Work Practice Plan to the appropriate DO/LAA.

(3) The permittee shall submit annual deviation reports concerning any failure to implement the Work Practice Plan. These reports shall be submitted as part of the annual Permit Evaluation Report (PER).

(4) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

f) Testing Requirements

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

a. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 13-minutes during any sixty-minute observation period.

Applicable Compliance Method:

If required, visible emissions of fugitive dust shall be determined according to USEPA Method 22, with the modifications found in OAC rule 3745-17-03(B)(4).

g) Miscellaneous Requirements

(1) None.

3. P901, Truck Loading

Operations, Property and/or Equipment Description:

Truck Loading. Maximum throughput of 4,169,760 TPY frac sand. Includes one hopper with load-in inside building, two covered conveyors, two silos (each with a top and a bottom bag house), and two telescoping chutes to deposit material into trucks.

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. b)(1)b., b)(1)c. and b)(2)b). below

(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 June 30, 2008	Total stack and fugitive particulate emissions (PE) combined shall not exceed 0.65 tons per month averaged over a twelve-month rolling period. See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to PE from this air contaminant source since the calculated annual emission rate is less than 10 tons/yr taking into account the voluntary restriction from OAC 3745-31-05(E). See b)(2)b. below.
c.	OAC rule 3745-31-05(E) as effective June 30, 2008	Total stack and fugitive PE combined shall not exceed 7.82 tons per year.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Install and operate a baghouse on top and bottom of each silo, with each baghouse designed to meet 99% operating efficiency or greater for control of PE from silos. Conveyor/hopper enclosures shall be maintained.
d.	OAC rule 3745-17-07(A)	Visible PE from stacks serving this emission unit shall not exceed 20 percent opacity emission as a six-minute average.
e.	OAC rule 3745-17-07(B)	Visible PE for fugitive source shall not exceed 20 percent opacity emission as a three-minute average.
f.	OAC rule 3745-17-08(B)	Reasonable available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)c. below.

(2) Additional Terms and Conditions

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

b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio State Implementation Plan (SIP).

c. The permittee shall employ reasonably available control measures for this emissions unit for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to maintain the hoppers inside a four sided, roofed structure and covered conveyors. In addition, the two silos shall be equipped with two bag houses each. The permittee shall employ a capture system on the baghouses with a 99% capture efficiency, that minimizes or eliminates visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design and vents the emissions to a baghouse that is capable of meeting the applicable requirements. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the amount of material processed for each month, in tons.

(2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust or visible emissions from the stacks 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 emission incident; and

e. any corrective actions taken to minimize or 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 daily 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) 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:

Total stack and fugitive PE shall not exceed 7.82 tons per year.

Total stack and fugitive PE shall not exceed 0.65 tons per month averaged over a twelve-month rolling period.

Applicable Compliance Method:

The emissions limitation was derived from the following calculations:

Maximum Plant Throughput based on permittees application: 4169760 TPY

<u>Hopper Loading</u>

$EF = k*0.0032*(U/5)^{1.3}/(M/2)^{1.4}$ (AP-42, Section 13.2.4, 11/06)

Where:

k = 0.74 particle size multiplier for TSP

U = 9.9 mean wind speed, 1.3 to 15 miles per hour

M = 1% moisture content of material, 0.25 to 4.8%

EF = 0.015188 pounds/ton TSP

(1 load point)*(0.015188 lbs/ton)*(476 tons/hour)*(8,760 hrs/yr)/(2,000 lbs/ton) = 31.66 TPY

Uncontrolled TSP = 31.66 TPY
80% control efficiency for hopper load-in inside building
Controlled TSP = 6.332 TPY

<u>Transfer points</u> (AP-42, Chapter 11, Table 11.19.2-2, 8/04)

EF = 0.003 pounds PE/ton

1 number of transfer points (hopper-to-conveyer)
4169760 TPY plant throughput

(1 transfer point)*(0.003 lbs PE/ton)*(476 tons/hour)*(8,760 hrs/yr)/(2,000 lbs/ton) = 6.25 TPY

Uncontrolled PM = 6.25 TPY
80% control efficiency (inside building)
Controlled PM = 1.25 TPY

2 number of transfer points (conveyor-to-silo)
2084880 TPY throughput (each)
238 TPH (each)

(2 transfer points)*(0.003 lbs PE/ton)*(238 tons/hour)*(8,760 hrs/yr)/(2,000 lbs/ton) = 6.25 TPY

Uncontrolled PM = 6.25 TPY
99% control efficiency (top dust collector)
Controlled PM = 0.12 TPY (for both top stacks)

2 number of transfer points (silo-to-truck)
2084880 TPY throughput (each)
238 TPH (each)

(2 transfer points)*(0.003 lbs PE/ton)*(238 tons/hour)*(8,760 hrs/yr)/(2,000 lbs/ton) = 6.25 TPY

Uncontrolled PM = 6.25 TPY
99% control efficiency (bottom dust collector)
Controlled PM = 0.12 TPY (for both bottom stacks)

Total Allowable Controlled PM = 7.82 TPY
7.82 Tons ÷ 12 = 0.65 Tons
0.65 Tons per month averaged over a twelve-month rolling period.

Compliance shall be determined by the above calculation taking into account the records required by d)(1).

b. Emissions Limitation:

Visible PE from stacks serving this emission unit shall not exceed 20 percent opacity emission as a six-minute average.

Visible PE for fugitive source shall not exceed 20 percent opacity emission as a three-minute average.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.