



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL CERTIFIED MAIL**  
**PORTAGE COUNTY**

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 16-02097**

**DATE: 3/13/2001**

303 Sand and Gravel  
Karl Stuble  
5511 Hurlburt Rd  
Rome, OH 44085

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging 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 Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
236 East Town Street, Room 300  
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo, Manager  
Field Operations and Permit Section  
Division of Air Pollution Control

CC: USEPA

ARAQMD



Permit To Install

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**FINAL PERMIT TO INSTALL 16-02097**

Application Number: 16-02097  
APS Premise Number: 1667050041  
Permit Fee: **\$2000**  
Name of Facility: 303 Sand and Gravel  
Person to Contact: Karl Stuble  
Address: 5511 Hurlburt Rd  
Rome, OH 44085

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**4020 SR 303**  
**Mantua, Ohio**

Description of proposed emissions unit(s):  
**Sand and Gravel Operation - mineral extraction, processing, aggregate storage piles, roadways and parking.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. Permit to Install General Terms and Conditions

#### 1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

#### 2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

#### 3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

#### 4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

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representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**9. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

**10. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**11. Applicability**

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

**12. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**13. Source Operation and Operating Permit Requirements After Completion of Construction**

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

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**14. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**15. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

**B. Permit to Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)**  
**TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	52.3

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

- 1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F001 - Mineral Extraction - scrapers, front-end loaders, track hoe, trucks, and/or dozer.	OAC rule 3745-31-05(A)(3)	16.0 tons of particulate emissions (PE) per year (See A.2.f below.)  20 percent opacity, as a three-minute average  best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.c through A.2.e)

**2. Additional Terms and Conditions**

**2.a** This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A) and OAC rule 3745-17-07(B)(11)(e), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B) and OAC rule 3745-17-07(B).

**2.b** The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

- overburden removal
- sand and gravel removal by front-end loader or track hoe
- overburden loading by front-end loader or dozer
- sand and gravel loading by front-end loader or track hoe

**2.c** The permittee shall employ best available control measures for the above-identified

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Issued

Facility ID: 1667050041

Emissions Unit ID: F001

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:

material handling operation(s)

control measure(s)

overburden removal

precautionary operating practice-minimization of disturbed land surface

sand and gravel removal by front-end loader or track hoe from front-end loader bucket

maintain low drop height  
  
high inherent moisture content

overburden loading by front-end loader or dozer in lieu of front-end loader when possible

move overburden with dozer  
  
maintain low drop height from front-end loader bucket  
  
high inherent moisture content of material process

sand and gravel loading by front-end loader or track hoe overloading

preventing haul vehicle  
  
maintain low drop height from front-end loader bucket  
  
high inherent moisture content of material processed

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

**2.d** For each material handling operation that is not adequately enclosed, the above-identified control measure(s) 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 measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

- 2.e Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- 2.f The 16.0 TPY PE limitation was established for PTI purposes to reflect the potential to emit for this emission unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

**B. Operational Restrictions**

None

**C. Monitoring and/or Recordkeeping Requirements**

- 1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
overburden removal	daily
sand and gravel removal by front-end loader or track hoe	daily
overburden loading by front-end loader or dozer	daily
sand and gravel loading by front-end loader or track hoe	daily

- 2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
- 3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District

Emissions Unit ID: **F001**

Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

4. 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 the control measure(s);
  - c. the dates the 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.

The information in 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency; and
  - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation  
20 percent opacity, as a three-minute average

Applicable Compliance Method

Compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

b. Emission Limitation

16.0 tons of PE per year

Applicable Compliance Method

Total Emissions = overburden removal + loading of sand and aggregate + loading of overburden + wind erosion

Overburden removal: Multiply the RACM emission factor (Ohio EPA RACM Table 2.1.4-3) of 0.004 pound of particulate emissions per ton of overburden removed by the maximum yearly amount of overburden removed, then divided by 2000.

Loading of sand and aggregate: Multiply RACM emission factor (Ohio EPA RACM Table 2.1.3-1) of 0.04 pound of particulate emissions per ton of material loaded by the maximum tons of material loaded per year. Then multiply the resulting uncontrolled emission rate by a control factor of 70% (1-0.70), then divided by 2000.

Loading of overburden: Multiply the AP-42 emission factor (AP-42, Table 11.9-4 (7/98)) of 0.037 pound of particulate emissions per ton of material loaded by the maximum tons of material loaded per year. Then multiply the resulting uncontrolled emission rate by a control factor of 70% (1-0.70), then divided by 2000.

Wind erosion: Multiply the RACM derived emission factor (Ohio EPA RACM section 2.4.1 equation 1) of 0.0536 ton of particulate emissions per acre per year by the number of barren acres at the site during the year.

**F. Miscellaneous Requirements**

None

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F002 - Aggregate Processing Plant - feeder, washing screen, sand classifier, and conveyors.	OAC rule 3745-31-05(A)(3)	13.7 tons of particulate emissions (PE) per year (See A.2.f below)  Use of reasonable available control measures (RACM) (See A.2.b below)
feed hopper	OAC rule 3745-31-05(A)(3)	Visible particulate emissions from the feed hopper shall not exceed twenty percent opacity, as a 3-minute average.
washing screen	OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the washing screen.
sand screw	OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the sand screw.
sand classifier	OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions from the sand classifier.
material handling operations: conveying, transfer points, and load-in to the feed hopper via truck dumping or front-end loader	OAC rule 3745-31-05(A)(3)	Visible particulate emissions from material loading into the feed hopper shall not exceed twenty percent opacity, as a 3-minute average.  Visible particulate emissions from the transfer points prior to the wash

screen shall not exceed ten percent opacity, as a 3-minute average.

There shall be no visible particulate emissions from the transfer points after the wash screen.

best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.c through A.2.e)

**2. Additional Terms and Conditions**

**2.a** This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A) and OAC rule 3745-17-07(B)(11)(e), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B) and OAC rule 3745-17-07(B).

**2.b** The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

<u>Emission Point</u>	<u>Equipment Type</u>	<u>Opacity Limit</u>	<u>Regulatory Basis for Limit</u>
material loading into feed hopper F1	front-end loader or track hoe/feed hopper	20%	OAC rule 3745-31-05
feed hopper F1 to belt conveyor C1	transfer point	10%	OAC rule 3745-31-05
belt conveyor C1 to washing screen S1	transfer point	10%	OAC rule 3745-31-05
washing screen S1 to belt	transfer point	no visible emissions	OAC rule 3745-31-05

conveyor C2

washing screen S1 to belt conveyor C3	transfer point	no visible emissions	OAC rule 3745-31-05
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washing screen S1 to belt conveyor C4	transfer point	no visible emissions	OAC rule 3745-31-05
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washing screen S1 to sand classifier SC1	transfer point	no visible emissions	OAC rule 3745-31-05
sand classifier SC1 to belt conveyor C5	transfer point	no visible emissions	OAC rule 3745-31-05
sand classifier SC1 to sand screw SCW1	transfer point	no visible emissions	OAC rule 3745-31-05
sand screw SCW1 to belt conveyor C6	transfer point	no visible emissions	OAC rule 3745-31-05

- 2.c** The permittee shall employ best available 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:

material handling operation(s)

control measure(s)

material loading into feed hopper

high inherent moisture content for the material being processed

transfer points

high inherent moisture content for the material being processed and employ wet screening

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.d** For each material handling operation that is not adequately enclosed, the above-identified control measure(s) 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 measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

Emissions Unit ID: F002

- 2.e Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- 2.f The 13.7 TPY PE limitation was established for PTI purposes to reflect the potential to emit for this emission unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

**B. Operational Restrictions**

None

**C. 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 particulate emissions of fugitive dust from the feed hopper, the washing screen, the sand screw, and the sand classifier. 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:

For the feed hopper:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to eliminate the visible emissions.

For the washing screen, the sand screw, and the sand classifier:

- a. the color of the emissions;
- b. the cause of the abnormal emissions;
- c. the total duration of any visible emission incident; and

- d. any corrective actions taken to eliminate the visible emissions.
2. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

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

3. The above-mentioned inspections shall be performed during representative, normal operating conditions.
4. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
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 the control measure(s);
  - c. the dates the 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.

The information in 5.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

**D. Reporting Requirements**

1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions of fugitive were observed from the primary screening operation and/or the wet sand screw and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit deviation reports that identify any of the following occurrences:

Emissions Unit ID: **F002**

- a. each day during which an inspection was not performed by the required frequency; and
  - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation

13.7 tons of PE per year

Applicable Compliance Method

Total Emissions = Feed Hopper Screening + Load-in to Feed Hopper + Primary Screening + Transfer and Conveying

Feed Hopper Screening: Multiply the Fire emission factor (US EPA - Fire 6.22, SCC 3-05-025-06) of 0.0315\* pound of particulate emissions per ton of product by the maximum annual amount of product. Then multiply the resulting uncontrolled emission rate by a control factor of 70% (1-.70), then divided by 2000.

Load-in to Feed Hopper: Multiply the AP-42 emission factor (AP-42, Table 11.19.2-2, dated 1/95) of 0.005 pound of particulate emissions per ton of loaded-in by the maximum annual amount of material loaded-in. Then multiply the resulting uncontrolled emission rate by a control factor of 70% (1-.70), then divided by 2000.

Primary Screening: Multiply the AP-42 emission factor (AP-42, Table 11.19.2-2, dated 1/95) of 0.0018\* pound of particulate emissions per ton of product by the maximum annual amount of product.

Transfer and Conveying: Multiply the AP-42 emission factor (AP-42, Table 11.19.2-2, dated 1/95) of 0.0001 pound of particulate emissions per ton of product by the maximum annual amount of product.

\*Emission factor was multiplied by 2.1 to convert the emission factor from PM-10 to total

suspended particulate.

b. Emission Limitation

20% opacity as a three-minute average

Applicable Compliance Method

OAC rule 3745-17-03(B)(3)

c. Emission Limitation

10% opacity for the transfer points prior to the wash screen

Applicable Compliance Method

OAC rule 3745-17-03(B)(3)

d. Emission Limitation

no visible particulate emissions

Applicable Compliance Method

OAC rule 3745-17-03(B)(4)

**F. Miscellaneous Requirements**

None

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F003 - Aggregate Storage Piles - sand and gravel storage piles, front-end loaders, and trucks.	OAC rule 3745-31-05(A)(3)	22.6 tons of particulate emissions (PE) per year (combined emissions from load-in, load-out, and wind erosion from all storage piles) (see Section A.2.g)
load-in and load-out of storage piles (see Section A.2.a for identification of storage piles)	OAC rule 3745-31-05(A)(3)	no visible emissions except for one minute in any hour  best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b, A.2.c and A.2.f)
wind erosion from storage piles (see Section A.2.a for identification of storage piles)	OAC rule 3745-31-05(A)(3)	no visible emissions except for one minute in any hour  best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.d through A.2.f)

**2. Additional Terms and Conditions**

- 2.a The storage piles that are covered by this permit and subject to the requirements of OAC

rule 3745-31-05 are listed below:

Washed Gravel Storage Piles #1 - 4

Washed Sand Storage Piles #1 - 3

- 2.b** The permittee shall employ best 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 permit application, the permittee has committed to maintain a low drop height from the conveyor and to use a variable height stacker in lieu of a front-end loader to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** 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.
- 2.d** The permittee shall employ best 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 permittee's permit application, the permittee has committed to maintain a high moisture and a low silt content of the material being stored, to maintain a low pile height as possible, and to maintain a low drop height from the stacker conveyor to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** 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.
- 2.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.

**2.g** The 22.6 tpy limitation was established for PTI purposes to reflect the potential to emit for this emission unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

**2.h** This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A) and OAC rule 3745-17-07(B)(11)(e), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B) and OAC rule 3745-17-07(B).

**B. Operational Restrictions**

None

**C. Monitoring and/or Recordkeeping Requirements**

1. Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
all	daily

2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
all	daily

3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
------------------------------------	--

all

daily

4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity 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.
5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
7. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented; and
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 7.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

#### **D. Reporting Requirements**

**303 Sand and Gravel**

PTI Application: 16-03007

Issued

Facility ID: 1667050041

Emissions Unit ID: F003

1. The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

**E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

22.6 tons of PE per year

Applicable Compliance Method:

Total Emissions = load-in + wind erosion + truck loading

Load-in: multiply the AP-42 derived emission factor (AP-42 Chapter 13.2.4, equation 1, dated 1/95) of 0.0011 pound of particulate emissions per ton of material loaded-in for sand by the maximum yearly tons of sand loaded-in plus multiply the AP-42 derived emission factor (AP-42 Chapter 13.2.4, equation 1, dated 1/95) of 0.002 pound of particulate emissions per ton of material loaded-in for gravel by the maximum yearly tons of gravel loaded-in.

Wind erosion: multiply the AP-42 emission factor (Ap-42, Table 11.12.-2 dated 10/86) of 3.5 pounds of particulate emissions per acre per day of material stored by the maximum acre per day times 365 days per year, then divided by 2000.

Truck loading: Multiply RACM emission factor (Ohio EPA RACM Table 2.1.3-1) of 0.04 pound of particulate emissions per ton of material loaded by the maximum tons of material loaded per year. Then multiply the resulting uncontrolled emission rate by a

control factor of 70% (1-0.70), then divided by 2000.

b. Emission Limitation:

no visible emissions except for one minute in any hour

Applicable Compliance Method:

Compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

**F. Miscellaneous Requirements**

None

**NEW SOURCE REVIEW FORM B**

PTI Number: 16-02097 Facility ID: 1667050041

FACILITY NAME 303 Sand and Gravel

FACILITY DESCRIPTION Sand and Gravel Operation - mineral extraction, processing, aggregate storage piles, roadways and parking. CITY/TWP Mantua

SIC CODE 1442 SCC CODE 3-05-025-99 EMISSIONS UNIT ID F001

EMISSIONS UNIT DESCRIPTION Mineral Extraction - scrapers, front-end loaders, track hoe, trucks, and/or dozer.

DATE INSTALLED 2000

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter			2.3		16.0
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with the terms and conditions of this permit.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No  
 OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? YES NO

IDENTIFY THE AIR CONTAMINANTS:

**NEW SOURCE REVIEW FORM B**

PTI Number: 16-02097 Facility ID: 1667050041

FACILITY NAME 303 Sand and Gravel

FACILITY DESCRIPTION Sand and Gravel Operation - mineral CITY/TWP Mantua

Emissions Unit ID: **F003**

SIC CODE 1442 SCC CODE 3-05-025-11 EMISSIONS UNIT ID F002

EMISSIONS UNIT DESCRIPTION Aggregate Processing Plant - feeder, washing screen, sand classifier, and conveyors.

DATE INSTALLED 11/2000

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter			2.0		13.7
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with the terms and conditions of this permit.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? YES NO

IDENTIFY THE AIR CONTAMINANTS:

**29 NEW SOURCE REVIEW FORM B**

PTI Number: 16-02097 Facility ID: 1667050041

FACILITY NAME 303 Sand and Gravel

FACILITY DESCRIPTION Sand and Gravel Operation - mineral CITY/TWP Mantua

Emissions Unit ID: **F003**

SIC CODE 1442 SCC CODE 3-05-025-02 EMISSIONS UNIT ID F003

EMISSIONS UNIT DESCRIPTION Aggregate Storage Piles - sand and gravel storage piles, front-end loaders, and trucks.

DATE INSTALLED not begun

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter			6.2		22.6
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with the terms and conditions of this permit.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No.

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? YES NO

IDENTIFY THE AIR CONTAMINANTS:

30 **NEW SC**

PTI Num

FACILITY

Emissions Unit ID: **F003** \_\_\_\_\_

FACILITY DESCRIPTION Sand and Gravel Operation - mineral extraction, processing, aggregate storage piles, roadways and parking.

CITY/TWP Mantua

**Ohio EPA Permit to Install Information Form** Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit **hard copy items to Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to **airpti@epa.state.oh.us**

Please fill out the following. If the checkbox does not work, replace it with an 'X'

	<u>Electronic</u>	<u>Additional information File Name Convention (your PTI # plus this letter)</u>	<u>Hard Copy</u>	<u>None</u>
<u>Calculations (required)</u>	<input checked="" type="checkbox"/>	0000000c.wpd	<input type="checkbox"/>	
<u>Modeling form/results</u>	<input type="checkbox"/>	0000000s.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>PTI Application (complete or partial)*</u>	<input type="checkbox"/>	0000000a.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>BAT Study</u>	<input type="checkbox"/>	0000000b.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Other/misc.</u>	<input type="checkbox"/>	0000000t.wpd	<input type="checkbox"/>	<input checked="" type="checkbox"/>

\* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

**NSR Discussion**

NONE

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

**Synthetic Minor Determination and/or**  **Netting Determination**  
Permit To Install **ENTER PTI NUMBER HERE**

- A. Source Description
- B. Facility Emissions and Attainment Status
- C. Source Emissions
- D. Conclusion

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

NONE

Please complete:

**3 NEW SOURCE REVIEW FORM B**

PTI Number: 16-02097

Facility ID: 1667050041

FACILITY NAME 303 Sand and Gravel

FACILITY DESCRIPTION Sand and Gravel Operation - mineral

CITY/TWP Mantua

Emissions Unit ID: **F003**

SUMMARY (for informational purposes only)

**TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

Pollutant

Tons Per Year

PE

52.3