State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

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MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

12/1/2009

Certified Mail

DAN GELET
BEST SAND COMPANY
PO BOX 87
11830 RAVENNA RD
CHARDON, OH 44024-7006

| | |
|---|---|
| No | TOXIC REVIEW |
| No | PSD |
| No | SYNTHETIC MINOR |
| No | CEMS |
| No | MACT |
| Yes | NSPS |
| No | NESHAPS |
| No | NETTING |
| No | MAJOR NON-ATTAINMENT |
| No | MODELING SUBMITTED |

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0228000079
Permit Number: P0105683
Permit Type: Administrative Modification
County: Geauga

Dear Permit Holder:

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

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, www.epa.ohio.gov/dapc, from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of $70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

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

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northeast District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page www.epa.ohio.gov/dapc.

Sincerely,

Michael W. Ahern

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

Cc: Ohio EPA-NEDO

**State of Ohio Environmental Protection Agency**
**Division of Air Pollution Control**

# FINAL

# Air Pollution Permit-to-Install and Operate

for

BEST SAND COMPANY

| | |
|---|---|
| Facility ID: | 0228000079 |
| Permit Number: | P0105683 |
| Permit Type: | Administrative Modification |
| Issued: | 12/1/2009 |
| Effective: | 12/1/2009 |
| Expiration: | 8/29/2018 |

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

# Air Pollution Permit-to-Install and Operate

for

BEST SAND COMPANY

**Table of Contents**

# Authorization

Facility ID: 0228000079
Application Number(s): A0038043
Permit Number: P0105683
Permit Description: Administrative Modification for P002: changeing control devices monitoring parameters based upon most recent stack test data. For P015: correcting throughput to 140 tons/hr.
Permit Type: Administrative Modification
Permit Fee: $200.00
Issue Date: 12/1/2009
Effective Date: 12/1/2009
Expiration Date: 8/29/2018
Permit Evaluation Report (PER) Annual Date: Apr 1 - Mar 31, Due May 15

This document constitutes issuance to:

BEST SAND COMPANY
11830 RAVENNA RD
Chardon, OH 44024

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

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

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087
(330)425-9171

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

# Authorization (continued)

Permit Number: P0105683
Permit Description: Administrative Modification for P002: changeing control devices monitoring parameters based upon most recent stack test data. For P015: correcting throughput to 140 tons/hr.

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

| | |
|---|---|
| **Emissions Unit ID:** | **P002** |
| Company Equipment ID: | Rotary Dryer |
| Superseded Permit Number: | P0104986 |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **P015** |
| Company Equipment ID: | P015 Rosin Dryer and Scalping Tower |
| Superseded Permit Number: | 02-22969 |
| 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 will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

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

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

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

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

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Northeast District Office in accordance with OAC

rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting 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 being permanently shut down without first applying for and obtaining a permit pursuant to 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. P002, Rotary Dryer**

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

A silica sand rotary dryer with a primary scalping screen, emissions are controlled by a wet scrubber, and a secondary screen with associated storage bins, transfer points, and bucket elevator, emissions are controlled by a Sly JP 7973 baghouse.

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| a. | OAC rule 3745-31-05 (A)(3) | Nitrogen Oxides ($NO_X$) emissions generated from this emissions unit shall not exceed 1.55 pounds per hour and 6.79 tons per year.<br><br>Particulate emissions from any stacks associate with this emissions unit shall not exceed 3.04 pounds per hour and 13.32 tons per year.<br><br>Visible particulate emissions from the stacks serving this emissions unit shall not exceed zero percent (0%) opacity as a six-minute average.<br><br>See b)(2)a and b)(2)b. |
| b. | OAC rule 3745-17-07 (A)(1) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | | rule 3745-31-05 (A)(3). |
| c. | OAC rule 3745-17-07 (B)(1) | See b)(2)c. |
| d. | OAC rule 3745-17-08 (B) | See b)(2)d. |
| e. | OAC rule 3745-17-11 | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3). |
| f. | 40 CFR Part 60, subpart UUU | See b)(2)e. |
| g. | 40 CFR Part 60, subpart OOO | See b)(2)f. |

(2) Additional Terms and Conditions

a. The emissions from the rotary dryer and primary scalping screen shall be vented to the wet scrubber at all times when this emissions unit is in operation.

b. The emissions from secondary scalping screen, storage bins No. 22, 23, and 24, and conveyors No. 4, 5, 6, and 7 shall be vented to the baghouse at all times when this emissions unit is in operation

c. In accordance with OAC rule 3745-17-07 (B)(11)(d), OAC rule 3745-17-07 (B)(1) shall not apply to any fugitive emissions unit which is exempted from the requirements of OAC rule 3745-17-08 (B).

d. The facility is not located at an Appendix A area of OAC rule 3745-17-08. In accordance with OAC rule 3745-17-08 (A)(1), this emissions unit is exempt from the requirements of OAC rule 3745-17-08 (B).

e. This emissions unit is exempt from the requirements of 40 CFR Part 60, subpart UUU, Standards of Performance for Calciners and Dryers in Mineral Industries, because this emissions unit was installed before April 23, 1986.

f. This emissions unit is exempt from the requirements of 40 CFR Part 60, subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plant, because this emissions unit was installed before August 31, 1983.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range for the pressure drop across the scrubber shall be greater than 15 inches of water, which was demonstrated compliance during the June 30, 2009 stack test, at all times while the rotary and/or the primary scalping screen are in operation.

(2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the scrubber water flow rate shall be maintained no less than 70 gallons of

water per minute, which was demonstrated compliance during the June 30, 2009 stack test, at all times while the rotary dryer and the primary scalping screen are in operation.

(3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range for the pressure drop across the baghouse JP-7973 is between 0.5 to 10.0 inches of water, which was demonstrated compliance during the June 30, 2009 stack test, at all times while the secondary scalping screen, storage bins No. 22, 23, and 24, and/or conveyor 4 – 7 are in operation.

(4) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in inches of water, gauge), the scrubber liquid flow rate (in gallons per minute), and the pressure drop across the baghouse (in inches of water) during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber and the scrubber liquid's flow rate on a daily basis, and the pressure drop across the baghouse on a weekly basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range or minimum limits established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment parameters within the acceptable range, or at or above the minimum limits specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date the corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop and flow rate readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

These range and/or limits for the pressure drops and liquid flow rate are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted range or limit for the pressure drops or liquid flow rate based upon information obtained during future performance tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(5) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions from each stack 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 name of the stack that the visible emissions are observed;

b. the color of the emissions;

c. the total duration of any visible emission incident; and

d. any corrective actions taken to eliminate the visible emissions.

e) Reporting Requirements

(1) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the wet scrubber during the 12-month reporting period for this/these emissions unit(s):

a. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber and/or the liquid flow rate was/were exceeded the applicable limit contained in this permit;

b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber;

c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the pressure drop and/or liquid flow rate into compliance with the appropriate range or limit contained in this permit, was determined to be necessary and was not taken; and

e. each incident of deviation described in "a" or "b" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

(2) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the baghouse during the 12-month reporting period for this emissions unit:

a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;

c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;

d. each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

(3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(5) above:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

b. any corrective actions taken to eliminate the visible particulate emissions.

(4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) above shall be determined in accordance with the following methods:

a. Emission Limitation: 1.55 lbs/hr of $NO_X$

Applicable Compliance Method:

Compliance shall be determined in accordance with the following:

$E_{NOx}$ = (MP)(EF)

where,

MP = the maximum process weight rate of this emissions unit = 50 tons/hr; and

EF = the emission factor = 0.031 lb/ton of sand processed, AP - 42, November 1995, §11.19.1 Sand and Gravel Processing, Table 11.19.1-1, Emission Factors for Industrial Sand and Gravel Processing.

If required, the permittee shall demonstrate compliance by emission testing in accordance with Method 7, 40 CFR Part 60, Appendix A.

b. Emissions Limitation: 3.04 lbs/hr of particulate

Applicable Compliance Method:

Compliance shall be determined based upon test method and procedures in accordance with f)(2) below.

c. Emission Limitation:

6.79 tons/yr of $NO_X$ and 13.32 tons/yr of particulate

Applicable Compliance Method:

The tons per year limitations were developed by multiplying the pound per hour limitations by the maximum operating schedule of 8,760 hours per year, and dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitations.

d. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed zero percent (0%) opacity as a six-minute average.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

(2) The permittee shall conduct emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted six (6) months prior to permit renewal.

b. The emission testing shall be conducted to demonstrate compliance with the allowable hourly mass emission rate for particulate from this emissions unit

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulate mass emission rate, Method 5 or Method 17 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA_approved test methods may be used with prior approval from the Ohio EPA. The test

methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency

g) Miscellaneous Requirements

(1) None.

## 2. P015, P015 Rosin Dryer and Scalping Tower

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

A Rosin Dryer, emissions are controlled by 2 cyclones and a wet scrubber in series, and a Rosin Scalping Screening Tower, emissions are controlled by a dust collector, with associated conveyors and storage bins and oversize piles.

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| a. | OAC rule 3745-31-05 | Nitrogen Oxides ($NO_X$) emissions generated from this emissions unit shall not exceed 4.03 pounds per hour and 17.65 tons per year.<br><br>Particulate emissions from any stacks associate with this emissions unit shall not exceed 44.90 tons per year.<br><br>Fugitive particulate emissions from this emissions unit shall not exceed 35.32 tons per year. |
| b. | OAC rule 3745-17-07 (A)(1) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR part 60, subpart OOO and subpart UUU. |
| c. | OAC rule 3745-17-07 (B) | See b)(2)a below. |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| d. | OAC rule 3745-17-08 | See b)(2)b below. |
| e. | OAC rule 3745-17-11 | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR part 60 subpart OOO and subpart UUU. |
| f. | 40 CFR Part 60, subpart OOO<br>(40 CFR 60.670 – 60.676) | See b)(2)c, b)(2)d, and b)(2)e below. |
| g. | 40 CFR Part 60 subpart UUU<br>(40 CFR 60.730 – 60.737) | See b)(2)f below. |

(2) Additional Terms and Conditions

a. In accordance with OAC rule 3745-17-07 (B)(11)(d), OAC rule 3745-17-07 (B)(1) shall not apply to any fugitive emissions unit which is exempted from the requirements of OAC rule 3745-17-08 (B).

b. The facility is not located at an Appendix A area of OAC rule 3745-17-08. In accordance with OAC rule 3745-17-08 (A)(1), this emissions unit is exempt from the requirements of OAC rule 3745-17-07 (B).

c. In accordance with 40 CFR §60.672 (e), any transfer point on a conveyor belt or screening operation, which is enclosed in a building, must comply with the following emission limits:

i. any stack emissions which:

(a) contain particulate matter in excess of 0.022 grain per dry standard cubic foot; and

(b) exhibit greater than 7 percent (7%) opacity.

ii. any fugitive emissions from any transfer point on belt conveyors, screen operation, bucket elevator, or any other affect facilities exhibit greater than 10 percent (10%) opacity.

d. In accordance with 40 CFR §60.672 (f), no owner or operator shall cause to be discharged into the atmosphere from any baghouse that controls emission from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent (7%) opacity.

e. Table 1 of subpart OOO of 40 CFR Part 60 – “Applicability of Subpart A to Subpart OOO” identifies which parts of the General Provisions in 40 CFR 60.1 – 60.19 apply.

f. In accordance with 40 CFR §60.732, no emissions shall be discharged into the atmosphere from the Rosin Dryer that contains particulate matter in excess of 0.025 grain per dry standard cubic foot.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and record keeping requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart OOO (40 CFR 60.670 – 60.676) and subpart UUU (40 CFR 60.730 – 60.737).

(2) In accordance with 40 CFR §60.764 (d), the owner or operate of the rosin dryer, who uses two (2) cyclones and a wet scrubber in series to comply with the mass emission limitation in b)(2)f above, shall install, calibrate, maintain, and operate monitoring devices that continuously measure and record the pressure loss of the gas stream through the scrubber and the scrubbing liquid flow rate to the scrubber. The pressure loss monitoring device must be certified by the manufacturer to be accurate within 5 percent of water column gauge pressure at the level of operation. The liquid flow rate monitoring device must be certified by the manufacturer to be accurate within 5 percent of design scrubbing liquid flow rate.

(3) In accordance with 40 CFR §60.735 (b), each owner or operator, who uses a wet scrubber to comply with limitation in b)(2)f above, shall determine and record once each day, from the recordings of the monitoring devices in d)(2) above, an arithmetic average over a 2-hour period of both the change in pressure of the gas stream across the scrubber and the flow rate of the scrubbing liquid.

(4) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range for the pressure drop across the Griffin Dust Collector is between 0.5 to 10.0 inches of water, which was demonstrated compliance during the on November 13, 2008 stack test, at all times while the scalping screen and/or conveyor 3 are in operation.

(5) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the Griffin Dust Collector (in inches of water) during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a weekly basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the range established in d)(4) above, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the Griffin Dust Collector's parameters within the acceptable range specified in d)(4) abovet, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date the corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

(6) This range of the pressure drops for Griffin Dust Collector are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted range for the pressure drops based upon information obtained during future performance tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

(1) The permittee shall comply with the applicable reporting requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart OOO (40 CFR 60.670 – 60.676) and subpart UUU (40 CFR 60.730 – 60.737).

(2) In accordance with 40 CFR §60.735 (a), records of the measurements required in d)(2) above shall be retained for at least 2 years.

(3) In accordance with 40 CFR §60.735 (c), each owner or operator of the Rosin Dryer shall submit written reports semiannually of exceedances of control device operating parameters required to be monitored by section b)(2)f above. For the purpose of these reports, exceedances are defined as follows:

a. All daily 2-hour average of the wet scrubber pressure drop determined as described in b)(2)f above that is less than 90 percent of the average value recorded according to November 13, 2008 stack test which demonstrated compliance with the particulate matter limitation in b)(2)f above.

b. Each daily wet scrubber liquid flow rate recorded as described in d)(3) above that is less than 80 percent or greater than 120 percent of the average value recorded according to November 13, 2008 stack test which demonstrated compliance with the particulate matter limitation in b)(2)f above.

(4) In accordance with 40 CFR §60.676 (j) and §60.735 (d), the requirements of sections d)(3), e)(2), and e)(3) above remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111 (c) of the Clean Air Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected facilities within the State will be relieved of the obligation to comply with this section provided that they comply with the requirements established by the State.

(5) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the Griffin Dust Collector during the 12-month reporting period for this emissions unit:

a. each period of time (start time and date, and end time and date) when the pressure drop across the Griffin Dust Collector was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the Griffin Dust Collector;

c. each incident of deviation described in “a” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

(6) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitations specified in b) above shall be determined in accordance with the following methods:

a. Emission Limitation: 0.022 gr/dscf from the stack of screening operation

Applicable Compliance Method:
The permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in f)(2) below.

b. Emission Limitation: 7% opacity from stack of screen operation

Applicable Compliance Method:
Compliance shall be determined by visible emission evaluations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

c. Emission Limitation: 10% opacity of fugitive emissions from any transfer points on belt conveyors, bucket elevator, and scalping screen operation

Applicable Compliance Method:
The permittee shall use Method 9 and procedures in 40 CFR Part 60, Appendix A, with the following addition:

i. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet);

ii. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

iii. The duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:

(a) There are no individual readings greater than 10 percent (10%) opacity; and

(b) There are no more than 3 readings of 10 percent (10%) for the 1-hour period.

d. Emission Limitation: 0.025 gr/dscf from Rosin Dryer operation

Applicable Compliance Method:
The permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in f)(2) below.

e. Emissions Limitation: 44.90 tons/yr of Particulate from stack

Applicable Compliance Method:
The tons per year emission limitation was developed based upon the following equation:

$E = [(E_d)(F_d) + (E_s)(F_s)](60 \text{ min/hr})(8{,}760 \text{ hrs/yr})/(2{,}000 \text{ lbs/ton})(7{,}000 \text{ grs/lb})$

where,

E = Maximum annual particulate emissions from stacks, in tons per year;
$E_d$ = The allowable particulate emissions from Rosin Dryer stack = 0.025 gr/dscf;
$F_d$ = Gas flow rate for Rosin Dryer stack = 46,605 dscf/min;
$E_s$ = The allowable particulate emissions from Scalping Screen operation stack = 0.022 gr/dscf;
$F_d$ = Gas flow rate for Scalping Screen operation stack = 1,400 dscf/min;

Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

f. Emission limitation: 35.32 tons/yr of fugitive

Applicable Compliance Method:

To determine the actual worst case fugitive particulate emissions, the following equation shall be used:

$E_f$ = (MP)(EF)(TP)(OT)/(2,000 lbs/ton)

Where,

$E_f$ = Fugitive particulate emissions, in tons per year;
MP = the maximum process weight rate of this emissions unit = 140 tons/hr; and
EF = the emission factors = 0.0064 lb/ton of sand processed, for activities of SCC Code 30502503, FIRE Version 6.25;
TP = Total transfer points = 9; and
OT = Annual operating hours = 8,760 hours per year maximum.

(2) The permittee shall conduct emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted six (6) months prior to permit renewal.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate emissions:

i. 0.025 grain per dry standard cubic foot (gr/dscf) from Rosin Dryer stack; and

ii. 0.022 grain per dry standard cubic foot (gr/dscf) from Scalping Screen operation stack.

c. The following test method shall be employed to demonstrate compliance with the allowable mass emission rates:

i. for Rosin Dryer:

(a) Method 5 shall be used. The sample time and volume for each test run shall be at least 2 hours and 1.70 dscm; and

(b) During the initial performance test of the wet scrubber, the owner or operator shall use the monitoring devices of d)(2) above to determine the average change in pressure of the gas stream

across the scrubber and the average flow rate of the scrubber liquid during each of the particulate matter runs. The arithmetic averages of the three runs shall be used as the based line average values for the purposes of e)(2) above.

ii. for Scalping Screen operation:

(a) Method 5 or Method 17. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 $^{0}$C (250 $^{0}$F), to prevent water condensation on the filter.

(b) If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting any rescheduled performance test required in this section, the owner or operator of this emissions unit shall submit a notice to the Administrator at least 7 days prior to any rescheduled performance test.

d. The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

No later than 30 days prior to the proposed test date, the permittee shall submit an "Intent to Test" notification to appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time and date of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the tet may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

(3) A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal fo the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

(1) None.