



State of Ohio Environmental Protection Agency

RECEIVED

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P.O. Box 1049
Columbus, OH 43216-1049

NOV 14 2005

CANTON CITY HEALTH DEPT.
AIR POLLUTION DIVISION

RE: FINAL PERMIT TO INSTALL

STARK COUNTY

Application No: 15-01607

Fac ID: 1576051149

DATE: 11/8/2005

Ironrock Capital Incorporated
Philip McGuinness
PO Box 9240 1201 Millerton Street S
Canton, OH 447119240

CERTIFIED MAIL

TOXIC REVIEW
PSD
SYNTHETIC MINOR
CEMS
MACT
NSPS
NESHAPS
NETTING
MAJOR NON-ATTAINMENT
MODELING SUBMITTED
GASOLINE DISPENSING FACILITY

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
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

Canton LAA



**Permit To Install
Terms and Conditions**

**Issue Date: 11/8/2005
Effective Date: 11/8/2005**

FINAL PERMIT TO INSTALL 15-01607

Application Number: 15-01607

Facility ID: 1576051149

Permit Fee: **\$500**

Name of Facility: Ironrock Capital Incorporated

Person to Contact: Philip McGuinness

Address: PO Box 9240 1201 Millerton Street SE
Canton, OH 447119240

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1201 Millerton Street SE
Canton, Ohio**

Description of proposed emissions unit(s):

Modification to F004 (Dump Truck) and P012 (Grinding, Screening, and Storage of Shale and Fireclay) emission limitations based on maximum capacity available.

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. State and Federally Enforceable Permit-To-Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. 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.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written

reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized 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 or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. 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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit-To-Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 ninety (90) days after commencing operation of the source(s) covered by this permit.

11. 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.

12. 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.

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable 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 state-only required 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 (i.e., postmarked) quarterly, 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. 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.

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit 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.

5. Construction of New Sources(s)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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.

6. 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.

7. 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).

8. Construction Compliance Certification

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. 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	25.8

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

1. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.
2. Ironrock Capital, Inc. is a major stationary source for PSD with respect to SO₂.

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

OAC rule 3745-17-07(B)	emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-08(B)	See A.1.2.b below.
OAC rule 3745-17-11(B)	The control measures specified in this rule are equal to or less stringent than the control measures established pursuant to OAC rule 3745-31-05(A)(3).
	See A.1.2.d below.

2. Additional Terms and Conditions

- 2.a** During the process of receiving materials (e.g. truck dumping and conveying to the building for processing), the following additional terms and conditions apply:
 - i. While dumping the raw shale plus grog and the raw fireclay plus grog into the receiving hoppers, there shall be no visible particulate emissions of fugitive dust from the three-sided partial enclosures which exceed 10% opacity as a 3-minute average.
 - ii. The raw shale plus grog and raw fireclay plus grog truck dump hoppers shall be serviced by water sprays and a fabric filter that has a collection efficiency, based on good engineering design, that is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the points of capture. The truck dump receiving hoppers shall be serviced by the truck dump fabric filter, DCF004. The fabric filter shall be vented inside the building. The outlet of the fabric filter shall have no visible emissions.
 - iii. Any belt conveyors, except for the apron feed conveyors, that are not contained in a totally enclosed building shall be covered.
- 2.b** The visible particulate emissions of fugitive dust resulting from the operation of the apron feed conveyor and the transfer of raw materials to existing conveyors shall not exceed 20% opacity as a 3-minute average.
- 2.c** For the following operations associated with this emissions unit, the best available control measures shall be:
 - i. For truck dumping operations, partial enclosures shall be used for each of the raw shale plus grog and raw fireclay plus grog truck dump receiving hoppers with water sprays in each partial enclosure for the control of particulate emissions from each of the truck dump receiving hoppers and a fabric filter (DCF004) with a collection efficiency, based on good engineering

design, sufficient to minimize or eliminate visible emissions of fugitive dust at the points of capture.

- ii. For the apron feed conveyors, except for the portion of the conveyor that receives the raw shale plus grog and the raw fireclay plus grog during truck dumping operations, the conveyors shall be located inside a building (total enclosure);
- iii. For the transfer points from the apron feed conveyor #1 for raw shale plus grog and apron feed conveyor #35 for raw fireclay plus grog to the existing conveyors, the transfer points shall be located inside a building (total enclosure); and
- iv. Except for the apron feed conveyors, for any belt conveyors not in a building, the belt conveyors shall be covered so as to minimize or eliminate visible particulate emissions of fugitive dust from the belt conveyors to the extent possible with good engineering design.

2.d The raw shale plus grog and the raw fireclay plus grog truck dump receiving hoppers, the apron feed conveyors #1 and #35, and the transfer points from the apron feed conveyors #1 and #35 to the existing conveyors are subject to OAC rule 3745-17-11. The particulate emission limitation specified in this applicable rule is less stringent than the particulate emission limitation established pursuant to the best available technology (BAT) requirement specified in OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The permittee shall be limited to receiving, crushing, grinding, and screening 200,000 tons of raw material per calendar year in emissions units F004, P011, and P012.
2. The pressure drop across the fabric filter (DCF004) shall be maintained within the range of 1 to 4 inches of water, while the emissions unit F004 is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain weekly records of the following:
 - a. The amount of material unloaded (received) in this emissions unit, in tons; and
 - b. The total amount of material received, crushed, ground, and screened in emissions units F004, P011, and P012, in tons.
2. The permittee shall perform weekly visible emissions checks for the following equipment and operations, when the emissions unit is in operation and when the weather conditions allow:

- a. For each receiving hopper, check for any visible particulate emissions of fugitive dust outside the 3-sided enclosure serving this truck dumping operation, when trucks are dumping raw materials into the hoppers;
 - b. For the apron feed conveyors #1 and #35, check for any visible particulate emissions of fugitive dust around the conveyors, when the conveyors are transporting the raw materials;
 - c. For the apron feed conveyors #1 and #35 transfer points, check for any visible particulate emissions of fugitive dust at the transfer points, when the conveyors are transporting the raw materials; and
 - d. For each stack, check for any visible particulate emissions, when the equipment the stack is serving is in operation. 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:
 - i. the color of the emissions;
 - ii. whether the emissions are representative of normal operations;
 - iii. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - iv. the total duration of any visible emissions incident; and
 - v. any corrective actions taken to eliminate the visible emissions.
3. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the fabric filter while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the fabric filter on a daily basis.
 4. The permittee shall maintain a daily record of hours of operation for this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that identify all days during which any visible particulate emissions were observed at any of the locations identified in section A.III.2 and describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.
2. The permittee shall submit annual reports that include the total amount of raw materials processed (unloaded), in tons, and the total particulate emissions, in tons for this

emissions unit during the previous calendar year. These reports shall be submitted by January 31 of each year.

3. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the fabric filter did not comply with the allowable range specified above.
4. The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Terms and Conditions A.1.c.ii.

V. Testing Requirements

1. Compliance with the emissions limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

1.50 pounds of particulate emissions per hour from the truck dump fabric filter (DCF004)

Applicable Compliance Method:

Compliance may be demonstrated using the number of tons of raw materials received and the number of operating hours per year (obtained from the required records described in section A.III.1 of this permit), the average size of a truckload (20 tons of raw material per truckload), the emission factor (estimated by the permittee) from PTI 15-1146 (1.0 pound of particulate emissions per truck load), the control efficiency of the watering (70% efficient), and the truck dump fabric filter DCF004 collection efficiency (50% efficient) to calculate the pounds of particulate emissions per hour as shown below.

Note: If required, the permittee shall demonstrate compliance with this emissions limitation through emissions tests performed in accordance with Methods 1 through 5 of 40 CFR Part 60 Appendix A.

Shale:

Storage capacity of Shale from closest mine storage Pit is 1000 tons. The maximum number of deliveries in one week is 50 using 5 trucks per day, 10 loads per truck, and 20 operating hours to unload 50 truckloads of raw shale plus grog.

PE per hour = (((1000 tons of raw shale plus grog received per 50 truckloads) / (20 tons of raw shale plus grog per truck load)) x (1.0 pound of particulate emissions per truck load) x (1-0.70) x (1-0.50)) / (20 hours of unloading 50 truckloads)

PE per hour = 0.375 pound of particulate emissions per hour

Fireclay:

Storage capacity of Fireclay from closest mine storage Pit is 1200 tons. The maximum number of deliveries in one week is 60 using 6 trucks per day, 10 loads per truck, and 10 operating hours to unload 60 truckloads.

PE per hour = (((1200 tons of raw shale plus grog received per 60 truckloads) / (20 tons of raw shale plus grog per truck load)) x (1.0 pound of particulate emissions per truck load) x (1-0.70) x (1-0.50)) / (10 hours of unloading 60 truckloads)

PE per hour = 0.90 pound of particulate emissions per hour

Total Emissions = (Shale + Fireclay) pounds of particulate emissions per hour

Total Emissions = (0.375 + 0.90) = 1.275 pounds of particulate emissions per hour

1.b Emission Limitation:

0.80 ton of particulate emissions per year from the truck dump fabric filter (DCF004)

Applicable Compliance Method:

Compliance can be achieved by estimating the maximum number of operating hours based on the previous year's operating hours and tons of raw materials received. In 2004, the actual operating hours were 1689.8 and the tons of raw materials received were 51,000. Using the ratio of the tons of materials received in 2004 to the maximum number of tons that can be received, the operating hours for receiving the maximum amount of raw materials can be estimated as shown below.

((200,000 tons of raw materials max.) x (1689.8 operating hours in 2004)) / (51,000 tons of raw materials received in 2004) = 6627 hours to receive 200,000 tons of raw materials

Compliance may be demonstrated using the number of tons of raw materials received and the number of operating hours per year (obtained from the required records described in section A.III.1 of this permit), the maximum number of tons of raw materials that can be processed (200,000 tons of raw materials per year), the control efficiency of the watering (70% efficient), the truck dump fabric filter DCF004 collection efficiency (50% efficient), and the emission limitation of 1.5 pounds of particulate emissions per hour to calculate the tons of particulate emissions per year as shown below.

PE per year = ((1.5 pounds of particulate emissions per hour) x (6627 hours of maximum operation) x (1-0.70) x (1-0.50)) / (2000 pounds)

PE per year = 0.745 ton of particulate emissions per year

1.c Emission Limitation:

During the process of dumping raw materials into the truck dump receiving hoppers, there shall be no visible particulate emissions of fugitive dust, which exceed 10% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emissions observations performed in accordance with the requirements specified in Method 9 of 40 CFR Part 60, Appendix A.

1.d Emission Limitation:

No visible particulate emissions at the outlet of the fabric filter (DCF004).

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the requirements specified in Method 22 of 40 CFR Part 60 Appendix A.

1.e Emission Limitation:

The visible particulate emissions of fugitive dust resulting from the operation of the apron feed conveyors and the transfer of raw materials to existing conveyors shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the requirements specified in Method 9 of 40 CFR Part 60 Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3).

2. The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:

- a. The emissions testing shall be conducted on an annual basis.
- b. The emissions testing shall be conducted to demonstrate compliance with the visible particulate emission limitation (10% opacity as a 3-minute average) for the unloading operations at the truck dump receiving hoppers.
- c. The following test method shall be employed to demonstrate compliance with the visible particulate emissions limitation: Method 9 of 40 CFR Part 60, Appendix A.

- 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 Canton City Health Department, Air Pollution Control Division with the following requirements.
 - i. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. 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 or people 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 Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emissions test(s).
 - ii. Personnel from the appropriate Canton City Health Department, Air Pollution Control Division 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.
 - iii. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or people responsible for the test(s) and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

VI. Miscellaneous Requirements

1. Note that this emissions unit is not subject to 40 CFR Part 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants as indicated in 40 CFR 60.672(d).

B. State Only Enforceable Section

I. 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>

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>
<p>This emissions unit modification consists of secondary grinding, screening, conveying, and storing of crushed shale plus grog (16 TPH processing capacity) and crushed fireclay plus grog (21 TPH processing capacity) which includes (1) loading of crushed shale plus grog onto belt conveyor #6a using a front end loader; (2) secondary grinding of crushed shale with a dry grinding pan and screening with 180 square feet of heated Vibro Screens with recycle and a BaCO₃ feeder; (3) loading of crushed fireclay plus grog onto belt conveyor #1 using a front-end loader; (4) grinding of crushed fireclay plus grog with hammer mill grinder, screening with 208 square feet of heated Vibro Screens with recycle and a BaCO₃ feeder; (5) storing of ground & screened shale plus grog and</p>	<p>OAC rule 3745-31-05 (supercedes PTI 15-1146)</p> <p>40 CFR Part 60, Subpart OOO</p> <p>OAC rule 3745-17-07(B)(1)</p> <p>OAC rule 3745-17-08(B)</p>	<p>25 tons of particulate emissions per year from the totally enclosed buildings</p> <p>Compliance with this rule shall also include compliance with the requirements specified in 40 CFR Part 60 Subpart OOO.</p> <p>See A.I.2.a below.</p> <p>See A.I.2.b below.</p> <p>See A.I.2.c below.</p> <p>See A.I.2.d below.</p>

ground & screened fireclay plus grog in surge tanks with load-in using belt conveyors; and (6) an interconnecting belt #22 for shale plus grog and an interconnecting belt #33 for fireclay plus grog, which are not enclosed in a building but totally covered.

The secondary grinding, screening, conveying, and storage of shale plus grog and fireclay plus grog operations are independent of each other, contained in separate areas of the building, and may run simultaneously. For the shale operations, the emissions unit is serviced by the 28,000 cfm fabric filter (DCP012s). For the fireclay operations, the emissions unit is serviced by the 28,000 cfm fabric filter (DCP012c). Both fabric filters are vented inside their respective areas of the building.

These terms and conditions supercede the terms and conditions in PTI #15-01146.

2. Additional Terms and Conditions

- 2.a** The following are the additional PTI 15-1146 best available technology (BAT) requirements:
- i. The grinding, screening, and storage operations (including the load-in and load-out of materials using a front-end loader) shall take place within totally enclosed buildings.

- ii. The grinding of shale plus grog in the dry grinding pan, screening with 180 square feet of heated Vibro Screens, the storage of the ground shale plus grog, all conveyors except #6a, #6b, #7, and #22, conveyor transfer points except those associated with the previously listed conveyors, and the BaCO₃ feeder shall be serviced by the 28,000 cfm fabric filter DCP012s, which is vented inside the building. The grinding of fireclay plus grog in the hammer mill grinder, screening with 208 square feet of heated Vibro Screens, the storing of ground fireclay plus grog, all conveyors except #1, #2, #3, and #33 conveyor transfer points except those associated with the previously listed conveyors, and the BaCO₃ feeder shall be serviced by the 28,000 cfm fabric filter DCP012c, which is vented inside the building. These fabric filters shall have capture efficiencies sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the points of capture to the extent possible with good engineering design.
 - iii. Conveyors shall be the only affected operating systems, which are not enclosed within a building. Any belt conveyors, which are not contained within a totally enclosed building, shall be covered.
 - iv. There shall be no vents into the ambient air from the buildings that contain this emissions unit.
 - v. For the load-in of ground materials using the front-end loader, the drop height from the front-end loader shall be minimized.
- 2.b** The following are the applicable emissions limitations and control requirements from 40 CFR Part 60, Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants (terms are defined in 40 CFR Part 60).
- i. There shall be no visible fugitive emissions which exhibit greater than 10% opacity as a 6-minute average for any conveyor belts not enclosed in a building.
 - ii. Requirements for emissions from affected facilities enclosed in buildings: there shall be no visible fugitive emissions escaping from the buildings housing the affected facilities.
- 2.c** The visible particulate emission limitation for fugitive dust required in OAC rule 3745-17-07(B)(1) is less stringent than the visible fugitive emissions limitation established in 40 CFR Part 60, Subpart OOO.
- 2.d** For all the operations, property, and/or equipment that emit fugitive dust (particulate emissions which do not exit a stack), reasonably available control measures (RACM) shall be utilized to minimize or eliminate visible emissions of fugitive dust. The permittee shall comply with the BAT and 40 CFR Part 60, Subpart OOO requirements of this permit in order to comply with the RACM requirements of this permit.

II. Operational Restrictions

1. The pressure drop across the fabric filters DCP012s and DCP012c servicing this emissions unit shall be maintained in the range of 3 to 5 inches of water gauge, while this emissions unit is in operation.
2. The permittee shall be limited to receiving, crushing, grinding, and screening 200,000 tons of raw material per calendar year in emissions units F004, P011, and P012.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across both fabric filters, while this emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the fabric filters on a daily basis.
2. The permittee shall perform weekly visible emissions checks for the following equipment and operations, when the emissions unit is in operation and when weather conditions allow:
 - a. The interconnecting belt #22 for shale plus grog and the interconnecting belt #33 for fireclay plus grog, which are totally covered and not enclosed in any building, check for any visible fugitive emissions around the conveyors when they are transporting materials;
 - b. For the following operations, property, and/or equipment that are all enclosed in buildings, the shale plus grog dry grinding pan and associated screens, the fireclay plus grog hammer mill grinder and associated screens, the BaCO₃ feeders, belt conveyors inside the buildings, and the storage tanks for ground shale plus grog and for ground fireclay plus grog with continuous loading by belt conveyors, check for any visible particulate emissions of fugitive dust escaping from the buildings; and
 - c. The presence or absence of any visible fugitive emissions (determined in accordance with sections A.III.2.a and A.III.2.b above) shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
 - i. the color of the emissions;
 - ii. whether the emissions are representative of normal operations;
 - iii. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

1.c Emission Limitation:

There shall be no visible particulate emissions of fugitive dust escaping from the totally enclosed buildings housing the affected facilities.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in Method 22 of 40 CFR Part 60, Appendix A, the procedures specified in 40 CFR Part 60.675(d), and section A.III.2 of this permit.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted on an annual basis.
- b. The emission testing shall be conducted to demonstrate compliance with the visible particulate emission limitations for fugitive dust specified in sections A.I.2.b.i and A.I.2.b.ii.
- c. The following test methods shall be employed to demonstrate compliance with the visible particulate emission limitations:
 - i. for the visible fugitive emission limitation, which includes a percent opacity in section A.I.2.b.i of this permit, Method 9 of 40 CFR Part 60 Appendix A; and
 - ii. for the visible fugitive emission limitation, which states no visible fugitive emissions in section A.I.2.b.ii of this permit, Method 22 of 40 CFR Part 60, Appendix A as described in 40 CFR Part 60.675(d).

Note: Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division.
 - i. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. 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 or people 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

Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emissions test(s).

- ii. Personnel from the appropriate Canton City Health Department, Air Pollution Control Division 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.
- iii. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or people responsible for the test(s) and submitted to the Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None