



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
MARION COUNTY**

**CERTIFIED MAIL**

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 03-13966**

**DATE: 10/7/2003**

Tri-County Limestone Company  
Katherine Hanna  
301 Frank Road  
Columbus, OH 43207

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, Supervisor  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: USEPA

NWDO



**Permit To Install  
Terms and Conditions**

**Issue Date: 10/7/2003  
Effective Date: 10/7/2003**

**FINAL PERMIT TO INSTALL 03-13966**

Application Number: 03-13966  
APS Premise Number: 0351000178  
Permit Fee: **\$3400**  
Name of Facility: Tri-County Limestone Company  
Person to Contact: Katherine Hanna  
Address: 301 Frank Road  
Columbus, OH 43207

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**4664 Hardin-Marion Road North  
Kenton, Ohio**

Description of proposed emissions unit(s):  
**Aggregate Processing Plant, Storage Piles, Mineral Extraction and (2) Diesel Fired Generators.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

## Part I - GENERAL TERMS AND CONDITIONS

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

#### 1. Compliance Requirements

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

#### 2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

#### 3. Records Retention Requirements

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

#### 4. Inspections and Information Requests

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

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

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

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

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

**Tri-County Limestone Company**  
**PTI Application: 03-13966**  
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Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

**10. Public Disclosure**

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

**11. Applicability**

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

**12. Best Available Technology**

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

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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

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#### 14. Construction Compliance Certification

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

#### 15. Fees

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

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

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
Fugitive PE	24.87
NOx	46.38
CO	23.05
OC	2.73
PE	1.44
SO <sub>2</sub>	7.35

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F002 - 400 TPH aggregate processing plant including primary and secondary crushing and screening and conveying (Modification of PTI #03-13430 issued on August 3, 2000 to allow for an increase in production)	OAC rule 3745-31-05(A)(3)	5.78 TPY fugitive PE
		20% opacity, as a 3-minute average for front-end loader dumping into feeder (for the primary crusher ) (see A.2.g)
		Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.2.a through A.2.c)
	OAC rule 3745-17-07(B)	See A.2.d
	OAC rule 3745-17-08(B)	See A.2.e
	40 CFR, Part 60, Subpart OOO	See A.2. f
		Visible Emission Restrictions (see A.2.g)

**2. Additional Terms and Conditions**

- 2.a The permittee shall employ best available control measures for the above-identified material handling operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee’s permit application, the permittee has committed to perform the following control measures to

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Tri-Co

PTI A

Issued: 10/7/2003

Emissions Unit ID: **F002**

ensure compliance:

<u>material handling operation</u>	<u>control measure(s)</u>
primary crushing and screening moisture content (>1.5%) (see A.2.b)	water sprays, if necessary, and inherent
secondary crushing and screening A.2.b)	inherent moisture content (>1.5%) (see
loading and unloading (>1.5%) (see A.2.b)	reduced drop height and inherent moisture content
transfer points	water sprays, if necessary, and inherent moisture content (>1.5%) (see A.2.b)

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

- 2.b** For each material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures is unnecessary.
- 2.c** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- 2.d** The requirements of this rule also include compliance with OAC rule 3745-17-07(B), OAC rule 3745-17-08(B) and CFR 40 Part 60, Subpart OOO.
- 2.e** This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.f** This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08 (it is located in Marion County). Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
- 2.g** Visible particulate emissions from the aggregate processing equipment included under this

permit shall not exceed the following opacity restrictions:

<b>Emission Point (Company ID)</b>	<b>Equipment Type</b>	<b>Opacity Limit as a 6-minute average, unless otherwise specified</b>	<b>Regulatory Basis for Limit</b>
Front End Loader to Feed Hopper	Transfer Point	20% opacity as a 3-minute average	OAC 3745-31-05(A)(3)
Feed Hopper to Grizzly Feeder	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Primary Crusher Inlet and Outlet	Crusher Inlet and Outlet	15%	40 CFR, Part 60, Subpart OOO
304 Cross Conveyor to 304 Transfer Belt	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
304 Transfer Belt to 304 Stacker	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Pan Feeder to Crusher Take-Out Belt - "C1"	Crusher Outlet	15%	40 CFR, Part 60, Subpart OOO
Crusher Take-Out Belt - "C1" to Field Conveyor - "C2"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Field Conveyor - "C2" to Primary Screen	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Primary Screen	Screen	10%	40 CFR, Part 60, Subpart OOO
Primary Screen to Cross Conveyor - "C4"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Cross Conveyor - "C4" to 1s/2s/4s Stacker	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Primary Screen to Cross Conveyor - "C5"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Cross Conveyor - "C5" to Transfer Conveyor - "C10"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Transfer Conveyor - "C10" to 57s Stacker - "C11"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Primary Screen to Crusher Feed Belt - "C3"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Crusher Feed Belt - "C3" to Secondary Crusher	Crusher Inlet	15%	40 CFR, Part 60, Subpart OOO
Secondary Crusher	Crusher	15%	40 CFR, Part 60, Subpart OOO
Secondary Crusher to Crusher Take-Out Belt - "C7"	Crusher Outlet	15%	40 CFR, Part 60, Subpart OOO

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Crusher Take-Out Belt - "C7" to Crusher Return Belt - "C8"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Crusher Return Belt - "C8" to Primary Screen	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Primary Screen to Under Screen Conveyor - "C6"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Under Screen Conveyor - "C6" to Stacker Conveyor/Secondary Screen Feed Belt - "C12"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Stacker Conveyor/Secondary Screen Feed Belt - "C12" to Secondary Screen	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Secondary Screen	Screen	10%	40 CFR, Part 60, Subpart OOO
Secondary Screen to 89S Transfer Belt - "C15"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
89S Transfer Belt - "C15" to 89s Stacker - "C19"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Secondary Screen to Under Screen Conveyor - "C16"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Under Screen Conveyor - "C16" to 10s Transfer Belt - "C20"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
10s Transfer Belt - "C20" to 10s Stacker - "C21"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Secondary Screen to 9s Transfer Belt - "C14"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
9s Transfer Belt - "C14" to 9s Stacker	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
Secondary Screen to 8s Transfer Belt - "C13"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO
8s Transfer Belt - "C13" to 8s Stacker - "C17"	Transfer Point	10%	40 CFR, Part 60, Subpart OOO

- 2.h** The application and enforcement of the provisions of NSPS, as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements for 40 CFR Part 60 are also federally enforceable.

**B. Operational Restrictions**

1. The permittee shall not exceed 1,000,000 tons per year of aggregate processed in emissions unit F002. This restriction is based on the aggregate throughput of the primary crusher.

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

1. The permittee shall maintain monthly records of the amount (tons per month and total tons, to date, for the calendar year) of aggregate processed through the primary crusher of emissions unit F002.
2. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

Material Handling Operations  
All

Minimum Inspection Frequency  
Once During Each Day of Operation

3. The above-mentioned inspections shall be performed during representative, normal operating conditions.
4. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
5. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
  - c. the dates the control measure(s) was (were) implemented; and
  - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

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

#### D. Reporting Requirements

1. The permittee shall submit an annual report which identifies the annual amount of aggregate processed in emissions unit F002. This report shall be submitted by January 31 of each year.
2. The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency; and
  - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
3. The permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in 40 CFR, Part 60, Subpart OOO, including the reports of opacity observations using Method 9 to demonstrate compliance with this subpart.
4. The permittee shall submit the following information for each piece of equipment that is replaced by a piece of equipment having the same function as the existing facility:
  - a. for a crusher:
    - i. the rated capacity, in tons per hour, of the existing facility being replaced, and
    - ii. the rated capacity, in tons per hour, of the replacement equipment; and
  - b. for a screen:
    - i. the rated capacity, in tons per hour, of the existing facility being replaced, and
    - ii. the rated capacity, in tons per hour, of the replacement equipment; and
  - c. for a conveyor belt:
    - i. the width of the existing belt being replaced, and
    - ii. the width of the replacement conveyor belt.

The notification shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of after the equipment replacement.

5. Pursuant to the general provisions of NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times for this emissions unit:
  - a. construction date (no later than 30 days after such date);
  - b. actual start-up date (within 15 days after such date); and
  - c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit  
Lazarus Government Center  
P.O. Box 1049  
Columbus, OH 43216-1049

and

Ohio EPA, Northwest District Office  
347 North Dunbridge Road  
Bowling Green, OH 43402

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

1. The permittee shall conduct, or have conducted, emission testing for all transfer points, screens and crushers of emissions unit F002.
2. Testing shall be conducted in accordance with the provisions of 40 CFR Part 60, Subpart A, Section 60.8 and 40 CFR Part 60, Subpart OOO, Section 60.675.
3. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, by not later than 180 days after initial startup of such facility and at such other times as may be required by the Ohio Environmental Protection Agency, Division of Air Pollution Control. The emission testing shall be conducted to demonstrate compliance with the allowable visible emission rates for particulate emissions.
4. The following test methods shall be employed to demonstrate compliance with the allowable

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**Emissions Unit ID: F002**

visible emissions rates:

- a. Method 9 of 40 CFR Part 60, Appendix A shall be used to determine opacity.

5. The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Division of Air Pollution Control. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's air agency's refusal to accept the results of the emission tests.
6. Personnel from the Ohio EPA District Office's 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 unit and /or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Division of Air Pollution Control within 30 days following completion of the tests.
7. Compliance with the emission limitations in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emission Limitation: 5.78 TPY fugitive PE  
  
Applicable Compliance Method: To demonstrate compliance with the annual limitation, the following equation shall be used: Total Emissions = S crushing\* + screening\*\* + transfer points\*\*\*  
  
\*Crushing: For each crusher, multiply the AP-42 emission factor of 0.00059 lb PE/ton (Section 11.19.2 - 1/95) by the maximum annual throughput of 1,000,000 tons and divide by 2000.  
  
\*\*Screening: For each screen, multiply the AP-42 emission factor of 0.00084 lb PE/ton (Section 11.19.2 - 1/95) by the maximum annual throughput of 1,000,000 tons and divide by 2000.  
  
\*\*\*Transfer Points: For each transfer point, multiply the AP-42 emission factor of 0.000048 lb PE/ton (Section 11.19.2 - 9/95) by the maximum annual throughput of 1,000,000 tons and divide by 2000.
  - b. Emission Limitation: 20% opacity, as a 3-minute average for front-end loader dumping

into the feed hopper (for primary crusher )

Applicable Compliance Method: If required, compliance shall be demonstrated using Method 9 of 40 CFR, Part 60, Appendix A.

- c. Emission Limitation: The permittee shall not cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15% opacity.

Applicable Compliance Method: Compliance shall be demonstrated using Method 9 of 40 CFR, Part 60, Appendix A, and the procedures in 40 CFR, Part 60, Subpart OOO as specified in sections E.1 through E.6 above.

- d. Emission Limitation: The permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10% opacity.

Applicable Compliance Method: Compliance shall be demonstrated using Method 9 of 40 CFR, Part 60, Appendix A, and the procedures in 40 CFR, Part 60, Subpart OOO as specified in sections E.1 through E.6 above.

## F. Miscellaneous Requirements

None

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
F003 - paved and unpaved roadways and parking areas	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-07(B)
paved roadways and parking areas (see Section A.2.a) (Modification of PTI #03-11049 issued on July 11, 2002 to allow for an increase in particulate emissions)	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-08(B)
	OAC rule 3745-17-07(B)	
	OAC rule 3745-17-08(B)	
unpaved roadways and parking areas (see Section A.2.b) (Modification of PTI #03-11049 issued on July 11, 2002 to allow for an increase in particulate emissions)	OAC rule 3745-31-05(A)(3)	

Applicable Emissions  
Limitations/Control Measures

18.04 TPY fugitive PE

no visible particulate emissions  
except for one minute during any  
60-minute period

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

See A.2.j

See A.2.k

no visible particulate emissions  
except for 3 minutes during any  
60-minute period

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

See A.2.j

See A.2.k

**2. Additional Terms and Conditions**

**2.a** The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

paved roadways:  
all paved roadways

paved parking areas:  
all paved parking area

- 2.b** The unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

unpaved roadways:  
all unpaved roadways

unpaved parking areas:  
none

- 2.c** The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by flushing with water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d** The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with water and/or any other suitable dust suppression chemicals, grading/resurfacing, speed reduction and good housekeeping at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.f** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved

surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.

- 2.g The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.h Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.i Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.
- 2.j This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.k This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08 (it is located in Marion County). Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

## B. Operational Restrictions

None

## C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:

<u>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all	daily
<u>unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all	daily

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented; and
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

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

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

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inspection, was not implemented.

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

- 1.a Emission Limitation: 18.04 TPY fugitive PE from paved and unpaved roadways and parking areas

Applicable Compliance Method: This emission limitation was developed by multiplying emission factors from AP-42, Chapter 13.2.1 (10/97) [paved] and Chapter 13.2.2 (10/01) [unpaved], the maximum vehicle miles traveled, a 95% control efficiency and dividing by 2000 lbs/ton:

- i. entrance road (paved):  $(3.61 \text{ lb PE/VMT}) (44,847 \text{ VMT}) (\text{ton}/2000 \text{ lbs}) (1-0.95) = 4.1 \text{ TPY}$
- ii. haul roads (unpaved):  $(6.24 \text{ lb PE/VMT}) (87,906 \text{ VMT}) (\text{ton}/2000 \text{ lbs}) (1-0.95) = 13.80 \text{ TPY}$
- iii. peripheral roadways (unpaved):  $(6.24 \text{ lb PE/VMT}) (795 \text{ VMT}) (\text{ton}/2000 \text{ lbs}) (1-0.95) = 0.14 \text{ TP}$

- 1.b Emission Limitation: no visible particulate emissions except for 1 minutes during any 60-minute period from paved roadways and parking areas

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

- 1.c Emission Limitation: no visible particulate emissions except for 3 minutes during any 60-minute period from unpaved roadways and parking areas

Applicable Compliance Method: Compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in

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paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

**F. Miscellaneous Requirements**

None

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F005 - mineral extraction including overburden removal, blasting, drilling, soil unloading operations and reclamation activities (Modification of PTI #03-11049 issued on July 11, 2002 to correct description of activities and particulate emissions limitations)	OAC rule 3745-31-05(A)(3)	1.05 TPY fugitive PE (Assume all PE is PM <sub>10</sub> .)
		Opacity Restrictions (see A.2.b)
		Use of best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.2.c and A.2.d)
	OAC rule 3745-17-07(B)	See A.2.e
	OAC rule 3745-17-08(B)	See A.2.f

**2. Additional Terms and Conditions**

- 2.a The mineral extraction operations that are covered by this permit and subject to the above mentioned requirements are listed below:

Overburden removal, blasting, drilling, loading operations and reclamation activities

- 2.b Visible particulate emissions shall not exceed 20% opacity as a 3-minute average from the following mineral extraction operations: overburden removal, drilling, soil unloading operations and reclamation activities.

- 2.c The permittee shall employ best available control measures for the above-identified mineral extraction operations for the purpose of ensuring compliance with the above-

mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measures to ensure compliance:

<u>mineral extraction operation</u>	<u>control measure(s)</u>
overburden removal	minimize area of disturbed land surface, maintenance of an inherent moisture content, maintain low drop height with backhoe and use of a water truck over area to be stripped
blasting	minimize area to be blasted, prevention of overshooting and maintenance of an inherent moisture content
drilling	either water control system or vent to a cyclone and/or baghouse
soil unloading operations	prevent haul vehicle overloading, watering of the muck pile as necessary and maintenance of an inherent moisture content in limestone
reclamation activities	reclaim land surface as expeditiously as possible

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

- 2.d** Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).
- 2.e** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.f** The Tri-County Limestone Company facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

## B. Operational Restrictions

None

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### C. Monitoring and/or Recordkeeping Requirements

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

<u>mineral extraction operation</u>	<u>minimum inspection frequency</u>
all	daily

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
  - c. the dates the control measure(s) was (were) implemented; and
  - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

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

### D. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency; and

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

### E. Testing Requirements

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

- a. Emission Limitation: 1.05 TPY fugitive PE

Applicable Compliance Method: The annual PE emission limitation was developed by applying emission factors from AP-42, Sections 11.9 [soil unloading operations, blasting, drilling and reclamation activities (7/98)] and 13.2.3 [overburden removal (1/95)], and the following control efficiencies to the associated maximum uncontrolled emission rates:

<u>Mineral Extraction Operation</u>	<u>Maximum Uncontrolled Emissions</u>	<u>Control Efficiency(%)</u>
overburden removal	0.66 TPY PE	90
blasting	0.17 TPY PE	90
drilling	1.41 TPY PE	90
soil unloading operations	6.33 TPY PE	90
reclamation activities	1.90 TPY PE	90

Compliance with the emissions limitations shall be determined in accordance with the monitoring and recordkeeping specified in section C.1. through C.4.

- b. Emission Limitation: Visible particulate emissions shall not exceed 20% opacity as a 3-minute average from the following mineral extraction operations: overburden removal, drilling, soil unloading operations and reclamation activities.

Applicable Compliance Method: If required, compliance shall be demonstrated using Method 9 of 40 CFR, Part 60, Appendix A.

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**F. Miscellaneous Requirements**

None

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

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

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

Operations, Property, and/or Equipment	<u>Applicable Rules/Requirements</u>	OAC rule 3745-23-06(B)
P001 - 515 hp (3.67 mmBtu/hr) diesel fired engine used to power the primary crusher	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-31-05(D)	
	OAC rule 3745-17-07(A)	
	OAC rule 3745-17-11(B)(5)(a)	
	OAC rule 3745-18-06(G)	
	OAC rule 3745-21-08(B)	

Applicable Emissions  
Limitations/Control Measures

1.06 lbs SO<sub>2</sub>/hr, 1.67 TPY SO<sub>2</sub>

0.45 lb PE/hr 0.72 TPY PE

1.10 lbs OC/hr, 1.74 TPY OC

9.66 lbs CO/hr, 15.24 TPY CO

7.79 lbs NO<sub>x</sub>/hr

Visible particulate emissions shall not exceed 10% opacity as a 6-minute average.

See A.2.a

12.30 tons of NO<sub>x</sub> per rolling, 12-month period (See A.2.b)

See A.2.c

See A.2.c

See A.2.c

See A.2.d

See A.2.d

## 2. Additional Terms and Conditions

- 2.a** Best Available Technology (BAT) for this emissions unit has been determined to be the use of diesel fuel and compliance with the requirements of OAC rule 3745-31-05(D), OAC rule 3745-17-07(A), OAC rule 3745-18-06(G) and OAC rule 3745-17-11(B)(5)(a).
- 2.b** The permittee has requested a federally enforceable limitation of 12.30 tons NOx per rolling 12-month period-month period based on an hours of operation restriction (see section B.1) for purposes of limiting potential to emit to avoid Title V applicability.
- 2.c** The emission limitation specified by this rule is less stringent than the emission limitation established by OAC rule 3745-31-05(A)(3).
- 2.d** The permittee has satisfied the "latest available control techniques and operating practices required pursuant to OAC rule 3745-21-07(B) and OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.

## B. Operational Restrictions

1. The maximum annual hours of operation for emissions unit P001 shall not exceed 3156 hours per year, based upon a rolling 12-month summation of the operating hours. To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Hours of Operation</u>
1	263
1-2	526
1-3	789
1-4	1052
1-5	1315
1-6	1578
1-7	1841
1-8	2104
1-9	2367
1-10	2630
1-11	2893
1-12	3156

After the first 12 calendar months of operation following the issuance of this permit, compliance

with the annual hours of operation limitation shall be based upon a rolling 12-month summation of operating hours.

2. The permittee shall burn only diesel fuel in this emissions unit.

### C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. the hours of operation;
  - b. during the first 12 calendar months of operation, the cumulative hours of operation;
  - c. beginning the first month after the first 12 calendar months of operation, the rolling, 12-month summation of the hours of operation;
  - d. the calculated monthly emission rate for NO<sub>x</sub> using the following equation:  
$$\text{NO}_x \text{ emissions in tons} = (\text{hours of operation}) \times (\text{potential hourly NO}_x \text{ emissions}) \times (1 \text{ ton}/2000 \text{ lbs}) = (C.1.a) \times (7.79 \text{ lbs NO}_x/\text{hr}) \times (1 \text{ ton}/2000 \text{ lbs})$$
  - e. beginning the first month after the 12 calendar months of operation, the rolling, 12-month summation, in ton of the emission rate for NO<sub>x</sub>.
2. For each day during which the permittee burns a fuel other than diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify the following exceedances:
  - a. the rolling, 12-month hours of operation limitation;
  - b. the rolling, 12-month NO<sub>x</sub> emissions; and
  - c. for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation.

These deviation (excursion) reports shall be submitted in accordance with the general terms and

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conditions of this permit.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than diesel fuel was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## E. Testing Requirements

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

- 1.a Emission Limitation: 1.06 lb SO<sub>2</sub>/hr, 1.67 TPY SO<sub>2</sub>

Applicable Compliance Method: The hourly emission limitation is based on the emission unit's potential-to-emit\*. Therefore, no hourly recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance with this limitation. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A.

\*The potential-to-emit is based on a maximum power output of 515 hp multiplied by the AP-42 emission factor of 0.00205 lb SO<sub>2</sub>/hp-hr (Section 3.3 - 10/96).

The TPY emission limitation was developed by multiplying the lb/hr emission limitation by a maximum operating schedule of 3156 hrs/yr divided by 2000 lbs/ton. Therefore, provided compliance is shown with the operational restriction of 3156 hours per year, based upon a rolling 12-month summation, compliance with the annual limitation is assumed. Monitoring and recordkeeping for the operational restriction is contained in C.1.

- 1.b Emission Limitation: 0.45 lb PE/hr, 0.72 TPY PE

Applicable Compliance Method: The hourly emission limitation is based on the emission unit's potential-to-emit\*. Therefore, no hourly recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance with this limitation. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A.

\*The potential-to-emit is based on a maximum power output of 515 hp multiplied by the emission factor of 0.000881 lb PE/hp-hr (from Manufacturer and California Air Resources Board).

The TPY emission limitation was developed by multiplying the lb/hr emission limitation by a maximum operating schedule of 3156 hrs/yr divided by 2000 lbs/ton. Therefore, provided compliance is shown with the operational restriction of 3156 hours per year, based upon a rolling 12-month summation, compliance with the annual limitation is

assumed. Monitoring and recordkeeping for the operational restriction is contained in C.1.

- 1.c Emission Limitation: 1.10 lbs OC/hr, 1.74 TPY OC

Applicable Compliance Method: The hourly emission limitation is based on the emission unit's potential-to-emit\*. Therefore, no hourly recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance with this limitation. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

\*The potential-to-emit is based on a maximum power output of 515 hp multiplied by the emission factor of 0.002138 lb OC/hp-hr () (from Manufacturer and California Air Resources Board).

The TPY emission limitation was developed by multiplying the lb/hr emission limitation by a maximum operating schedule of 3156 hrs/yr divided by 2000 lbs/ton. Therefore, provided compliance is shown with the operational restriction of 3156 hours per year, based upon a rolling 12-month summation, compliance with the annual limitation is assumed. Monitoring and recordkeeping for the operational restriction is contained in C.1.

- 1.d Emission Limitation: 9.66 lbs CO/hr, 15.24 TPY CO

Applicable Compliance Method: The hourly emission limitation is based on the emission unit's potential-to-emit\*. Therefore, no hourly recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance with this limitation. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 and 10 of 40 CFR, Part 60, Appendix A.

\*The potential-to-emit is based on a maximum power output of 515 hp multiplied by the emission factor of 0.01875 lb CO/hp-hr () (from Manufacturer and California Air Resources Board).

The TPY emission limitation was developed by multiplying the lb/hr emission limitation by a maximum operating schedule of 3156 hrs/yr divided by 2000 lbs/ton. Therefore, provided compliance is shown with the operational restriction of 3156 hours per year, based upon a rolling 12-month summation, compliance with the annual limitation is assumed. Monitoring and recordkeeping for the operational restriction is contained in C.1.

- 1.e Emission Limitation: 7.79 lbs NOx/hr

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Applicable Compliance Method: The hourly emission limitation is based on the emission unit's potential-to-emit\*. Therefore, no hourly recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance with this

limitation. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 and 7 of 40 CFR, Part 60, Appendix A.

\*The potential-to-emit is based on a maximum heat input rate of 515 hp multiplied by the emission factor of 0.015132 lb NO<sub>x</sub>/hp-hr () (from Manufacturer and California Air Resources Board).

- 1.f Emission Limitation: Visible particulate emissions shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method: If required, compliance shall be demonstrated using Method 9 of 40 CFR, Part 60, Appendix A.

- 1.g Emission Limitation: 12.30 tons of NO<sub>x</sub> per rolling, 12-month period

Applicable Compliance Method: Compliance with the tons of NO<sub>x</sub> per rolling 12-month period shall be demonstrated by the monitoring and recordkeeping requirements in section C.1.

#### F. Miscellaneous Requirements

None

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

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

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

Operations, Property, <u>and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	OAC rule 3745-23-06(B)
P002 - 900 hp (6.35 mmBtu/hr) diesel fired engine used to power the secondary crusher and all screening and conveying	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-31-05(D)	
	OAC rule 3745-17-07(A)	
	OAC rule 3745-17-11(B)(5)(b)	
	OAC rule 3745-18-06(G)	
	OAC rule 3745-21-08(B)	

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Applicable Emissions  
Limitations/Control Measures

3.60 lbs SO<sub>2</sub>/hr, 5.68 TPY SO<sub>2</sub>

0.62 TPY PE

0.63 lb OC/hr, 0.99 TPY OC

4.95 lbs CO/hr, 7.81 TPY CO

21.60 lbs NO<sub>x</sub>/hr

Visible particulate emissions shall not exceed 10% opacity as a 6-minute average.

See A.2.a

34.08 tons of NO<sub>x</sub> per rolling, 12-month period (See A.2.b)

See A.2.c

0.062 lb PE/mmBtu of actual heat input

See A.2.c

See A.2.d

See A.2.d

## 2. Additional Terms and Conditions

- 2.a** Best Available Technology (BAT) for this emissions unit has been determined to be the use of diesel fuel and compliance with the requirements of OAC rule 3745-31-05(D), OAC rule 3745-17-07(A), OAC rule 3745-18-06(G) and OAC rule 3745-17-11(B)(5)(b).
- 2.b** The permittee has requested a federally enforceable limitation of 34.08 tons NOx per rolling 12-month period-month period based on an hours of operation restriction (see section B.1.) for purposes of limiting potential to emit to avoid Title V applicability.
- 2.c** The emission limitation specified by this rule is less stringent than the emission limitation established by OAC rule 3745-31-05(A)(3).
- 2.d** The permittee has satisfied the "latest available control techniques and operating practices required pursuant to OAC rule 3745-21-07(B) and OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.

## B. Operational Restrictions

1. The maximum annual hours of operation for emissions unit P001 shall not exceed 3156 hours per year, based upon a rolling 12-month summation of the operating hours. To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the levels specified in the following table:

<u>Month</u>	<u>Maximum Allowable Hours of Operation</u>
1	263
1-2	526
1-3	789
1-4	1052
1-5	1315
1-6	1578
1-7	1841
1-8	2104
1-9	2367
1-10	2630
1-11	2893
1-12	3156

After the first 12 calendar months of operation following the issuance of this permit, compliance

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with the annual hours of operation limitation shall be based upon a rolling 12-month summation of operating hours.

2. The permittee shall burn only diesel fuel in this emissions unit.

### C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. the hours of operation;
  - b. during the first 12 calendar months of operation, the cumulative hours of operation;
  - c. beginning the first month after the first 12 calendar months of operation, the rolling, 12-month summation of the hours of operation;
  - d. the calculated monthly emission rate for NO<sub>x</sub> using the following equation:
 
$$\text{NO}_x \text{ emissions in tons} = (\text{hours of operation}) \times (\text{potential hourly NO}_x \text{ emissions}) \times (1 \text{ ton}/2000 \text{ lbs}) = (\text{C.1.a}) \times (21.60 \text{ lbs NO}_x/\text{hr}) \times (1 \text{ ton}/2000 \text{ lbs})$$
  - e. beginning the first month after the 12 calendar months of operation, the rolling, 12-month summation, in ton of the emission rate for NO<sub>x</sub>.
2. For each day during which the permittee burns a fuel other than diesel fuel the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify the following exceedances:
  - a. the rolling, 12-month hours of operation limitation;
  - b. the rolling, 12-month NO<sub>x</sub> emissions; and
  - c. for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation.

These deviation (excursion) reports shall be submitted in accordance with the general terms and conditions of this permit.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than diesel fuel was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## E. Testing Requirements

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

- 1.a Emission Limitation: 3.60 lbs SO<sub>2</sub>/hr, 5.68 TPY SO<sub>2</sub>

Applicable Compliance Method: The hourly emission limitation is based on the emission unit's potential-to-emit\*. Therefore, no hourly recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance with this limitation. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A.

\*The potential-to-emit is based on a maximum power output of 900 hp multiplied by the AP-42 emission factor of 0.004 lb SO<sub>2</sub>/hp-hr (Section 3.4 - 10/96).

The TPY emission limitation was developed by multiplying the lb/hr emission limitation by a maximum operating schedule of 3156 hrs/yr divided by 2000 lbs/ton. Therefore, provided compliance is shown with the operational restriction of 3156 hours per year, based upon a rolling 12-month summation, compliance with the annual limitation is assumed. Monitoring and recordkeeping for the operational restriction is contained in C.1.

- 1.b Emission Limitation: 0.62 TPY PE

Applicable Compliance Method:

The TPY emission limitation was developed by multiplying the maximum heat input rate of 6.35 mmBtu/hr, the AP-42 emission factor of 0.062 lb PE/mmBtu (Section 3.4 - 10/96) and a maximum operating schedule of 3156 hrs/yr divided by 2000 lbs/ton. Therefore, provided compliance is shown with the operational restriction of 3156 hours per year, based upon a rolling 12-month summation, compliance with the annual limitation is assumed. Monitoring and recordkeeping for the operational restriction is contained in C.1.

- 1.c Emission Limitation: 0.63 lb OC/hr, 0.99 TPY OC

Applicable Compliance Method: The hourly emission limitation is based on the emission unit's potential-to-emit\*. Therefore, no hourly recordkeeping, deviation reporting or

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compliance method calculations are required to demonstrate compliance with this limitation. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

\*The potential-to-emit is based on a maximum power output of 900 hp multiplied by the AP-42 emission factor of 0.000705 lb OC/hp-hr (Section 3.4 - 10/96).

The TPY emission limitation was developed by multiplying the lb/hr emission limitation by a maximum operating schedule of 3156 hrs/yr divided by 2000 lbs/ton. Therefore, provided compliance is shown with the operational restriction of 3156 hours per year, based upon a rolling 12-month summation, compliance with the annual limitation is assumed. Monitoring and recordkeeping for the operational restriction is contained in C.1.

- 1.d Emission Limitation: 4.95 lbs CO/hr, 7.81 TPY CO

Applicable Compliance Method: The hourly emission limitation is based on the emission unit's potential-to-emit\*. Therefore, no hourly recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance with this limitation. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 and 10 of 40 CFR, Part 60, Appendix A.

\*The potential-to-emit is based on a maximum power output of 900 hp multiplied by the AP-42 emission factor of 0.0055 lb CO/hp-hr (Section 3.4 - 10/96).

The TPY emission limitation was developed by multiplying the lb/hr emission limitation by a maximum operating schedule of 3156 hrs/yr divided by 2000 lbs/ton. Therefore, provided compliance is shown with the operational restriction of 3156 hours per year, based upon a rolling 12-month summation, compliance with the annual limitation is assumed. Monitoring and recordkeeping for the operational restriction is contained in C.1.

- 1.e Emission Limitation: 21.60 lbs NOx/hr

Applicable Compliance Method: The hourly emission limitation is based on the emission unit's potential-to-emit\*. Therefore, no hourly recordkeeping, deviation reporting or compliance method calculations are required to demonstrate compliance with this limitation. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 and 7 of 40 CFR, Part 60, Appendix A.

\*The potential-to-emit is based on a maximum power output of 900 hp multiplied by the AP-42 emission factor of 0.024 lb NOx/hp-hr (Section 3.4 - 10/96).

- 1.f Emission Limitation: Visible particulate emissions shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method: If required, compliance shall be demonstrated using Method 9 of 40 CFR, Part 60, Appendix A.

- 1.g Emission Limitation: 34.08 tons of NO<sub>x</sub> per rolling, 12-month period

Applicable Compliance Method: Compliance with the tons of NO<sub>x</sub> per rolling 12-month period shall be demonstrated by the monitoring and recordkeeping requirements in section C.1.

- 1.h Emission Limitation: 0.062 lb PE/mmBtu of actual heat input

Applicable Compliance Method: The lbs PE/mmBtu emission limitation represents the potential to emit\* for this emissions unit. Therefore no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation. If required, compliance shall be demonstrated in accordance with OAC rule 3745-17-03(B).

\*Potential to emit was determined using AP-42, Table 3.4-2 (10/96).

#### F. Miscellaneous Requirements

None