



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **01 2017 - 004**

Project Number: 2016-11-038
Installation Number: PORT-0746

Parent Company: Capital Quarries Company, Inc.

Parent Company Address: P.O. Box 105050, Jefferson City, MO 65110

Installation Name: Capital Quarries Company, Inc.

Installation Address: 822 W. Stadium, Jefferson City, MO 65110

Location Information: PORT- 0746 (Multiple sites Listed in Special Conditions)

Application for Authority to Construct was made for:

Installation of a new generic portable rock crushing plant. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

Standard Conditions (on reverse) are applicable to this permit.

Standard Conditions (on reverse) and Special Conditions are applicable to this permit.


Prepared by
Jordan Hull
New Source Review Unit


Director or Designee
Department of Natural Resources

JAN 05 2017

Effective Date

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Enforcement and Compliance Section of the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Enforcement and Compliance Section of the Department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department's regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit using the contact information below.

Contact Information:

Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-4817

The regional office information can be found at the following website:
<http://dnr.mo.gov/regions/>

GENERAL SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Capital Quarries Company, Inc.
PORT-0746

1. Generic Plant Designation and Maximum Combined Hourly Design Rate
Capital Quarries Company, Inc. PORT-0746 has been designated to be a Generic Plant Operation. The combined MHDR each of the following generic equipment types shall not exceed the rates and numbers listed in Table 1.

Table 1: Generic Equipment

Equipment Type	MHDR	Maximum Number of Units
EU-2 Feeder/Grizzly	450 tons per hour	1
EU-3 Primary Crusher (3-12")	450 tons per hour	1
EU- 4, 6, 7, 8, 9 Primary Conveyor(s)	450 tons per hour (2,250 total)	5
EU-5 Primary Screen(s)	450 tons per hour	1
EU-10 Secondary Crusher (1-4")	338 tons per hour	1
EU- 11, 13, 14, 15, 16 Secondary Conveyor(s)	338 tons per hour (1,960 total)	5
EU-12 Secondary Screen(s)	338 tons per hour	1
EU- 17 Tertiary Crusher (3/16-1")	288 tons per hour	1
EU-18 Tertiary Conveyor(s)	288 tons per hour	1
EU-19, 20 Stacking Conveyor(s)	288 tons per hour	2

2. Generic Plant Equipment Identification Requirement
 - A. Capital Quarries Company, Inc. PORT- 0746 shall submit the following information to the Air Pollution Control Program's Permitting Section and the Northeast Regional Office within 15 days of actual startup.
 - 1) A master list of all equipment that will be permitted for use with the generic plant. This master list shall include at minimum the following information for each piece of equipment:
 - a) Manufacturer's name
 - b) Model number
 - c) Serial number
 - d) Actual MHDR
 - e) Date of manufacture
 - f) Any other additional information that is necessary to uniquely

GENERAL SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- identify the equipment.
 - 2) A list of the core equipment that will always be utilized with the generic plant. The core equipment associated with the generic plant shall include at least one primary unit that controls the rate of the process flow (e.g., a primary crusher or primary screen).
 - 3) A determination of the applicability of 40 CFR Part 60, Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants" for each piece of equipment indicating whether each piece of equipment is subject to Subpart OOO and justification for this determination.
 - 4) Capital Quarries Company, Inc. PORT- 0746 shall notify the Air Pollution Control Program's Permitting Section and the Southeast Regional Office when new equipment is added to the master list and when core equipment is changed within 30 days of the change.
 - B. Capital Quarries Company, Inc. PORT-0746 shall maintain a list of the specific equipment currently being utilized with the generic plant. Any arrangement of the generic plant's equipment must be such that the core equipment is not bypassed in the process flow.
3. **Equipment Identification Requirement**
Capital Quarries Company, Inc. PORT-0746 shall maintain easily read permanent markings on each component of the plant. These markings shall be the equipment's serial number or a company assigned identification number that uniquely identifies the individual component.
 4. **Relocation of Portable Plant**
 - A. Capital Quarries Company, Inc. PORT-0746 shall not be operated at any location longer than 24 consecutive months except if the Site Specific Special Conditions of this portable plant, PORT-0746, contain a nonroad engine requirement limiting the portable plant at the site specific location to 12 consecutive months.
 - B. A complete "Portable Source Relocation Request" application must be submitted to the Air Pollution Control Program prior to any relocation of this portable rock crushing plant.
 - 1) If the portable rock crushing plant is moving to a site previously permitted, and if the circumstances at the site have not changed, then the application must be received by the Air Pollution Control Program at least seven days prior to the relocation.
 - 2) If the portable rock crushing plant is moving to a new site, or if circumstances at the site have changed (e.g. the site was only permitted for solitary operation and now another plant is located at the site), then the application must be received by the Air Pollution

GENERAL SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

Control Program at least 21 days prior to the relocation. The application must include written notification of any concurrently operating plants.

5. **Record Keeping Requirement**
Capital Quarries Company, Inc. PORT-0746 shall maintain all records required by this permit for not less than five years and shall make them available to any Missouri Department of Natural Resources' personnel upon request.
6. **Reporting Requirement**
Capital Quarries Company, Inc. PORT-0746 shall report to the Air Pollution Control Program Enforcement Section P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after any exceedances of the limitations imposed by this permit.

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

PORT ID #: PORT-0746

Site ID#: 013-0039

Site Name: Adrian Quarry
S-33, 34, T-42N, R-32W

Site County: Bates

Site ID#: 051-0065

Site Name: Algoa Quarry
S-24, T-44N, R-11W

Site County: Cole

Site ID#: 013-0048

Site Name: Lone Oak
S-5, T-39N, R-31W

Site County: Bates

Site ID#: 051-0059

Site Name: Eugene Quarry
S-20/29-30, T-42N, R-13W

Site County: Cole

Site ID#: 015-P011

Site Name: Warsaw Quarry
S-04, T-39N, R-22W

Site County: Benton

Site ID#: 051-P039

Site Name: Hwy 50 Quarry
S-8, T-44N, R-12W

Site County: Cole

Site ID#: 019-0050

Site Name: Hwy 63 N.
S-13/14, T-45N, R-12W

Site County: Boone

Site ID#: 051-0029

Site Name: Hwy 54 Quarry
S-23/24, T-44N, R-12W

Site County: Cole

Site ID#: 027-P027

Site Name: Holts Summit Quarry
S-22, T-45N, R-11W

Site County: Callaway

Site ID#: 051-P067

Site Name: Route B Quarry
S-25, T-44N, R-12W

Site County: Cole

Site ID#: 029-0016

Site Name: Linn Creek S.
S-16, T-38N, R-16W

Site County: Camden

Site ID#: 051-0034

Site Name: Stadium Quarry
S-10/11, T-44N, R-12W

Site County: Cole

Site ID#: 029-0016

Site Name: Linn Creek N.
S-16, T-38N, R-16W

Site County: Camden

Site ID#: 055-P042

Site Name: Cuba Quarry
S-2/24, T-38N, R-5W

Site County: Crawford

Project No. 2016-11-038

Permit No.

012017-004

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

Site ID#: 055-9001
Site Name: Sullivan Quarry
S-32, T-39/40N, R-2W
Site County: Crawford

Site ID#: 093-0022
Site Name: Arcadia Quarry
S-6, T-33N, R-4E
Site County: Iron

Site ID#: 065-0040
Site Name: Salem Quarry
S-3, T-33N, R-4W
Site County: Dent

Site ID#: 101-0031
Site Name: Warrensburg Quarry
S-18, T-45N, R-25W
Site County: Johnson

Site ID#: 073-P033
Site Name: Bay Quarry
S-18, T-43N, R-5W
Site County: Gasconade

Site ID#: 101-0060
Site Name: Leeton Quarry
S-5, T-44N, R-25W
Site County: Johnson

Site ID#: 073-0047
Site Name: Herman Quarry
S-35, T-46N, R-5W
Site County: Gasconade

Site ID#: 131-0035
Site Name: Bagnell Quarry
S-07, T-40N, R-15W
Site County: Miller

Site ID#: 073-0019
Site Name: Owensville Quarry
S-36, T-42N, R-6W
Site County: Gasconade

Site ID#: 135-P016
Site Name: California Quarry
S-20, T-46N, R-14W
Site County: Moniteau

Site ID#: 083-P025
Site Name: Urich Quarry
S-04, 33, T-41.42N, R-28W
Site County: Henry

Site ID#: 139-0025
Site Name: Danville Quarry
S-25, T-48N, R-6W
Site County: Miller

Site ID#: 083-0011
Site Name: Tightwad Quarry
S-03, T-40N, R-24W
Site County: Henry

Site ID#: 141-0014
Site Name: Prestage Quarry
S-21, T-40N, R-17W
Site County: Morgan

Site ID#: 083-P024
Site Name: Montrose Quarry
S-16, T-40N, R-28W
Site County: Henry

Site ID#: 151-P038
Site Name: Linn Quarry
S-19/20, T-43N, R-7W
Site County: Osage

Site ID#: 083-0051
Site Name: Creighton Quarry
S-6, T-43N, R-28W
Site County: Henry

Site ID#: 159-0002
Site Name: Sedalia Quarry
S-23, 24, T-46N, R-22W
Site County: Pettis

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

Site ID#: 161-0046
Site Name: Jerome Quarry
S-24, T-37N, R-4W
Site County: Phelps

Site ID#: 161-0027
Site Name: Rolla Quarry
S-14, 23, T-38N, R-08W
Site County: Phelps

1. **Best Management Practices Requirement**
 - A. Capital Quarries Company, Inc. PORT-0746 shall control fugitive emissions from pit and shipping haul roads at this site by performing BMPs as defined in Attachment AA.
 - B. Undocumented watering will be conducted on all vehicular activity areas. This includes areas surrounding stockpiles and grizzly loading.
2. **Annual Emission Limit**
 - A. Capital Quarries Company, Inc. PORT-0746 shall emit less than 15.0 tons of PM₁₀ in any 12-month period from the entire installation.
 - B. Capital Quarries Company, Inc. PORT-0746 shall demonstrate compliance with Special Condition 2.A using Attachment A or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.
3. **Moisture Content Testing Requirement**
 - A. Capital Quarries Company, Inc. PORT- 0746 shall verify that the moisture content of the processed rock is greater than or equal to 1.5 percent by weight.
 - B. Testing shall be conducted according to the method prescribed by the American Society for Testing Materials (ASTM) D-2216, C-566 or another method approved by the Director.
 - C. The initial test shall be conducted no later than 45 days after the start of operation. A second test shall be performed the calendar year following the initial test during the months of July or August.
 - D. The test samples shall be taken from rock that has been processed by the plant or from each source of aggregate (e.g. quarry).
 - E. The written analytical report shall include the raw data and moisture content of each sample, the test date and the original signature of the individual performing the test. The report shall be filed on-site or at the

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

Capital Quarries Company, Inc. PORT- 0746 main office within 30 days of completion of the required test.

F. If the moisture content of either of the two tests is less than the moisture content in Special Condition 3.A, another test may be performed within 15 days of the noncompliant test. If the results of that test is less than the moisture content in Special Condition 3.A, Capital Quarries Company, Inc. PORT-0746 shall either:

- 1) Apply for a new permit to account for the revised information, or
- 2) Submit a plan for the installation of wet spray devices to the Compliance/Enforcement Section of the Air Pollution Control Program within 10 days of the second noncompliant test. The wet

spray devices shall be installed and operational within 40 days of the second noncompliant test.

4. Primary Equipment Requirement

Capital Quarries Company, Inc. PORT-0746 shall process all rock through the primary crusher (EU-3). Bypassing the primary crusher is prohibited.

5. Nonroad Engine Requirement

Capital Quarries Company, Inc. Port-0746 engines are used to propel the portable plant as well as to supply power to the crusher and associated equipment. Therefore, it meets the definition of a nonroad engine as stated in 40 CFR 89.2.

6. Record Keeping Requirement

Capital Quarries Company, Inc. PORT-0746 shall maintain all records required by this permit for not less than five years and make them available to any Missouri Department of Natural Resources' personnel upon request.

7. Reporting Requirement

Capital Quarries Company, Inc. PORT-0746 shall report to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after any exceedances of the limitations imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW

Project Number: 2016-11-038

Installation ID Number: PORT-0746

Permit Number: 012017-004

Installation Address:

Capital Quarries Company, Inc.
822 W. Stadium
Jefferson City, MO 65110

Parent Company:

Capital Quarries Company, Inc.
P.O. Box 105050
Jefferson City, MO 65110

PORT-0746

PROJECT DESCRIPTION

Capital Quarries Company, Inc. has purchased a Jersey 5 Piece Portable Tracked Crushing Plant (PORT-0746). PORT-0746 is a generic rock crushing plant consisting of 3 crushers, 2 screens, 11 conveyors, and 2 stacking conveyors. The maximum MHDR is 450 tons per hour for the primary jaw crusher. The diesel engine(s) meet the definition of non-road engine as defined in 40 CFR 89.2 (1)(i). Therefore, the emissions of the engine were not included.

The applicant is using one of the methods described in Attachment AA, "Best Management Practices," to control emissions from the pit and shipping haul.

Initially, the plant will be delivered to Hwy 63 Quarry (Site ID# 019-0050) in Boone County, an attainment area for all criteria pollutants.

No Permits have been issued to Capital Quarries Company, Inc. for PORT-0746 from the Air Pollution Control Program.

TABLES

The table below summarizes the emissions of the worst case scenario site for haul roads and wind erosion from storage piles. The potential emissions of the process equipment excludes emissions from haul roads and wind erosion from the pits. The potential emissions of the application represents the emissions of all the equipment and activities assuming continuous operation (8760 hours per year). The conditioned potential emissions include emissions from sourced that will limit their production to ensure compliance with the annual emissions limit. Conditioned potential emissions account for the voluntary PM₁₀ annual emissions limit to avoid dispersion modeling requirements.

Table 2: Worst Case Site Emissions Summary (tpy)

Pollutant	Regulatory <i>De Minimis</i> Levels	Potential Emissions of Process Equipment	^a Potential Emissions of the Application	Conditioned Potential Emissions
PM	25.0	16.16	595.44	47.74
PM ₁₀	15.0	6.06	187.09	<15.0
PM _{2.5}	10.0	0.91	41.63	3.34
SO _x	40.0	N/A	N/A	N/A
NO _x	40.0	N/A	N/A	N/A
VOC	40.0	N/A	N/A	N/A
CO	100.0	N/A	N/A	N/A
HAPs	10.0/25.0	N/A	N/A	N/A

N/A = Not Applicable

^aWorst case site haul road and storage pile emissions included

EMISSIONS/CONTROLS EVALUATION

Emissions for the project were calculated using emission factors found in the United States EPA document AP-42 *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, Fifth Edition (AP-42).

Emissions from the rock-crushing equipment:

- Calculated using emission factors from AP-42 Section 11.19.2 "Crushed Stone Processing and Pulverized Mineral Processing," August 2004.
- The controlled emission factors were used because the inherent moisture content of the crushed rock is less/greater than 1.5 % by weight.

Emissions from haul roads and vehicular activity areas:

- Calculated using the predictive equation from AP-42 Section 13.2.2 "Unpaved Roads," November 2006.
- A 90% control efficiency for PM and PM₁₀ and a 74% control efficiency for PM_{2.5} were applied to the two 2,500 foot long haul roads emission calculations for the use of BMPs. The 100 foot loader haul road to the grizzly and 50 foot pile loader haul road control efficiency for PM and PM₁₀ is 50% and 41% for PM_{2.5} for undocumented watering.
- Haul road lengths were calculated for each site. The longest haul road possible was used to calculate the shipping and pit haul road emissions.

Emissions from storage piles:

- Load-in and load-out of storage piles were calculated using the predictive equation from AP-42 Section 13.2.4.
- The moisture content of the aggregate is 1.5% by weight.
- Emissions from wind erosion of storage piles were calculated using an equation found in the Air Pollution Control Program's Emissions Inventory Questionnaire Form 2.8 "Storage Pile Worksheet."

The engines emissions were not evaluated for this review as the diesel engine at this site are classified as nonroad engines. 40 CFR 63 Subpart ZZZZ, "National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and 40 CFR 60 Subpart IIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" does not apply. However, if the engines were to remain in one location for longer than 24 consecutive months, it would not be in compliance with this permit because engine emissions were not evaluated. It may also not be in compliance with MACT ZZZZ or NSPS IIII. The nonroad engines are subject to further applicable requirements in 40 CFR 89 and 40 CFR 1039 which are outside the purview of this program.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. The conditioned potential emissions include emissions from sources that will limit their production to ensure compliance with the annual PM₁₀ emission limit of 15.0 tons per year for stationary plants in order to avoid refined modeling according to 10 CSR 10-6.060 (6)(B)3. Potential emissions of PM are above de minimis but below major source levels. There are no modeling requirements for PM.

APPLICABLE REQUIREMENTS

Capital Quarries Company, Inc. shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110.
- A Basic Operating Permit application is not required since this is a portable plant.
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- 40 CFR 60 Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants" applies to the equipment.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPS) or National Emission Standards for Hazardous Air Pollutants for Source Categories (MACTS) apply to the proposed equipment.

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, it is recommended that this permit be granted with special conditions.

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated November 10, 2016, received November 17, 2016, designating Capital Quarries Company, Inc. as the owner and operator of the installation.

Attachment AA: Best Management Practices

Haul roads and vehicular activity areas shall be maintained in accordance with at least one of the following options when the plant is operating.

1. **Pavement**
 - A. The operator shall pave the area with materials such as asphalt, concrete or other materials approved by the Air Pollution Control Program. The pavement will be applied in accordance with industry standards to achieve control of fugitive emissions while the plant is operating.
 - B. Maintenance and repair of the road surface will be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating.
 - C. The operator shall periodically wash or otherwise clean all of the paved portions of the haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating.

2. **Application of Chemical Dust Suppressants**
 - A. The operator shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to unpaved areas.
 - B. The quantities of the chemical dust suppressant shall be applied and maintained in accordance with the manufacturer's recommendation (if available) and in sufficient quantities to achieve control of fugitive emissions from these areas while the plant is operating.
 - C. The operator shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The operator shall keep these records with the plant for not less than five (5) years and make these records available to Department of Natural Resources' personnel upon request.

3. **Application of Water-Documented Daily**
 - A. The operator shall apply water to unpaved areas. Water shall be applied at a rate of 100 gallons per day per 1,000 square feet of unpaved or untreated surface area while the plant is operating.
 - B. Precipitation may be substituted for watering if the precipitation is greater than one quarter of one inch and is sufficient to control fugitive emissions.
 - C. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads.
 - D. The operator shall record the date, volume of water application and total surface area of active haul roads or the amount of precipitation that day. The operators shall also record the rationale for not watering (e.g. freezing conditions or not operating).
 - E. The operator shall keep these records with the plant for not less than five (5) years, and the operator shall make these records available to Department of Natural Resources' personnel upon request.

APPENDIX A

Abbreviations and Acronyms

%	percent	m/s	meters per second
°F	degrees Fahrenheit	Mgal	1,000 gallons
acfm	actual cubic feet per minute	MW	megawatt
BACT	Best Available Control Technology	MHDR	maximum hourly design rate
BMPs	Best Management Practices	MMBtu ...	Million British thermal units
Btu	British thermal unit	MMCF	million cubic feet
CAM	Compliance Assurance Monitoring	MSDS	Material Safety Data Sheet
CAS	Chemical Abstracts Service	NAAQS ..	National Ambient Air Quality Standards
CEMS	Continuous Emission Monitor System	NESHAPs	National Emissions Standards for Hazardous Air Pollutants
CFR	Code of Federal Regulations	NO_x	nitrogen oxides
CO	carbon monoxide	NSPS	New Source Performance Standards
CO₂	carbon dioxide	NSR	New Source Review
CO_{2e}	carbon dioxide equivalent	PM	particulate matter
COMS	Continuous Opacity Monitoring System	PM_{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
CSR	Code of State Regulations	PM₁₀	particulate matter less than 10 microns in aerodynamic diameter
dscf	dry standard cubic feet	ppm	parts per million
EIQ	Emission Inventory Questionnaire	PSD	Prevention of Significant Deterioration
EP	Emission Point	PTE	potential to emit
EPA	Environmental Protection Agency	RACT	Reasonable Available Control Technology
EU	Emission Unit	RAL	Risk Assessment Level
fps	feet per second	SCC	Source Classification Code
ft	feet	scfm	standard cubic feet per minute
GACT	Generally Available Control Technology	SDS	Safety Data Sheet
GHG	Greenhouse Gas	SIC	Standard Industrial Classification
gpm	gallons per minute	SIP	State Implementation Plan
gr	grains	SMAL	Screening Model Action Levels
GWP	Global Warming Potential	SO_x	sulfur oxides
HAP	Hazardous Air Pollutant	SO₂	sulfur dioxide
hr	hour	tph	tons per hour
hp	horsepower	tpy	tons per year
lb	pound	VMT	vehicle miles traveled
lbs/hr	pounds per hour	VOC	Volatile Organic Compound
MACT	Maximum Achievable Control Technology		
µg/m³	micrograms per cubic meter		



Jeremiah W. (Jay) Nixon, Governor • Harry D. Bozoian, Director

DEPARTMENT OF NATURAL RESOURCES

dnr.mo.gov

JAN 05 2017

Mr. Chris Thiltgen
Regulatory Compliance Manager
Capital Quarries Company, Inc.
822 W. Stadium
Jefferson City, MO 65110

RE: New Source Review Permit - Project Number: 2016-11-038

Dear Mr. Thiltgen:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions and your new source review permit application is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.oa.mo.gov/ahc.



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Mr. Chris Thiltgen
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If you have any questions regarding this permit, please do not hesitate to contact Jordan Hull, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



Susan Heckenkamp
New Source Review Unit Chief

SH:jhj

Enclosures

c: Northeast Regional Office
PAMS File: 2016-11-038

Permit Number: **01 2017 - 004**