

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: 102018-002

Project Number: 2018-06-041
Installation ID: 103-0002

Parent Company: Knox County Stone Co.

Parent Company Address: 1701 5th Avenue, Moline, IL 61265

Installation Name: Knox County Stone Co. - Edina Quarry (KC-01)

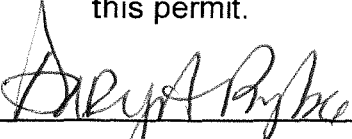
Installation Address: 53490 State Hwy 6, Edina, MO 63537

Location Information: Knox County, S25 T62N R12W

Application for Authority to Construct was made for:
New primary crusher and grizzly feeder. 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.



Director or Designee
Department of Natural Resources

OCT 02 2018

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/>

SITE SPECIFIC 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."

1. Superseding Condition

The conditions of this permit supersede all special conditions found in the previously issued construction permit 032005-026 from the Air Pollution Control Program.

2. Generic Plant Designation and Maximum Combined Hourly Design Rate

Knox County Stone Co. - Edina Quarry (KC-01) 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
Primary Unit(s) (Primary Crusher)	750 tons per hour	1
Feeder/Grizzly	1,000 tons per hour	1
Crusher(s) including primary crusher	1,500 tons per hour	5
Conveyor(s), Stacker(s)	16,500 tons per hour	75
Screen(s)	2,000 tons per hour	6

3. Generic Plant Equipment Identification Requirement

A. Knox County Stone Co. - Edina Quarry (KC-01) 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 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).

SITE SPECIFIC SPECIAL CONDITIONS:

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

- 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) Knox County Stone Co. - Edina Quarry (KC-01) shall notify the Air Pollution Control Program's Permitting Section and the Northeast Regional Office when new equipment is added to the master list and when core equipment is changed within 30 days of the change.
 - B. Knox County Stone Co. - Edina Quarry (KC-01) 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.
4. Equipment Identification Requirement
Knox County Stone Co. - Edina Quarry (KC-01) 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.
5. Best Management Practices Requirement
Knox County Stone Co. - Edina Quarry (KC-01) shall control fugitive emissions from all of the haul roads and vehicular activity areas at this site by performing BMPs as defined in Attachment AA.
6. Annual Emission Limit
 - A. Knox County Stone Co. - Edina Quarry (KC-01) shall emit less than 31.87 tons of PM₁₀ in any 12-month period from the entire installation which consists of the equipment listed in Table 1. The SSM emissions as reported to the Air Pollution Control Program's Compliance/Enforcement Section in accordance with the requirements of 10 CSR 10-6.050 *Start-Up, Shutdown, and Malfunction Conditions* shall be included in the limit.
 - B. Knox County Stone Co. - Edina Quarry (KC-01) shall demonstrate compliance with Special Condition 6.A using Attachment A or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.
7. Moisture Content Testing Requirement
 - A. Knox County Stone Co. - Edina Quarry (KC-01) shall verify that the moisture content of the processed rock is greater than or equal to 1.5 percent by weight.

SITE SPECIFIC SPECIAL CONDITIONS:

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

- 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 Knox County Stone Co. - Edina Quarry (KC-01) 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 7.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 7.A, Knox County Stone Co. - Edina Quarry (KC-01) 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. Plans may be sent by mail to P.O. Box 176, Jefferson City, MO 65102 or by email at aircompliancereporting@dnr.mo.gov. The wet spray devices shall be installed and operational within 40 days of the second noncompliant test.
 - G. In lieu of testing, Knox County Stone Co. - Edina Quarry (KC-01) may obtain test results that demonstrate compliance with the moisture content in Special Condition 7.A from the supplier of the aggregate.
8. Primary Equipment Requirement
Knox County Stone Co. - Edina Quarry (KC-01) shall process all rock through the primary crusher (EP-06). Bypassing the primary crusher is prohibited.
9. Record Keeping Requirement
Knox County Stone Co. - Edina Quarry (KC-01) 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.

SITE SPECIFIC SPECIAL CONDITIONS:

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

10. Reporting Requirement

Knox County Stone Co. - Edina Quarry (KC-01) shall report to the Air Pollution Control Program, Compliance / Enforcement Section by mail to P.O. Box 176, Jefferson City, MO 65102 or by email at AirComplianceReporting@dnr.mo.gov, 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: 2018-06-041
Installation ID Number: 103-0002

Permit Number: 102018-002

Knox County Stone Co. - Edina Quarry (KC-01): Complete: June 26, 2018
53490 State Hwy 6
Edina, MO 63537

Parent Company:
Knox County Stone Co.
1701 5th Avenue
Moline, IL 61265

Knox County, S25 T62N R12W

PROJECT DESCRIPTION

Knox County Stone Co. – Edina Quarry (KC-01) has applied to replace their primary crusher and grizzly feeder, representing a debottlenecking of the existing plant and increase in emissions. Construction Permit (CP) No. 032005-026 placed a 50.0 tpy PM₁₀ limit on the entire installation as well as ambient impact tracking towards a limit of 150 µg/m³ of PM₁₀. Baseline actuals for the installation were calculated from October 2015 to September 2017 and yielded an average consecutive 24-month annual emission rate of 16.87 tons of PM₁₀. This value was calculated using previously permitted emission factors. For this permit, Knox County Stone Co. has requested an additional 15.0 tpy emissions increase to avoid modeling. Therefore, to avoid modeling with the addition of new equipment, the total installation wide emission limit will be 31.87 tons per year. This limit was also established in Special Condition 9.

Since the previous emissions spreadsheet was not available for this review, and because there will be a de minimis increase in emissions as a result of a plant modification, emissions for the installation were recalculated. This resulted in a new composite emission factor and a removal of ambient air impact tracking.

Ambient impact tracking will no longer be a requirement for this site. This change reflects the Air Pollution Control Program's updated construction industry policy "Ceasing the Use of Nomographs" dated May 1, 2016.

The new grizzly feeder will be able to accommodate 1,000 tph of materials which will feed the new Lippman Jaw Crusher which will bottleneck the installation to 750 tph of crushed rock. There will also be a secondary and tertiary rock crusher which have maximum feed rates of 450 tph and 300 tph, respectively. Moisture content of the

crushed rock will be maintained equal to or above 1.5%. The entire installation will receive line power and therefore no engine emissions will be associated with this site.

Conditioned emissions of PM, PM₁₀, and PM_{2.5} will be less than 100 tpy for process equipment that do not involve fugitive emissions. Therefore no operating permit is required for the installation.

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

This installation is located in Knox County, an attainment area for all criteria pollutants. This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].

TABLES

Table 2: List of Equipment

Emission Point ¹	Equipment Description	MHDR (TPH)
EP-04	Unloading to feeder	750
EP-05	Grizzly Feeder	1000
EP-06	Primary Crusher (Lippmann 38x62)	750
EP-07A	Transfer 30" through 60" Conveyors (75 total)	16,500
EP-08A	Screening (6 total)	2,000
EP-09A	Secondary Crusher	450
EP-010A	Tertiary Crusher	300
EP-20	Haul Road #1 – Unpaved	2.15 VMT
EP-21	Haul Road #2 – Paved	0.63 VMT
EP-30A	Storage – Vehicular Activity (load in and out)	111.93 VMT
EP-30A	Storage – Wind Erosion	18 Acres

¹EP-01, EP-02, and EP-03 were designated for previous permits as blasting, drilling, and blast rock hauling. These emissions have not been quantified. Other emission points have been removed or are relevant only for EIQ purposes.

The following permits have been issued to Knox County Stone Co. - Edina Quarry (KC-01) from the Air Pollution Control Program.

Table 3: Permit History

Permit Number	Description
032005-026	Modification of an existing stationary rock crushing plant

The table below summarizes the emissions of this project. The potential emissions of the process equipment, do not include emissions from haul roads and wind erosion. The existing actual emissions were taken from the previous year's EIQ. The potential emissions of the application represent the emissions of all equipment and activities

assuming continuous operation without controls (8760 hours per year). Conditioned potential emissions of the installation represent a 15 tpy PM₁₀ emissions increase over baseline actual emissions. The conditioned potential emissions include emissions from sources that will limit their production to ensure compliance with the annual emission limit.

Table 4: Emissions Summary (tons per year)

Air Pollutant	De Minimis Level/SMAL	Existing Actual Emissions (2017 EIQ)	^b Potential Emissions of the Installation	^b Conditioned Potential Emissions of the Installation
PM	25.0	N/D	733.45	111.32
PM ₁₀	15.0	13.1	209.75	< 31.87
PM _{2.5}	10.0	1.2	47.22	7.17
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
GHG (CO ₂ e)	N/A	N/A	N/A	N/A
GHG (mass)	N/A	N/A	N/A	N/A
Total HAPs	25.0	N/A	N/A	N/A

N/A = Not Applicable; N/D = Not Determined

^aPTE of process equipment excluding storage piles and haul roads

^bIncludes site specific haul road and storage pile emissions

EMISSIONS CALCULATIONS

Emissions for the project and the baseline actual emissions were calculated as described below and 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 and aggregate handling 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 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 emission calculations for the use of BMPs.

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 at least 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."

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 increase in potential emissions above baseline actual emissions of PM₁₀ are conditioned below de minimis levels. PM emissions are above de minimis but below major source.

APPLICABLE REQUIREMENTS

Knox County Stone Co. - Edina Quarry (KC-01) 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.
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400. With a throughput of 750 tph of crushed rock, no emission point exceeds 73.92 lbs/hr of particulate (this value was determined using the equation; $\text{lb/hr} = 55.0 \times (\text{tph})^{0.11 - 40}$). All emissions are fugitive.

- 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 June 1, 2018, received June 26, 2018, designating Knox County Stone Co. as the owner and operator of the installation.

Attachment A: Monthly PM₁₀ Emissions Tracking Sheet

Knox County Stone Co. – Edina Quarry (KC-01)

Project Number: 2018-06-041

Permit Number: 102018-002

Site Name: Knox County Stone Co. – Edina Quarry (KC-01)

Site Address: 53490 State Hwy 6, Edina, MO 63537

Site County: Knox, S25 T62N R12W

This sheet covers the period from _____ to _____ (Copy as needed)
 (Month, Year) (Month, Year)

Month	Production (tons)	Emission Factor (lb/ton)	Monthly Emissions ¹ (lbs)	Shutdown and Malfunction PM ₁₀ Emissions ² (lbs)	Monthly Emissions ³ (tons)	12-Month Total Emissions ⁴ (tons)
<i>Example</i>	40,000	0.0479	1,916	0.0	0.958	<i>0.958 + Sum of Previous eleven months</i>
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¹Multiply the monthly production by the emission factor.

²As reported to the Air Pollution Control Program’s Compliance/Enforcement Section according to the provisions of 10 CSR 10-6.050 for the month.

³Add the monthly PM₁₀ emissions plus the SSM emissions from the same time period and divide by 2000 and

⁴Add the monthly emissions (tons) to the sum of the monthly emissions from the previous eleven months. A total of less than 31.87 tons of PM₁₀ per consecutive 12 months is necessary for compliance.

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.

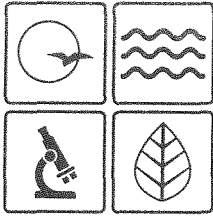
2. Application of Chemical Dust Suppressants
 - A. The operator shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to unpaved areas.
 - B. The quantities of the chemical dust suppressant shall be applied and maintained in accordance with the 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	MMBtu	Million British thermal units
°F	degrees Fahrenheit	MMCF	million cubic feet
acfm	actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	NAAQS ...	National Ambient Air Quality Standards
BMPs	Best Management Practices	NESHAPs ..	National Emissions Standards for Hazardous Air Pollutants
Btu	British thermal unit	NO_x	nitrogen oxides
CAM	Compliance Assurance Monitoring	NSPS	New Source Performance Standards
CAS	Chemical Abstracts Service	NSR	New Source Review
CEMS	Continuous Emission Monitor System	PM	particulate matter
CFR	Code of Federal Regulations	PM_{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
CO	carbon monoxide	PM₁₀	particulate matter less than 10 microns in aerodynamic diameter
CO₂	carbon dioxide	ppm	parts per million
CO₂e	carbon dioxide equivalent	PSD	Prevention of Significant Deterioration
COMS	Continuous Opacity Monitoring System	PTE	potential to emit
CSR	Code of State Regulations	RACT	Reasonable Available Control Technology
dscf	dry standard cubic feet	RAL	Risk Assessment Level
EIQ	Emission Inventory Questionnaire	SCC	Source Classification Code
EP	Emission Point	scfm	standard cubic feet per minute
EPA	Environmental Protection Agency	SDS	Safety Data Sheet
EU	Emission Unit	SIC	Standard Industrial Classification
fps	feet per second	SIP	State Implementation Plan
ft	feet	SMAL	Screening Model Action Levels
GACT	Generally Available Control Technology	SO_x	sulfur oxides
GHG	Greenhouse Gas	SO₂	sulfur dioxide
gpm	gallons per minute	SSM	startup, shutdown, & malfunction
gr	grains	tph	tons per hour
GWP	Global Warming Potential	tpy	tons per year
HAP	Hazardous Air Pollutant	VMT	vehicle miles traveled
hr	hour	VOC	Volatile Organic Compound
hp	horsepower		
lb	pound		
lbs/hr	pounds per hour		
MACT	Maximum Achievable Control Technology		
µg/m³	micrograms per cubic meter		
m/s	meters per second		
Mgal	1,000 gallons		
MW	megawatt		
MHDR	maximum hourly design rate		



OCT 02 2018

Mr. John Brimeyer
Environmental Manager
Knox County Stone Co. - Edina Quarry (KC-01)
53490 State Hwy 6
Edina, MO 63537

RE: Project Number: 2018-06-041; Installation Number: 103-0002
New Source Review Permit - Permit Number:

Dear Mr. Brimeyer:

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. In addition, please note that Knox County Stone Co. - Edina Quarry (KC-01) cannot operate with any other plants that have ambient impact limits based on the Air Pollution Control Program's nomographs. Please refer to the permits of any plant that you are operating with to see if their respective permits contain an ambient impact limit. 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 Mr.



Mr. John Brimeyer
Page Two

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.ao.mo.gov/ahc.

If you have any questions regarding this permit, please do not hesitate to contact Hans Robinson at the department's 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:shj

Enclosures

c: Northeast Regional Office
PAMS File: 2018-06-041
102018-002
Permit Number:

NOTICE: This spreadsheet is for your use only and should be used with caution. MoDNR does not guarantee the accuracy of the information it contains. This spreadsheet is subject to continual revision and updating. It is your responsibility to be aware of the most current, accurate and complete information available. MoDNR is not responsible for errors or omissions in this spreadsheet. Submittal of the information contained in this spreadsheet (workbook) does not relieve the responsible official of the certification statement signed on the first page of the application.

For Single Plant Operation

Hours per day	24.0
Days per year	28.1
Hours per year	626.4

For Multiple Plant Operation

Hours per day	24.0
Days per year	55.5
Hours per year	1330.8

Pollutant	Justification for Limit
PM10	De Minimis

Pollutant	Potential Emissions of Process Equipment (tons/yr)	Potential Emissions including fugitives (tons/yr)	Allowable Emissions for 1331 hours per year (tons/yr)	De Minimis Thresholds	Plant-wide Composite Emission Factor (lb/ton)
PM	37.41	733.45	111.42	25	0.1675
PM ₁₀	13.42	269.75	31.87	15	0.0479
PM _{2.5}	2.07	47.22	7.17	10	0.0108
SO ₂	-	-	-	40	0.0000
NO ₂	-	-	-	40	0.0000
VOC	-	-	-	40	0.0000
CO	-	-	-	100	0.0000
CH ₂ O	-	-	-	2.00	0.0000
Pb	-	-	-	0.01	0.0000
HAPs	-	-	-	10	0.0000
CO ₂	-	-	-	100	0.0000
N ₂ O	-	-	-	100	0.0000
CH ₄	-	-	-	100	0.0000
GHG _{max}	-	-	-	100	0.0000
CO ₂ eq	-	-	-	100,000	0.0000

Limit Hours per Year

Limit Hours per Year w/ 24 hr day

Maximum hourly design rate (tons/hr) 1000

Tons of product per day	24,000.0
Tons of product per year	1,330,800.0

Baseline Actual Emissions 16.87 tpy
 Emissions Increase 15.00 tpy
 Installation Limit 31.87 tpy