

# PERMIT BOOK

## STATE OF 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: **08 2014 - 008**

Project Number: 2014-04-019  
Installation ID: 097-0166

Parent Company: Jasper Stone, LLC

Parent Company Address: 17389 Redbud Rd, Jasper, MO 64755

Installation Name: Jasper Stone, LLC

Installation Address: 17389 Redbud Road, Jasper, MO 64755

Location Information: Jasper County, S13 T30N R31W

Application for Authority to Construct was made for:

The installation of a new chip drying plant at an existing 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.

**AUG 15 2014**

EFFECTIVE DATE

Handwritten signature of Kyna L Moore in black ink.  
\_\_\_\_\_  
DIRECTOR OR DESIGNEE  
DEPARTMENT OF NATURAL RESOURCES

## 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 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 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 of Natural Resources 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 this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' 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 at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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Permit No.	
Project No.	2014-04-019

**SITE SPECIFIC SPECIAL CONDITIONS:**

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

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*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 Special Conditions 3, 4 and 6 found in Construction Permit 072012-004, which was issued by the Air Pollution Control Program.

2. Ambient Air Impact Limitation

A. Jasper Stone, LLC shall not cause an exceedance of the NAAQS for PM<sub>10</sub> of 150.0 µg/m<sup>3</sup> 24-hour average in ambient air.

B. Jasper Stone, LLC shall demonstrate compliance with Special Condition 2.A using Attachment A, Attachment B or other equivalent forms that have been approved by the Air Pollution Control Program, including electronic forms. Jasper Stone, LLC shall account for the impacts from sources of PM<sub>10</sub> not owned by Jasper Stone, LLC as instructed in Attachment B.

3. Annual Emission Limit – Chip Drying Plant

A. Jasper Stone, LLC shall emit less than 15.0 tons of PM<sub>10</sub> in any 12-month period from the chip drying plant.

B. Jasper Stone, LLC shall demonstrate compliance with Special Condition 3.A using Attachment C or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.

4. Annual Emission Limit – Rock-Crushing Plant

A. Jasper Stone, LLC shall emit less than 15.0 tons of PM<sub>10</sub> in any 12-month period from the rock-crushing plant.

B. Jasper Stone, LLC shall demonstrate compliance with Special Condition 4.A using Attachment D or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.

5. Enclosure Control System Requirement

A. Jasper Stone, LLC shall control emissions from the following emission sources associated with the chip drying plant by operating them inside of a building:

- 1) Grizzly Feeder: EP 1.02

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**SITE SPECIFIC SPECIAL CONDITIONS:**

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

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- 2) Conveyors: EP 1.03, 1.04, 1.06, 1.07, 1.09, 1.17, 1.19, 1.24, 1.25, 1.26, 1.28, 1.29, 2.02, 2.04, 2.05, 2.13, 2.16, 2.17, 2.18, 2.19, 2.2, 2.22, 3.0, 3.03, 4.03, 4.10, and 4.11
  - 3) Storage Bins: EP 1.05, 2.07 and 4.04
  - 4) Crusher: EP 2.09
6. Control Device Requirement-Baghouse
- A. Jasper Stone, LLC shall control emissions from the following emission sources associated with the chip drying plant using baghouses as specified in the permit application:
    - 1) Conveyors: EP 1.08B, 1.10, 1.16, 1.18, 2.03, 2.06, 2.08, 2.10, and 2.12
    - 2) Rotary Dryer: EP 1.08A
    - 3) Storage Bins: EP 1.11, 1.12, 1.13, 4.00A, 4.00B, 4.00C, 4.00D, 4.06A, 4.06B, 5.00A, 5.00B, 5.00C, 5.00D, 5.00E, 5.00F, 5.00G and 5.00H
    - 4) Crushers: EP 1.14 and 1.15
    - 5) Screens: EP 2.00, 2.01, 2.15A, 2.15B, 2.15C and 2.15D
  - B. The baghouses shall be operated and maintained in accordance with the manufacturer's specifications. The baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources employees may easily observe them.
  - C. Replacement filters for the baghouses shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
  - D. Jasper Stone, LLC shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
  - E. Jasper Stone, LLC shall maintain a copy of the baghouse manufacturer's performance warranty on site.
  - F. Jasper Stone, LLC shall maintain an operating and maintenance log for the baghouses which shall include the following:
    - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
    - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

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**SITE SPECIFIC SPECIAL CONDITIONS:**

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

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7. **Minimum Distance to Property Boundary Requirement**  
The primary emission point shall be located at least 1200 feet from the nearest property boundary.
8. **Primary Equipment Requirement**  
Jasper Stone, LLC shall process all rock for chip drying through the rotary dryer (EP-1.08). Bypassing the dryer is prohibited.
9. **Record Keeping Requirement**  
Jasper Stone, LLC 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.
10. **Reporting Requirement**  
Jasper Stone, LLC 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: 2014-04-019  
Installation ID Number: 097-0166  
Permit Number:

Jasper Stone, LLC  
17389 Redbud Road  
Jasper, MO 64755

Complete: May 26, 2014

Parent Company:  
Jasper Stone, LLC  
17389 Redbud Rd  
Jasper, MO 64755

Jasper County, S13 T30N R31W

### PROJECT DESCRIPTION

Jasper Stone, LLC has submitted an Application for Authority to Construct for the installation of a new chip drying plant at its existing quarry, which houses an existing rock-crushing plant owned by Jasper Stone, LLC. A rotary dryer will be the bottleneck of the chip drying plant and is rated at 100 tons per hour. This dryer will utilize a natural gas burner that is rated at 40 million British thermal units per hour. The rest of the plant will be powered by electricity from the grid.

Limestone will be crushed by the existing rock-crushing plant and a portion of the stockpiled limestone will be sent to the chip drying plant to produce animal supplement products. The dried aggregate from the chip drying plant will be stored in bins so additional storage pile emissions are not expected from this project. The overall amount of limestone product shipped offsite will not increase, and therefore, additional haul road and vehicular activity emissions from the new chip drying plant are not expected.

This chip drying plant is replacing the chip drying equipment that was permitted in Construction Permit 072012-004. As a result, Special Conditions 3, 4, and 6 of Construction Permit 072012-004 are being superseded by this permit to clarify the emission tracking sheets for the rock-crushing plant. Construction Permit 072012-004 gave the installation a 15.0 ton PM<sub>10</sub> per year limit. At the time of the issuance of that permit, the installation mostly consisted of the rock-crushing plant. This current permit (Project Number 2014-04-019) is re-establishing the 15.0 ton PM<sub>10</sub> per year limit for the rock-crushing plant in addition to giving the new chip drying plant its own ton PM<sub>10</sub> per year limit.

This installation is located in Jasper 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

The following permits have been issued to Jasper Stone, LLC from the Air Pollution Control Program.

**Table 1: Permit History**

Permit Number	Description
052010-001	Installation of a rock-crushing plant
072012-004	Modification of rock-crushing plant

The table below summarizes the emissions of this project. The existing actual emissions were taken from the previous year's EIQ. The potential emissions of the chip drying plant represent the emissions of all equipment and activities associated with the chip drying plant assuming continuous operation (8760 hours per year). The conditioned potential emissions of the chip drying plant are based on a voluntary 15.0 ton per year PM<sub>10</sub> emission limit for only the chip drying plant to avoid modeling requirements. The potential emissions of the installation are based on the potential emissions of all equipment at this site (the chip drying plant and rock-crushing plant), including control devices and permit limits.

**Table 2: Emissions Summary of the Chip Drying Plant (tons per year)**

Air Pollutant	De Minimis Level/SMAL	Existing Actual Emissions (2013 EIQ)	Potential Emissions of the Chip Drying Plant	Conditioned Potential Emissions of the Chip Drying Plant	Potential Emissions of the Installation
PM	25.0	N/D	34.46	27.45	72.77
PM <sub>10</sub>	15.0	4.06	18.83	< 15.00	30.00
PM <sub>2.5</sub>	10.0	0.94	12.48	9.94	13.50
SO <sub>x</sub>	40.0	N/D	0.10	0.08	0.08
NO <sub>x</sub>	40.0	N/D	17.18	13.68	14.00
VOC	40.0	N/D	0.94	0.75	0.77
CO	100.0	N/D	14.43	11.49	11.76
Total HAPs	25.0	N/D	0.32	0.26	0.26

N/D = Not Determined

The table below summarizes the emissions of the existing rock-crushing plant. The existing actual emissions were taken from the previous year's EIQ. The potential emissions of the rock-crushing plant represent the emissions of all equipment and activities associated with the rock-crushing plant in continuous operation (8760 hours per year). The conditioned potential emissions of the rock-crushing plant are based on a voluntary 15.0 ton per year PM<sub>10</sub> emission limit taken in Construction Permit 072012-004. This current permit (Project Number 2014-04-019) is re-establishing the 15.0 ton PM<sub>10</sub> per year limit for the rock-crushing plant. The potential emissions of the installation are based on the potential emissions of all equipment at this site (the chip drying plant and rock-crushing plant), including control devices and permit limits.

Table 3: Emissions Summary of the Rock-Crushing Plant (tons per year)

Air Pollutant	De Minimis Level/SMAL	Existing Actual Emissions (2013 EIQ)	Potential Emissions of the Rock-Crushing Plant	Conditioned Potential Emissions of the Rock-Crushing Plant	Potential Emissions of the Installation
PM	25.0	N/D	294.39	45.33	72.77
PM <sub>10</sub>	15.0	4.06	97.41	< 15.00	30.00
PM <sub>2.5</sub>	10.0	0.94	23.13	3.56	13.50
SO <sub>x</sub>	40.0	N/D	N/A	N/A	0.08
NO <sub>x</sub>	40.0	N/D	N/A	N/A	14.00
VOC	40.0	N/D	N/A	N/A	0.77
CO	100.0	N/D	N/A	N/A	11.76
Total HAPs	25.0	N/D	N/A	N/A	0.26

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

Table 4: Ambient Air Quality Impact Analysis

Pollutant	NAAQS (µg/m <sup>3</sup> ) <sup>a</sup>	Averaging Time	Maximum Modeled Impact of Rock-Crushing Plant (µg/m <sup>3</sup> )	Maximum Modeled Impact of Chip Drying Plant (µg/m <sup>3</sup> )	Limited Impact (µg/m <sup>3</sup> )	Back-ground (µg/m <sup>3</sup> ) <sup>b</sup>	Daily Production (tons/day) <sup>c</sup>
PM <sub>10</sub> (same) <sup>d</sup>	150.0	24-hour	46.70	84.85	130.0	20.0	N/A
PM <sub>10</sub> (separate) <sup>e</sup>	150.0	24-hour	N/A	N/A	87.48	62.52	N/A

N/A = Not Applicable

<sup>a</sup> National Ambient Air Quality Standards (NAAQS)

<sup>b</sup> Background emissions include 20.0 µg/m<sup>3</sup> to address emissions from haul roads and vehicular activity areas and, when applicable, 42.52 µg/m<sup>3</sup> to address emissions from plants not owned by Jasper Stone, LLC.

<sup>c</sup> The daily production limit of Jasper Stone, LLC is indirectly based on compliance with the NAAQS for PM<sub>10</sub>. However, the daily production limit of Jasper Stone, LLC during the solitary and same owner operating scenarios is not determined because Jasper Stone, LLC can balance production between all plants they own and operate at this site.

<sup>d</sup> Operation with other plants that are owned by Jasper Stone, LLC.

<sup>e</sup> Operation with other plants that are not owned by Jasper Stone, LLC.

<sup>f</sup>

## EMISSIONS CALCULATIONS

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 chip drying plant (conveyors, grizzly feeder, storage bin, crushers and screens) were calculated using emission factors from AP-42 Section 11.19.2 "Crushed Stone Processing and Pulverized Mineral Processing," August 2004. These emission sources are either controlled by a baghouse or an enclosure. As a result, a 99% control efficiency for PM, PM<sub>10</sub>, PM<sub>2.5</sub> were applied to the uncontrolled emission

factors of sources that will be controlled by baghouses. Also, a 3.7% control efficiency for PM and PM<sub>10</sub> and a 1.5% control efficiency for PM<sub>2.5</sub> were applied to the uncontrolled emission factors of sources that will be controlled by an enclosure.

Emissions from the sand dryer were calculated using emission factors from AP-42 Section 1.4 "Sand & Gravel Processing," November 1995. Combustion emissions from the sand dryer were calculated using emission factors from AP-42 Section 11.19.1 "Natural Gas Combustion," November 1998.

Conveyor EP-1.01 will transport aggregate from the rock-crushing plant to the chip drying plant. Aggregate from the rock-crushing plant has a moisture content of at least 1.5 percent by weight. As a result, this moisture content was taken into account for this emission point only. As a result, the controlled emission factor was used for this emission point.

### AMBIENT AIR QUALITY IMPACT ANALYSIS

An ambient air quality impact analysis (AAQIA) was performed to determine the impact of the pollutants listed in Table 4. The Air Pollution Control Program requires an AAQIA of PM<sub>10</sub> for all asphalt, concrete and rock-crushing plants regardless of the level of PM<sub>10</sub> emissions if a permit is required. An AAQIA is required for other pollutants if their emissions exceed their respective de minimis or screening model action level (SMAL). The AAQIA was performed using the Air Pollution Control Program's generic nomographs and when appropriate the EPA modeling software AERSCREEN. For each pollutant that was modeled, the maximum concentration that occurs at or beyond the site boundary was compared to the NAAQS or RAL for the pollutant. If during continuous operation the modeled concentration of a pollutant is greater than the applicable NAAQS or RAL, the plant's production is limited to ensure compliance with the standard.

### OPERATING SCENARIOS

The plant is permitted to operate with other plants located at the site as long as the NAAQS is not exceeded. The following scenarios explain how Jasper Stone, LLC shall demonstrate compliance with the NAAQS.

- When more than one plant owned by Jasper Stone, LLC, which is referred to as a same owner plant, is located at the site, Jasper Stone, LLC must calculate the daily impact of each plant and limit the total impact of all plants to not exceed the NAAQS using Attachment A or another equivalent form.
- When plants that are not owned by Jasper Stone, LLC, which are referred to as separate owner plants, are located at the site, Jasper Stone, LLC must account for the impacts of these plants as a background concentration and add it to the total impact of all plants owned by Jasper Stone, LLC that are operating at the site. This total is limited to not exceed the NAAQS. Jasper Stone, LLC will limit the total

impact of all plants they own and operate at the site to 87.48  $\mu\text{g}/\text{m}^3$  when any plants they do not own are located at the site. Jasper Stone, LLC is not permitted to operate with any plant that is not owned by Jasper Stone, LLC that has a separate owner background greater than 42.52  $\mu\text{g}/\text{m}^3$ . Emissions from haul roads and vehicular activity areas at this site are addressed as a background concentration of 20.0  $\mu\text{g}/\text{m}^3$ . During this scenario, Jasper Stone, LLC shall use Attachment B, or another equivalent form, to demonstrate compliance with the NAAQS.

### PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of  $\text{PM}_{2.5}$  are conditioned below its de minimis level and potential emissions of PM are above its de minimis level, but below its major source level.

### APPLICABLE REQUIREMENTS

Jasper Stone, LLC 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. For a complete list of applicable requirements for your installation, please consult your operating permit.

### GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
- A modification to your Basic Operating Permit (Project 2014-04-019) to include this permit is required within 30 days of the issuance of this permit
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *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 applicable equipment of this plant (including, but not limited to, each crusher, screening operation, conveyor, storage bin, enclosed truck loading station)
- 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*, I recommend this permit be granted with special conditions.

\_\_\_\_\_  
Daronn A. Williams  
New Source Review Unit

\_\_\_\_\_  
Date

## PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated April 7, 2014, received April 8, 2014, designating Jasper Stone, LLC as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.









## APPENDIX A

### Abbreviations and Acronyms

<b>%</b> .....	percent	<b>MMBtu</b> .....	Million British thermal units
<b>°F</b> .....	degrees Fahrenheit	<b>MMCF</b> .....	million cubic feet
<b>acfm</b> .....	actual cubic feet per minute	<b>MSDS</b> .....	Material Safety Data Sheet
<b>BACT</b> .....	Best Available Control Technology	<b>NAAQS</b> .....	National Ambient Air Quality Standards
<b>BMPs</b> .....	Best Management Practices	<b>NESHAPs</b> ...	National Emissions Standards for Hazardous Air Pollutants
<b>Btu</b> .....	British thermal unit	<b>NO<sub>x</sub></b> .....	nitrogen oxides
<b>CAM</b> .....	Compliance Assurance Monitoring	<b>NSPS</b> .....	New Source Performance Standards
<b>CAS</b> .....	Chemical Abstracts Service	<b>NSR</b> .....	New Source Review
<b>CEMS</b> .....	Continuous Emission Monitor System	<b>PM</b> .....	particulate matter
<b>CFR</b> .....	Code of Federal Regulations	<b>PM<sub>2.5</sub></b> .....	particulate matter less than 2.5 microns in aerodynamic diameter
<b>CO</b> .....	carbon monoxide	<b>PM<sub>10</sub></b> .....	particulate matter less than 10 microns in aerodynamic diameter
<b>CO<sub>2</sub></b> .....	carbon dioxide	<b>ppm</b> .....	parts per million
<b>CO<sub>2e</sub></b> .....	carbon dioxide equivalent	<b>PSD</b> .....	Prevention of Significant Deterioration
<b>COMS</b> .....	Continuous Opacity Monitoring System	<b>PTE</b> .....	potential to emit
<b>CSR</b> .....	Code of State Regulations	<b>RACT</b> .....	Reasonable Available Control Technology
<b>dscf</b> .....	dry standard cubic feet	<b>RAL</b> .....	Risk Assessment Level
<b>EIQ</b> .....	Emission Inventory Questionnaire	<b>SCC</b> .....	Source Classification Code
<b>EP</b> .....	Emission Point	<b>scfm</b> .....	standard cubic feet per minute
<b>EPA</b> .....	Environmental Protection Agency	<b>SIC</b> .....	Standard Industrial Classification
<b>EU</b> .....	Emission Unit	<b>SIP</b> .....	State Implementation Plan
<b>fps</b> .....	feet per second	<b>SMAL</b> .....	Screening Model Action Levels
<b>ft</b> .....	feet	<b>SO<sub>x</sub></b> .....	sulfur oxides
<b>GACT</b> .....	Generally Available Control Technology	<b>SO<sub>2</sub></b> .....	sulfur dioxide
<b>GHG</b> .....	Greenhouse Gas	<b>tph</b> .....	tons per hour
<b>gpm</b> .....	gallons per minute	<b>tpy</b> .....	tons per year
<b>gr</b> .....	grains	<b>VMT</b> .....	vehicle miles traveled
<b>GWP</b> .....	Global Warming Potential	<b>VOC</b> .....	Volatile Organic Compound
<b>HAP</b> .....	Hazardous Air Pollutant		
<b>hr</b> .....	hour		
<b>hp</b> .....	horsepower		
<b>lb</b> .....	pound		
<b>lbs/hr</b> .....	pounds per hour		
<b>MACT</b> .....	Maximum Achievable Control Technology		
<b>µg/m<sup>3</sup></b> .....	micrograms per cubic meter		
<b>m/s</b> .....	meters per second		
<b>Mgal</b> .....	1,000 gallons		
<b>MW</b> .....	megawatt		
<b>MHDR</b> .....	maximum hourly design rate		

Mr. Larry North  
Managing Partner  
Jasper Stone, LLC  
17389 Redbud Road  
Jasper, MO 64755

RE: New Source Review Permit - Project Number: 2014-04-019; Installation Number: 097-0166

Dear Mr. North:

Jasper Stone, LLC has submitted an Application for Authority to Construct for the installation of a new chip drying plant at its existing quarry, which houses an existing rock-crushing plant owned by Jasper Stone, LLC. A rotary dryer will be the bottleneck of the chip drying plant and is rated at 100 tons per hour. This dryer will utilize a natural gas burner that is rated at 40 million British thermal units per hour. The rest of the plant will be powered by electricity from the grid.

Limestone will be crushed by the existing rock-crushing plant and a portion of the stockpiled limestone will be sent to the chip drying plant to produce animal supplement products. The dried aggregate from the chip drying plant will be stored in bins so additional storage pile emissions are not expected from this project. The overall amount of limestone product shipped offsite will not increase, and therefore, additional haul road and vehicular activity emissions from the new chip drying plant are not expected.

This chip drying plant is replacing the chip drying equipment that was permitted in Construction Permit 072012-004. As a result, Special Conditions 3, 4, and 6 of Construction Permit 072012-004 are being superseded by this permit to clarify the emission tracking sheets for the rock-crushing plant.

Enclosed with this letter is your permit to construct. Please study it carefully. 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, your new source review permit application and with your amended operating permit 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.

Mr. Larry North  
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If you have any questions regarding this permit, please do not hesitate to contact Daronn A. Williams, 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:dwl

Enclosures

c: Southwest Regional Office  
PAMS File: 2014-04-019

Permit Number: