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: 012010-002
Project Number: 2009-09-043

Parent Company: Old Castle Materials Group, Inc.
Parent Company Address: 900 Ashwood Parkway, Atlanta, GA 30338
Installation Name: APAC-Kansas, Inc. (Bates City Quarry)
Installation Address: 1317 Z Highway, Bates City, MO 64011
Location Information: Lafayette County, S25, T48N, R29W

Application for Authority to Construct was made for:
APAC-Kansas, Inc. is changing their installation to a Generic Plant. Rock will be processed through no more that 5 crushers, 5 screens, 40 conveyors, and 10 bins. The rock crushing plant has a maximum hourly design rate (MHDR) of 500 tons per hour (tph). Best Management Practices will be used to control fugitive emissions from storage piles and haul roads. 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.

JAN - 4 2010
EFFECTIVE DATE

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 devises shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the departments’ Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. 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.
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); by the Missouri Rules listed in Title 10, Division 10 of the Codes of State Regulations (specifically 10 CSR 10-6.060); by 10 CSR 10-6.060 paragraph (12)(A)10. “Conditions required by permitting authority”; by 10 CSR 10-6.010 “Ambient Air Quality Standards” and 10 CSR 10-6.060 subsections (5)(D) and (6)(A); and by control measures requested by the applicant, in their permit application, to reduce the amount of air pollutants being emitted, in accordance with 10 CSR 10-6.060 paragraph (6)(E)3. Furthermore, one or more of the Subparts of 40 CFR Part 60, New Source Performance Standards (NSPS), applies to this installation.

1. Generic Plant Designation and Maximum Combined Hourly Design Rate
   APAC-Kansas, Inc. (Bates City Quarry)’s Stationary rock crushing plant (107-0042) has been designated to be a Generic Plant Operation. The combined Maximum Hourly Design Rate (MHDR) for the primary unit(s) and each of the following generic equipment types shall not exceed the maximum installation capacities listed below at any time the installation is in operation.

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Maximum Combined Hourly Design Rate</th>
<th>Maximum Number of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Unit(s) (Primary Crusher)</td>
<td>500 tons per hour</td>
<td>1</td>
</tr>
<tr>
<td>Feeder/Grizzly</td>
<td>500 tons per hour</td>
<td>1</td>
</tr>
<tr>
<td>Crusher(s) including primary crusher</td>
<td>2,500 tons per hour</td>
<td>5</td>
</tr>
<tr>
<td>Conveyor(s), Stacker(s)</td>
<td>10,000 tons per hour</td>
<td>40</td>
</tr>
<tr>
<td>Screen(s)</td>
<td>1,500 tons per hour</td>
<td>5</td>
</tr>
<tr>
<td>Storage Bin(s)</td>
<td>200 tons per hour</td>
<td>10</td>
</tr>
</tbody>
</table>

2. Generic Plant Equipment Identification Requirement
   A. Within thirty (30) days of the receipt of this permit, APAC-Kansas, Inc. (Bates City Quarry) shall submit to the Air Pollution Control Program’s Permitting Section, and the Kansas City Regional Office, the following information for the generic plant (107-0042):

   1.) A Master List of all equipment that will be permitted for use with the generic plant (107-0042). This master list shall include the following information for each piece of equipment. The manufacturer’s name, the model number, the serial number, the actual MHDR, the date of manufacture, any company-assigned equipment number, and any other additional information such as sizes and/or dimensions that is necessary to uniquely identify all of the equipment.

   2.) A list of the core equipment that will always be utilized with the generic plant (107-0042). The core equipment associated with the generic plant shall include at least one (1) primary unit. Core equipment items are rate-controlling components of the process flow (e.g., primary crusher and/or primary screen). The maximum hourly design rate of the generic plant is defined to be the sum of the MHDR(s) of the core equipment. Any arrangement of the generic plant’s equipment must be such that the core equipment is not bypassed in the process flow.

   3.) A determination on the applicability of 40 CFR Part 60, Subpart "OOO", Standards of Performance for Nonmetallic Mineral Processing Plants, for each piece of equipment. APAC-Kansas, Inc. (Bates City Quarry) shall indicate whether or not each piece of equipment is subject to Subpart "OOO" and provide the justification for this applicability determination.

   4.) APAC-Kansas, Inc. (Bates City Quarry) shall submit notification to the Air Pollution Control Program and the Regional Office if the core equipment is changed and/or if new equipment is added to the supplemental equipment list.

   B. To assure that each piece of equipment is properly identified as being a part of this generic Stationary rock crushing plant (107-0042), APAC-Kansas, Inc. (Bates City Quarry) shall provide and maintain suitable, 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...
GENERAL SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

the individual component. These identification numbers must be submitted to the Air Pollution Control Program and the Regional Office no later than fifteen (15) days after start-up of the generic plant.

C. APAC-Kansas, Inc. (Bates City Quarry) shall at all times maintain a list of the specific equipment currently being utilized with the generic Stationary rock crushing plant (107-0042). The installation shall immediately make this list of currently used equipment available to any Missouri Department of Natural Resources’ personnel upon request.

3. Record Keeping Requirement
The operator(s) shall maintain all records required by this permit for not less than five (5) years and shall make them available to any Missouri Department of Natural Resources’ personnel upon request.

4. Superseding Condition
The conditions of this permit supersede all special conditions found in the previously issued construction permit(s) (062006-013) from the Air Pollution Control Program.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

Site ID No.: 107-0042
Site Name: APAC-Kansas, Inc. (Bates City Quarry)
Site Address: 1317 Z Highway, Bates City, MO 64011
Site County: Lafayette County, S25, T49N, R29W

1. Best Management Practices
   APAC-Kansas, Inc. (Bates City Quarry) shall control fugitive emissions from all of the haul roads and stockpiles at this site by performing Best Management Practices, which include the usage of paving, chemical dust suppressants, or documented watering. These practices are defined in Attachment AA.

2. National Ambient Air Quality Standards (NAAQS) Limitation for Particulate Matter Less Than Ten Microns in Diameter (PM$_{10}$)
   A. The operator(s) for APAC-Kansas, Inc. (Bates City Quarry)'s rock crushing plant (107-0042) shall ensure, while operating at this site, that the ambient impact of PM$_{10}$ at or beyond the nearest property boundary does not exceed 150.0 µg/m$^3$ in any 24-hour period, in accordance with the Federal NAAQS requirements (40 CFR 50.6).
   B. The total daily ambient impact of PM$_{10}$ at this site shall include the combined impact of the rock crushing plant and any ambient background concentration from installations or equipment located on the same site as the rock crushing plant.
   C. To demonstrate compliance, the operator(s) shall maintain a daily record of material processed. Attachment A and B, Daily Ambient PM$_{10}$ Impact Tracking Record, or other equivalent form(s), will be used for this purpose.

3. Annual Emission Limit of PM$_{10}$
   A. The operator(s) shall ensure that APAC-Kansas, Inc. (Bates City Quarry)'s rock crushing plant emits less than 50.0 tons of PM$_{10}$ into the atmosphere in any 12-month period.
   B. To demonstrate compliance, the operator(s) shall maintain a daily record of material processed and PM$_{10}$. Attachment C, Monthly PM$_{10}$ Emissions Tracking Record, or other equivalent form(s), will be used for this purpose.

4. Moisture Content Testing Requirement
   A. APAC-Kansas, Inc. (Bates City Quarry shall verify through testing that the moisture content of the processes rock is greater than or equal to 1.5% 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 within 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 (e.g. quarry) of aggregate.
   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 APAC-Kansas, Inc.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 with 15 days of the noncompliant test. If the results of that test also exceed the limit, APAC-Kansas, Inc. shall either:
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

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 Air Pollution Control Program Compliance Assistance section 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.

G. In lieu of testing, APAC-Kansas, Inc. may obtain test results of the supplier of the aggregate that demonstrate compliance with the moisture content in special condition 3.A.

5. Performance Testing for New Source Performance Standards (NSPS)
APAC-Kansas, Inc. (Bates City Quarry) shall show compliance for all equipment applicable to NSPS Subpart “OOO”.

6. Restriction on Process Configuration of Primary Emission Point(s)
The maximum hourly design rate of the plant is equal to the sum of the design rate(s) of the primary emission point(s). APAC-Kansas, Inc. (Bates City Quarry) has designated the following unit(s) as the primary emission point(s) of the rock crushing plant: primary crusher (EP07). Bypassing the primary emission point(s) for processing is prohibited.

7. Restriction on Minimum Distance to Nearest Property Boundary
The primary emission point of the rock crushing plant, which is the primary crusher (EP07), shall be located at least 500 feet from the nearest property boundary whenever it is operating at this site.

8. Record Keeping Requirement
The operator(s) shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources’ personnel upon request.
TECHNICAL REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT

PROJECT DESCRIPTION

APAC-Kansas (Bates City Quarry) is changing the stationary rock crushing plant to a generic stationary rock crushing plant. Rock will be processed through no more than 1 feeder(s), 5 crusher(s), 5 screen(s), 50 conveyor(s), and 10 bin(s). The maximum hourly design rate (MHDR) of the primary crusher (EP-07) is 500 tons per hour. Processing equipment is powered with hardwire electric power. The emission points are listed in the attached spreadsheet summary. This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2]. The installation is located in Lafayette County, an attainment area for all criteria air pollutants. The combined total MHDR for each equipment group is listed below.

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Maximum Combined Hourly Design Rate</th>
<th>Maximum Number of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Unit(s) (Primary Crusher)</td>
<td>500 tons per hour</td>
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</tr>
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<td>1</td>
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<tr>
<td>Crusher(s) including primary crusher</td>
<td>2,500 tons per hour</td>
<td>5</td>
</tr>
<tr>
<td>Conveyor(s), Stacker(s)</td>
<td>10,000 tons per hour</td>
<td>40</td>
</tr>
<tr>
<td>Screen(s)</td>
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<td>5</td>
</tr>
<tr>
<td>Storage Bin(s)</td>
<td>200 tons per hour</td>
<td>10</td>
</tr>
</tbody>
</table>

The following table lists the previous permits issued to APAC-Kansas (Bates City Quarry) site 107-0042.

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Completed</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0599-016</td>
<td>5/20/1999</td>
<td>New Limestone Crusher</td>
</tr>
<tr>
<td>0599-016A</td>
<td>6/22/2000</td>
<td>Change Record Keeping</td>
</tr>
<tr>
<td>102003-005</td>
<td>10/8/2003</td>
<td>Change Boundaries and Production</td>
</tr>
<tr>
<td>062006-013</td>
<td>7/7/2006</td>
<td>Amendment for BMPs</td>
</tr>
</tbody>
</table>

EMISSIONS EVALUATION

Criteria air pollutants will be emitted from this operation. The main air pollutant of concern is PM$_{10}$. The potential emissions were calculated from the maximum hourly design rate (MHDR) of the equipment, appropriate emission factors, control device efficiencies, and the limiting operating hours at MHDR. The sources of the emission factors and control efficiencies are listed in the section “Permit Documents”. Based on the conditioned potential emissions, the operation is considered a minor source under 10 CSR 10-6.060 section (6).

The rock crushing plant has an annual emission limit of less than 50.0 tons of PM$_{10}$ in any 12-month period. A composite PM$_{10}$ emission factor was developed for the rock crushing plant. The composite emission factor is incorporated into the monthly record keeping table, Attachment C. If the conditioned potential emissions of PM$_{10}$ were 50 tons per year or greater, then the owner would be required to submit dispersion modeling results.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>&lt;50.0</td>
<td>5.42</td>
<td>50.82</td>
<td>&lt;50.0</td>
<td>0.0371</td>
</tr>
<tr>
<td>SOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
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<td>NOx</td>
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</tr>
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<td>VOC</td>
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<td>N/A</td>
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<tr>
<td>CO</td>
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<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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</tr>
<tr>
<td>HAPs</td>
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<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note: N/A = Not Applicable
* Existing potential emissions taken from permit # 062006-013
** Conditioned potential based on voluntary limit.
AMBIENT AIR QUALITY IMPACT ANALYSIS

Screening tools were used to evaluate the ambient air impact of the hourly emissions from this operation. The ambient impact was evaluated at a distance of 500 feet to the nearest property boundary. The ambient impact at this site shall not exceed the National Ambient Air Quality Standard (NAAQS) of 150 µg/m³ of PM₁₀ at or beyond the nearest property boundary in any single 24-hour period. The screening tools were used to develop an ambient impact factor for the rock crushing plant. This ambient impact factor is incorporated into the daily record keeping tables, Attachment A and B.

For sources agreeing to use Best Management Practices (BMPs), as defined in Attachment AA, haul roads and stockpiles are not modeled with screening tools. Instead, they are addressed as a background level of 20.0 µg/m³ of PM₁₀. To ensure conformity with NAAQS, the remaining process emissions are limited to an impact of less than 130 µg/m³ of PM₁₀ at or beyond the nearest property boundary.

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 APAC-Kansas (Bates City Quarry) shall demonstrate compliance with the NAAQS.

- When plants that are owned by APAC-Kansas (Bates City Quarry) are located at the site, APAC-Kansas (Bates City Quarry) must calculate the daily impact of each plant and limit the total impact of all plants below the NAAQS.

- When plants that are not owned by APAC-Kansas (Bates City Quarry) are located at the site, APAC-Kansas (Bates City Quarry) must account for the impacts of these plants as a background concentration and add it to the total impact of all plants owned by APAC-Kansas (Bates City Quarry) that are operating at the site. This total is limited below the NAAQS. APAC-Kansas (Bates City Quarry) will limit the total impact of all plants they own and operate at the site to 100.0 µg/m³ when any plants they do not own are located at the site. APAC-Kansas (Bates City Quarry) is not permitted to operate with any plant that is not owned by APAC-Kansas (Bates City Quarry) that has a separate owner background greater than 30.0 µg/m³.

Table 2: Ambient Air Quality Impact Analysis

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>¹NAAQS/ RAL (µg/m³)</th>
<th>Averaging Time</th>
<th>²Maximum Modeled Impact (µg/m³)</th>
<th>Limited Impact (µg/m³)</th>
<th>Background (µg/m³)</th>
<th>³Daily Limit (tons/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>¹PM₁₀ (same)</td>
<td>150.0</td>
<td>24-hour</td>
<td>252.46</td>
<td>130.0</td>
<td>20.0</td>
<td>7501</td>
</tr>
<tr>
<td>³PM₁₀ (separate)</td>
<td>150.0</td>
<td>24-hour</td>
<td>N/A</td>
<td>100.0</td>
<td>50.00</td>
<td>6616</td>
</tr>
</tbody>
</table>

¹ National Ambient Air Quality Standards (NAAQS) and Risk Assessment Level (RAL)
² Modeled impact at maximum capacity with controls
³ Indirect limit based on compliance with NAAQS.
⁴ Solitary operation or operation with other plants that are owned by APAC-Kansas (Bates City Quarry)
⁵ Operation with other plants that are not owned by APAC-Kansas (Bates City Quarry)
APPLICABLE REQUIREMENTS
The owner is subject to compliance with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements.

- Submission of Emission Data, Emission Fees and Process Information, 10 CSR 10-6.110
- Operating Permits, 10 CSR 10-6.065
- 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 10-3.090
- Restriction of Emission of Particulate Matter From Industrial Processes, 10 CSR 10-6.400
- The National Emission Standards for Hazardous Air Pollutants (NESHAPs) and the currently promulgated Maximum Achievable Control Technology (MACT) regulations do not 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.

Gerad Fox       Date
Environmental Engineer

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, designating Old Castle Materials Group, Inc. as the owner and operator of the installation.
- Environmental Protection Agency (EPA) AP-42, Compilation of Air Pollutant Emission Factors; Volume I, Stationary Point and Area Sources, Fifth Edition.
- Spreadsheet calculations of potential-to-emit and ambient impact.
- Kansas City Regional Office Site Survey.
- Best Management Practices
## Attachment A: Daily Ambient PM$_{10}$ Impact Tracking Record (Same)

**APAC-Kansas, Inc. (Bates City Quarry), 107-0042 – Generic Rock Crushing Plant**

Project Number: 2009-09-043  
County, CSTR: Lafayette County (S25, T49N, R29W)  
Primary Unit Size: 500 tph  
Distance to Nearest Property Boundary: 500 feet

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

<table>
<thead>
<tr>
<th>Date</th>
<th>APAC-Kansas, Inc. (Bates City Quarry) 107-0042 Project #: 2009-09-043</th>
<th>Same Owner Plant</th>
<th>Same Owner Plant</th>
<th>Separate Owner Plant</th>
<th>Project #: 2009-09-043</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Daily Production (tons)</td>
<td>Impact Factor (µg/m$^3$/ton)</td>
<td>Impact$^1$ (µg/m$^3$)</td>
<td>Impact (µg/m$^3$)</td>
<td>Impact (µg/m$^3$)</td>
</tr>
<tr>
<td>Example</td>
<td>2,457</td>
<td>0.0173</td>
<td>42.5</td>
<td>87.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0173</td>
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<td>N/A</td>
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<td></td>
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<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>20.0</td>
</tr>
</tbody>
</table>

Note 1: The Daily PM$_{10}$ Impact (µg/m$^3$) for each plant is calculated by multiplying the Daily Production (tons) by the matching Ambient Impact Factor.

Note 2: Background PM$_{10}$ Level (µg/m$^3$) is from Haul Roads and Stockpiles.

Note 3: The TOTAL PM$_{10}$ Level (µg/m$^3$) is calculated by summing the Daily PM$_{10}$ Ambient Impact(s) and the Background PM$_{10}$ Level. A TOTAL PM$_{10}$ Level of less than 150.0 µg/m$^3$ in any 24-hour period indicates compliance.
## Attachment B: Daily Ambient PM\(_{10}\) Impact Tracking Record (Separate)

**APAC-Kansas, Inc. (Bates City Quarry), 107-0042 – Generic Rock Crushing Plant**

**Project Number:** 2009-09-043  
**County, CSTR:** Lafayette County (S25, T49N, R29W)  
**Primary Unit Size:** 500 tph  
**Distance to Nearest Property Boundary:** 500 feet

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

<table>
<thead>
<tr>
<th>Date</th>
<th>APAC-Kansas, Inc. (Bates City Quarry) 107-0042 Project #: 2009-09-043</th>
<th>Same Owner Plant</th>
<th>Separate Owner Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Daily Production (tons)</td>
<td>Impact Factor (µg/m(^3)ton)</td>
<td>Impact(^1) (µg/m(^3))</td>
</tr>
<tr>
<td>Example</td>
<td>2,815</td>
<td>0.0151</td>
<td>42.5</td>
</tr>
<tr>
<td></td>
<td>0.0151</td>
<td>0.0151</td>
<td>30.0</td>
</tr>
<tr>
<td></td>
<td>0.0151</td>
<td>0.0151</td>
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</tr>
<tr>
<td></td>
<td>0.0151</td>
<td>0.0151</td>
<td>30.0</td>
</tr>
</tbody>
</table>

### Notes:

1. **Note 1:** The Daily PM\(_{10}\) Impact (µg/m\(^3\)) for each plant is calculated by multiplying the Daily Production (tons) by the matching Ambient Impact Factor.
2. **Note 2:** Background PM\(_{10}\) Level (µg/m\(^3\)) is from Haul Roads and Stockpiles and from other plants not owned by APAC-Kansas, Inc.
3. **Note 3:** The TOTAL PM\(_{10}\) Level (µg/m\(^3\)) is calculated by summing the Daily PM\(_{10}\) Ambient Impact(s) and the Background PM\(_{10}\) Level. A TOTAL PM\(_{10}\) Level of less than 150.0 µg/m\(^3\) in any 24-hour period indicates compliance.
### Attachment C: Monthly PM$_{10}$ Emissions Tracking Record

**APAC-Kansas, Inc. (Bates City Quarry), 107-0042 – Generic Rock Crushing Plant**

**Project Number:** 2009-09-043  
**County, CSTR:** Lafayette County (S25, T49N, R29W)  
**Primary Unit Size:** 500 tph  
**Distance to Nearest Property Boundary:** 500 feet

This sheet covers the period from _ _ to _ _ (Month, Day, Year)  
*(Copy this sheet as needed.)*

<table>
<thead>
<tr>
<th>Month</th>
<th>Monthly Production (tons)</th>
<th>Composite PM$_{10}$ Emission Factor (lbs/ton)</th>
<th>$^1$Monthly PM$_{10}$ Emissions (lbs)</th>
<th>$^2$Monthly PM$_{10}$ Emissions (tons)</th>
<th>$^3$12-Month PM$_{10}$ Emissions (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>44,000</td>
<td>0.0371</td>
<td>2327.6</td>
<td>1.164</td>
<td>9.080</td>
</tr>
</tbody>
</table>

Note 1: The Monthly Emissions (lbs) are calculated by multiplying the Monthly Production (tons) by the Composite Emission Factor (lbs/ton).

Note 2: The Monthly Emissions (tons) are calculated by dividing the Monthly Emissions (lbs) by 2,000.

Note 3: The 12-Month Emissions (tons/year) are a rolling total calculated by adding the Month’s Emissions (tons) to the Monthly Emissions (tons) of the previous eleven (11) months. A total of less than 50.0 tons in any consecutive 12-month period indicates compliance.
Attachment AA: Best Management Practices (BMPs)- Construction Industry
Fugitive Emissions

Construction Industry Sites covered by the Interim Relief Policy shall maintain Best Management Control Practices (BMPs) for fugitive emission areas at their installations when in operation. Options for BMPs are at least one of the following:

For Haul Roads:

1. **Pavement of Road Surfaces** –
   A. The operator(s) may pave all or any portion of the haul roads with materials such as asphalt, concrete, and/or other material(s) after receiving approval from the program. The pavement will be applied in accordance with industry standards for such pavement so as to achieve “Control of Fugitive Emissions”\(^1\) while the plant is operating.
   B. Maintenance and/or 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(s) shall periodically water, wash and/or otherwise clean all of the paved portions of the haul road(s) as necessary to achieve control of fugitive emissions from these areas while the plant is operating.

2. **Usage of Chemical Dust Suppressants** –
   A. The operator(s) shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to all the unpaved portions of the haul roads. The suppressant will be applied in accordance with the manufacturer’s suggested application rate (if available) and re-applied as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
   B. The quantities of the chemical dust suppressant shall be applied, re-applied and/or maintained sufficient to achieve control of fugitive emissions from these areas while the plant is operating.
   C. The operator(s) 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(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.

3. **Usage of Documented Watering** –
   A. The operator(s) shall control the fugitive emissions from all the unpaved portions of the haul roads at the installation by consistently and correctly using the application of a water spray. Documented watering will be applied in accordance with a recommended application rate of 100 gallons per day per 1,000 square feet of unpaved/untreated surface area of haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating. For example, the operator(s) shall calculate the total square feet of unpaved vehicle activity area requiring control on any particular day, divide that product by 1,000, and multiply the quotient by 100 gallons for that day.
   B. The operator(s) shall maintain a log that documents daily water applications. This log shall include, but is not limited to, date and volumes (e.g., number of tanker applications and/or total gallons used) of water application. The log shall also record rationale for not applying water on day(s) the plant is in operation (e.g., meteorological situations, precipitation events, freezing, etc.)
   C. Meteorological precipitation of any kind, (e.g. a quarter inch or more rainfall, sleet, snow, and/or freeze thaw conditions) which is sufficient in the amount or condition to achieve control of fugitive emissions from these areas while the plant is operating.
   D. 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. The operator(s) shall record a brief description of such events in the same log as the documented watering.
   E. The operator(s) shall record the date and the amount of water applied for each application on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.

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\(^1\) For purposes of this document, Control of Fugitive Emissions means to control particulate matter that is not collected by a capture system and visible emissions to the extent necessary to prevent violations of the air pollution law or regulation. (Note: control of visible emission is not the only factor to consider in protection of ambient air quality.)
For Vehicle Activity Areas around Open Storage Piles:

1. Pavement of Stockpile Vehicle Activity Surfaces –
   A. The operator(s) may pave all or any portion of the vehicle activity areas around the storage piles with materials such as asphalt, concrete, and/or other material(s) after receiving approval from the program. The pavement will be applied in accordance with industry standards for such pavement so as to achieve control of fugitive emissions while the plant is operating.
   B. Maintenance and/or 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(s) shall periodically water, wash and/or otherwise clean all of the paved portions of the vehicle activity areas around the storage piles as necessary to achieve control of fugitive emissions from these areas while the plant is operating.

2. Usage of Chemical Dust Suppressants –
   A. The operator(s) shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to all the vehicle activity areas around the open storage piles. The suppressant will be applied in accordance with the manufacturer’s suggested application rate (if available) and re-applied as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
   B. The quantities of the chemical dust suppressant shall be applied, re-applied and/or maintained sufficient to achieve control of fugitive emissions from these areas while the plant is operating.
   C. The operator(s) 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(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.

3. Usage of Documented Watering –
   A. The operator(s) shall control the fugitive emissions from all the vehicle activity areas around the storage piles at the installation by consistently and correctly using the application of a water spray. Documented watering will be applied in accordance with a recommended application rate of 100 gallons per day per 1,000 square feet of unpaved/untreated surface area of vehicle activity areas around the storage piles as necessary to achieve control of fugitive emissions from these areas while the plant is operating. (Refer to example for documented watering of haul roads.)
   B. The operator(s) shall maintain a log that documents daily water applications. This log shall include, but is not limited to, date and volumes (e.g., number of tanker applications and/or total gallons used) of water application. The log shall also record rationale for not applying water on day(s) the plant is in operations (e.g., meteorological situations, precipitation events, freezing, etc.)
   C. Meteorological precipitation of any kind, (e.g. a quarter inch or more rainfall, sleet, snow, and/or freeze thaw conditions) which is sufficient in the amount or condition to achieve control of fugitive emissions from these areas while the plant is operating.
   D. 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. The operator(s) shall record a brief description of such events in the same log as the documented watering.
   E. The operator(s) shall record the date and the amount of water applied for each application on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.
Ms. Adrienne Coppock
Environmental Director
APAC-Kansas, Inc.
P.O. Box 23910
Overland Park, KS 66283

RE: New Source Review Permit - Project Number: 2009-09-043

Dear Ms. Coppock:

Enclosed with this letter is your New Source Review permit. Please review your permit carefully and note the special conditions, if any, and the requirements in your permit.

Operation in accordance with the conditions and requirements in your permit, the New Source Review application submitted for project 2009-09-043, and your amended operating permit, if required, is necessary for continued compliance. Please review your amended operating permit, as it will contain all applicable requirements for your rock crushing plant, including any special conditions from your New Source Review permit.

The section of the permit entitled “Technical Review of Application for Authority to Construct” should not be separated from the main portion of your permit. The entire permit must be retained in your files. 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.

If you have any questions regarding this permit, please do not hesitate to contact me at (573) 751-4817, or you may write to me at the Departments’ Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH:gfl

Enclosures

c: Kansas City Regional Office
   PAMS File 2009-09-043
   Permit Number: