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: 022012-009

Project Number: 2011-12-027

Installation ID: PORT-0649

Parent Company: APAC - Kansas, Inc.

Parent Company Address: P.O. Box 23910, Overland Park, Kansas 66283

Installation Name: APAC - Kansas, Inc.

Installation Address: 2674 Southeast Frost Street, Cameron, MO 64429

Location Information: DeKalb County, S5/6 T57N R30W

Application for Authority to Construct was made for:
The installation of PORT-0649, a generic portable rock-crushing plant that is rated at 600 tons per hour. 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.

FEB 17 2012

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 Departments’ Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant sources(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 sources(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) 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. Generic Plant Designation and Maximum Combined Hourly Design Rate
APAC - Kansas, Inc.'s portable rock-crushing plant PORT-0649 has been designated to be a Generic Plant Operation. The combined Maximum Hourly Design Rate (MHDR) of each of the following generic equipment types shall not exceed the rates and numbers listed in Table 1.

Table 1: Generic Equipment

<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: Primary Crusher</td>
<td>600 tons per hour</td>
<td>1</td>
</tr>
<tr>
<td>Feeder/Grizzly</td>
<td>600 tons per hour</td>
<td>1</td>
</tr>
<tr>
<td>Crushers (including primary crusher)</td>
<td>1,300 tons per hour</td>
<td>3</td>
</tr>
<tr>
<td>Conveyors/Stackers</td>
<td>10,000 tons per hour</td>
<td>38</td>
</tr>
<tr>
<td>Screens</td>
<td>1,500 tons per hour</td>
<td>4</td>
</tr>
<tr>
<td>Engines</td>
<td>2,546 horsepower</td>
<td>6</td>
</tr>
</tbody>
</table>

2. Generic Plant Equipment Identification Requirement
A. APAC - Kansas, Inc. shall submit the following information to the Air Pollution Control Program’s Permitting Section and the Kansas City 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).
   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.
GENERAL SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following Special Conditions:

4) APAC - Kansas, Inc. shall notify the Air Pollution Control Program’s Permitting Section and the Kansas City Regional Office when new equipment is added to the master list and when core equipment is changed within 30 days of the change.

B. APAC - Kansas, Inc. shall maintain a list of the specific equipment currently being utilized with the generic plant. Any arrangement of the generic plant’s equipment must be such that the core equipment is not bypassed in the process flow.

3. Equipment Identification Requirement
APAC - Kansas, Inc. 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. These identification numbers must be submitted to the Air Pollution Control Program no later than 15 days after start-up of the portable rock crushing plant.

4. Relocation of Portable Rock Crushing Plant
A. APAC - Kansas, Inc.’s portable rock-crushing plant PORT-0649 shall not be operated at any location longer than 24 consecutive months.

B. A complete “Portable Source Relocation Request” application must be submitted to the Air Pollution Control Program prior to any relocation of this portable rock crushing plant.
   1) If the portable rock crushing plant is moving to a site previously permitted, and if the circumstances at the site have not changed, then the application must be received by the Air Pollution Control Program at least seven days prior to the relocation.
   2) If the portable rock crushing plant is moving to a new site, or if circumstances at the site have changed (e.g. the site was only permitted for solitary operation and now another plant is located at the site), then the application must be received by the Air Pollution Control Program at least 21 days prior to the relocation. The application must include written notification of any concurrently operating plants.

5. Record Keeping Requirement
APAC - Kansas, Inc. shall maintain all records required by this permit for not less than five years and shall make them available to any Missouri Department of Natural Resources’ personnel upon request.

6. Reporting Requirement
APAC - Kansas, Inc. shall report to the Air Pollution Control Program Enforcement Section P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedances of the limitations imposed by this permit.
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.”

PORT ID Number: PORT-0649
Site ID Number: 063-0012
Site Name: Cameron Quarry
Site Address: 2674 Southeast Frost Street, Cameron, MO 64429
Site County: DeKalb County, S5/6 T57N R30W

1. Best Management Practices Requirement
   APAC - Kansas, Inc. shall control fugitive emissions from all of the haul roads and vehicular activity areas at this site by performing Best Management Practices as defined in Attachment AA.

2. Annual Emission Limit
   A. APAC - Kansas, Inc. shall emit less than 40.0 tons of nitrogen oxides in any 12-month period from the entire installation.
   
   B. APAC - Kansas, Inc. shall demonstrate compliance with Special Condition 2.A using Attachment A or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.

3. Ambient Air Impact Limitation
   A. APAC - Kansas, Inc. shall not cause an exceedance of the National Ambient Air Quality Standard for particulate matter less than ten microns in aerodynamic diameter (PM_{10}) of 150.0 \mu g/m^3 24-hour average in ambient air.
   
   B. APAC - Kansas, Inc. shall demonstrate compliance with Special Condition 3.A using Attachment B and Attachment C or other equivalent forms that have been approved by the Air Pollution Control Program, including an electronic forms. APAC - Kansas, Inc. shall account for the impacts from other sources of PM_{10} as instructed in the attachments.

4. Moisture Content Testing Requirement
   A. APAC - Kansas, Inc. shall verify that the moisture content of the processed rock is greater than or equal to 1.5 percent by weight.
   
   B. Testing shall be conducted according to the method prescribed by the American Society for Testing Materials D-2216, C-566 or another method approved by the Director.
SITE SPECIFIC SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following Special Conditions:

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 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 4.A, another test may be performed within 15 days of the noncompliant test. If the results of that test also exceed the limit, APAC - Kansas, Inc. 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 Air Pollution Control Program Compliance Assistance section within ten 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 that demonstrate compliance with the moisture content in Special Condition 4.A from the supplier of the aggregate.

5. Minimum Distance to Property Boundary Requirement
   The primary emission point shall be located at least 600 feet from the nearest property boundary.

6. Primary Equipment Requirement
   APAC - Kansas, Inc. shall process all rock through the primary crusher (Emission Unit 5). Bypassing the primary crusher is prohibited.

7. Record Keeping Requirement
   APAC - Kansas, Inc. 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.

8. Reporting Requirement
   APAC - Kansas, Inc. shall report to the Air Pollution Control Program Enforcement Section P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedances of the limitations imposed by this permit.
APAC - Kansas, Inc. Complete: December 12, 2011
2674 Southeast Frost Street
Cameron, MO 64429

Parent Company:
APAC - Kansas, Inc.
P.O. Box 23910
Overland Park, Kansas 66283

DeKalb County, S5/6 T57N R30W

PROJECT DESCRIPTION

APAC - Kansas, Inc. has requested to install PORT-0649, a generic portable rock-crushing plant that is rated at 600 ton per hour, in DeKalb County at the Cameron Quarry (063-0012). The equipment of this plant, which is listed in Table 1, is powered by up to six engines with a combined maximum output of 2,546 horsepower. 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.

Currently, no other plants operate at this site. However, APAC - Kansas, Inc. has requested flexibility for this plant to operate with other plants, both plants owned and not owned by APAC - Kansas, Inc. This installation is located in DeKalb 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].

No permits have been issued to PORT-0649 from the Air Pollution Control Program.

TABLES

The table below summarizes the emissions of this project. The potential emissions of the process equipment, which excluded emissions from haul roads and wind erosion, are site specific and should not vary from site to site. The potential emissions of the application represent the emissions of all equipment and activities assuming continuous operation (8,760 hours per year). The conditioned potential emissions are based on a voluntary 40.0 ton per year de minimis limit of nitrogen oxides (NOX). The conditioned potential emissions of the other pollutants are proportionally reduced based upon the plant’s NOX limit.
### Table 2: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th>Air Pollutant</th>
<th>De Minimis Level</th>
<th>¹Potential Emissions of Process Equipment</th>
<th>Existing Actual Emissions</th>
<th>²Potential Emissions of the Application</th>
<th>Conditioned Potential Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>25.0</td>
<td>52.70</td>
<td>N/A</td>
<td>245.66</td>
<td>28.48</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>15.0</td>
<td>35.15</td>
<td>N/A</td>
<td>97.08</td>
<td>11.35</td>
</tr>
<tr>
<td>PM₂₅</td>
<td>10.0</td>
<td>26.62</td>
<td>N/A</td>
<td>57.15</td>
<td>6.47</td>
</tr>
<tr>
<td>SOₓ</td>
<td>40.0</td>
<td>1.17</td>
<td>N/A</td>
<td>1.17</td>
<td>0.13</td>
</tr>
<tr>
<td>NOₓ</td>
<td>40.0</td>
<td>357.25</td>
<td>N/A</td>
<td>357.25</td>
<td>&lt; 40.00</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>29.16</td>
<td>N/A</td>
<td>29.16</td>
<td>3.27</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>76.96</td>
<td>N/A</td>
<td>76.96</td>
<td>8.62</td>
</tr>
<tr>
<td>Total HAPs</td>
<td>25.0</td>
<td>0.32</td>
<td>N/A</td>
<td>0.32</td>
<td>0.04</td>
</tr>
</tbody>
</table>

**N/A = Not Applicable**

¹ Excludes emissions from haul roads and wind erosion

² Includes site specific haul road and storage pile emissions

### Table 3: Ambient Air Quality Impact Analysis

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>³NAAQS (µg/m³)</th>
<th>⁴Averaging Time</th>
<th>⁵Maximum Modeled Impact (µg/m³)</th>
<th>Limited Impact (µg/m³)</th>
<th>Background (µg/m³)</th>
<th>⁶Daily Limit (tons/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>⁴PM₁₀ (Solitary)</td>
<td>150.0</td>
<td>24-hour</td>
<td>435.05</td>
<td>130.0</td>
<td>20.0</td>
<td>6,831</td>
</tr>
<tr>
<td>⁴PM₁₀ (Same Owner)</td>
<td>150.0</td>
<td>24-hour</td>
<td>N/A</td>
<td>130.0</td>
<td>20.0</td>
<td>N/A</td>
</tr>
<tr>
<td>⁴PM₁₀ (Separate Owner)</td>
<td>150.0</td>
<td>24-hour</td>
<td>N/A</td>
<td>90.0</td>
<td>60.0</td>
<td>4,729</td>
</tr>
</tbody>
</table>

**N/A = Not Applicable**

³ National Ambient Air Quality Standards (NAAQS)

⁴ Modeled impact of PORT-0649 at maximum capacity with controls

⁵ The daily production limit of PORT-0649 during all operating scenarios are indirectly based on compliance with NAAQS. The daily production limit of PORT-0649 during the same owner operating scenario is not determined because APAC - Kansas, Inc. can balance production between all plants they own and operate at this site.

⁶ Operation without other plants

⁷ Operation with other plants that are owned by APAC - Kansas, Inc.

⁸ Operation with other plants that are not owned by APAC - Kansas, Inc.

### EMISSIONS CALCULATIONS

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

Emissions from the rock-crushing equipment were 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 equal to or greater than 1.5 percent by weight.
Emissions from the diesel engines were calculated using emission factors from AP-42 Section 3.3 Gasoline and Diesel Industrial Engines,” October 1996.

Emissions from haul roads and vehicular activity areas were calculated using the predictive equation from AP-42 Section 13.2.2 “Unpaved Roads,” November 2006. A 90.0 percent control efficiency is applied to the emission calculations for the use of Best Management Practices (BMPs). Emissions from load-in and load-out of storage piles were calculated using the predictive equation from AP-42 Section 13.2.4. The moisture content of the aggregate is 1.5 percent 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.”

AMBIENT AIR QUALITY IMPACT ANALYSIS

An ambient air quality impact analysis (AAQIA) was performed to determine the impact of particulate matter less than ten microns in aerodynamic diameter (PM$_{10}$), as listed in Table 3. The Air Pollution Control Program requires an AAQIA of PM$_{10}$ for all asphalt, concrete and rock-crushing plants regardless of the level of PM$_{10}$ 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. The AAQIA was performed using the Air Pollution Control Program’s generic nomographs and when appropriate the EPA modeling software SCREEN3. For each pollutant that was modeled, the maximum concentration that occurs at or beyond the site boundary was compared to the National Ambient Air Quality Standard (NAAQS) or Risk Assessment Level (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. In cases where the plant is providing material for a highway project, the ambient impact is evaluated in accordance with a memorandum issued by the Air Pollution Control Program titled “Permitting Asphalt/Concrete Plants for Temporary Highway Projects,” dated April 10, 2000. This memorandum states that air quality should be analyzed at the nearest residence or location where the public could reasonably expected to be found instead of all ambient air. This practice generally allows for a less restrictive daily production level while protecting the public.

This plant uses BMPs to control emissions from haul roads and vehicular activity areas, so emissions from these sources were not included in the AAQIA. Instead they were addressed as a background concentration of 20.0 µg/m$^3$ of PM$_{10}$ in accordance with the Air Pollution Control Program’s BMPs interim policy.

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, Inc. shall demonstrate compliance with the NAAQS.
• When no other plants are located at this site, which is referred to as solitary operation, APAC - Kansas, Inc. must calculate the daily impact of this plant and limit its impact below the NAAQS using Attachment A.

• When plants that are owned by APAC - Kansas, Inc., which are referred to as same owner plants, are located at the site, APAC - Kansas, Inc. must calculate the daily impact of each plant and limit the total impact of all plants below the NAAQS using Attachment A.

• When plants that are not owned by APAC - Kansas, Inc., which are referred to as separate owner plants, are located at the site, APAC - Kansas, Inc. 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, Inc. that are operating at the site. This total is limited below the NAAQS. APAC - Kansas, Inc. will limit the total impact of all plants they own and operate at the site to 90.0 µg/m³ when any plants they do not own are located at the site. APAC - Kansas, Inc. is not permitted to operate with any plant that is not owned by APAC - Kansas, Inc. that has a separate owner background greater than 40.0 µg/m³. During this scenario, APAC - Kansas, Inc. shall use Attachment B 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 particulate matter less than 2.5 microns in diameter (PM$_{2.5}$) are conditioned below the de minimis level and potential emissions of particulate matter are above the de minimis level, but below major source levels.

APPLICABLE REQUIREMENTS

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

• 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 IIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" applies to the equipment.


- None of the National Emission Standards for Hazardous Air Pollutants apply to the proposed equipment of this plant.

- Restriction of Emission of Sulfur Compounds, 10 CSR 10-6.260.

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 Williams Date
Environmental Engineer

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated December 7, 2011, received December 12, 2011, designating APAC - Kansas, Inc. as the owner and operator of the installation.


- Kansas City Regional Office Site Survey, dated December 20, 2011.
### Attachment A: NOX Annual Emissions Tracking Sheet

**APAC - Kansas, Inc. PORT-0649**  
**Project Number: 2011-12-027**

**Site Name:** Cameron Quarry  
**Site Address:** 2674 Southeast Frost Street, Cameron, MO 64429  
**Site County:** DeKalb County, S5/6 T57N R30W

This sheet covers the period from ___________ to ___________ (Copy as needed)

<table>
<thead>
<tr>
<th>Month</th>
<th>Production (tons)</th>
<th>Emission Factor (lb/ton)</th>
<th>Monthly Emissions&lt;sup&gt;1&lt;/sup&gt; (lbs)</th>
<th>Monthly Emissions&lt;sup&gt;2&lt;/sup&gt; (tons)</th>
<th>12-Month Total Emissions&lt;sup&gt;3&lt;/sup&gt; (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>120,000</td>
<td>0.1359</td>
<td>16,308</td>
<td>8.15</td>
<td>8.15</td>
</tr>
<tr>
<td>Example</td>
<td>115,000</td>
<td>0.1359</td>
<td>15,628.5</td>
<td>7.81</td>
<td>15.96</td>
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</table>

<sup>1</sup> Multiply the monthly production by the emission factor.  
<sup>2</sup> Divide the monthly emissions (lbs) by 2000.  
<sup>3</sup> Add the monthly emissions (tons) to the sum of the monthly emissions from the previous eleven months. A total of less than **40.0** tons of NO<sub>X</sub> is necessary for compliance.
Attachment B: Ambient Impact Tracking Sheet  
For Solitary and Same Owner Operations  
APAC - Kansas, Inc. PORT-0649  
Project Number: 2011-12-027

Site Name: Cameron Quarry  
Site Address: 2674 Southeast Frost Street, Cameron, MO 64429  
Site County: DeKalb County, S5/6 T57N R30W

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. PORT-0649</th>
<th>Same Owner Plant</th>
<th>Same Owner Plant</th>
<th>Same Owner Plant</th>
<th>Background</th>
<th>Total Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Daily Production (tons)</td>
<td>Impact Factor (µg/m³/ton)</td>
<td>Impact¹ (µg/m³)</td>
<td>Impact² (µg/m³)</td>
<td>Impact² (µg/m³)</td>
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<td>Example</td>
<td>5,800</td>
<td>0.0190</td>
<td>110.2</td>
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1 Calculate the impact for PORT-0649 by multiplying the daily production by the impact factor.  
2 Input the impact for any plants owned by APAC - Kansas, Inc. that are operating on the site.  
3 Calculate the total impact by adding the applicable impacts and background. A total of 150.0 µg/m³ or less is necessary for compliance.
### Attachment C: Ambient Impact Tracking Sheet

**For Separate Owner Operation**

**APAC - Kansas, Inc. PORT-0649**

**Project Number: 2011-12-027**

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**Site Name:** Cameron Quarry  
**Site Address:** 2674 Southeast Frost Street, Cameron, MO 64429  
**Site County:** DeKalb County, S5/6 T57N R30W  

This sheet covers the period from _______________ to _______________ (Copy as needed)  

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<table>
<thead>
<tr>
<th>Date</th>
<th>APAC - Kansas, Inc. PORT-0649</th>
<th>Same Owner Plant</th>
<th>Same Owner Plant</th>
<th>Separate Owner Plant</th>
<th>Background</th>
<th>Total Impact</th>
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<tbody>
<tr>
<td></td>
<td>Daily Production (tons)</td>
<td>Impact Factor (µg/m³/ton)</td>
<td>Impact₁ (µg/m³)</td>
<td>Impact₂ (µg/m³)</td>
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<td>Example</td>
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1. Calculate the impact for PORT-0649 by multiplying the daily production by the impact factor.  
2. Input the impact for any plants owned by APAC - Kansas, Inc. that are operating on the site.  
3. Calculate the total impact by adding the applicable impacts and backgrounds. A total of **150.0 µg/m³** or less is necessary for compliance.
Haul roads and vehicular activity areas shall be maintained in accordance with at least one of the following options when the portable 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 rational 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.

¹For 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.)
Ms. Adrienne Coppock  
Environmental Manager  
APAC - Kansas, Inc.  
P.O. Box 23910  
Overland Park, Kansas 66283  

RE: New Source Review - Project Number: 2011-12-027  
    Installation Number: PORT-0649

Dear Ms. Coppock:

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

If you have any questions regarding this permit, please do not hesitate to contact Daronn Williams, at the Department’s Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp  
New Source Review Unit Chief

SH:dwk

Enclosures

c: Kansas City Regional Office  
PAMS File: 2011-12-027

Permit Number: