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: 102010-006  Project Number: 2010-06-044
Installation ID: 029-0016

Parent Company: APAC Missouri Inc.
Parent Company Address: P.O. Box 1117, Columbia, MO 65201
Installation Name: APAC Missouri Inc.
Installation Address: County Road 54-68, Linn Creek, MO 65052
Location Information: Camden County, S16, T38N, R16W

Application for Authority to Construct was made to change the status of PORT-0066 from a portable asphalt plant to a stationary asphalt plant. This review was conducted in accordance with Section (5), 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.

OCT 08 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 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.
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. Best Management Practices (BMPs) Requirement
   APAC Missouri Inc. shall control fugitive emissions from all of the haul roads and vehicular activity areas at this site by performing BMPs as defined in Attachment AA.

2. Ambient Air Impact Limitation
   A. APAC Missouri Inc. shall maintain a daily record of material processed to demonstrate that the daily impact on ambient air quality from the entire installation does not exceed the daily NAAQS of 150.0 µg/m³ for particulate matter less than ten microns in diameter (PM₁₀) at or beyond the property boundary. Record keeping is not required during solitary operation of the asphalt plant.
   B. Attachment A, Attachment B or an equivalent form, such as an electronic form, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Condition 2.A.

3. Annual Emission Limit
   A. APAC Missouri Inc.’s asphalt plant shall emit less than 15.0 tons of PM₁₀ in any 12-month period from the asphalt plant.
   B. APAC Missouri Inc. 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. Moisture Content Testing Requirement
   A. APAC Missouri Inc. shall verify 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 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.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

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 Missouri 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 Missouri 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 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 Missouri Inc. may obtain test results that demonstrate compliance with the moisture content in Special Condition 4.A from the supplier of the aggregate.

5. Control Device Requirement-Baghouse

A. APAC Missouri Inc. shall control emissions from the drum dryer using baghouses as specified in the permit application.

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 the 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. APAC Missouri Inc. 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. APAC Missouri Inc. shall maintain an operating and maintenance log for the baghouses which shall include the following:
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

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.

6. Minimum Distance to Property Boundary Requirement
The primary emission point shall be located at least 1100 feet from the nearest property boundary.

7. Fuel Sulfur Weight Percent Requirement
A. When using waste oil #6 to power the drum dryer of the asphalt plant, the asphalt plant shall burn waste oil #6 with a sulfur content less than 0.50% by weight in. Waste oil #4 and waste oil #5 are prohibited to be used in the drum dryer.

B. The use of waste oil #4, waste oil #5, and waste oil #6 in the asphalt heater are prohibited.

C. APAC Missouri Inc. shall obtain the sulfur content of waste oil #6 for each delivery from the fuel vendors or by conducting their own fuel analysis. The fuel consumption records and statement shall be kept on-site for five (5) years and shall be made immediately available to the Missouri Department of Natural Resources’ personnel upon request.

8. Concurrent Operation Restriction
APAC Missouri Inc. may operate with other plants not owned by APAC Missouri Inc. that are located at the site. These plants are limited to a total daily impact of less than 26.10 µg/m³ of PM₁₀ emissions.

9. Record Keeping Requirement
APAC Missouri 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.

10. Reporting Requirement
APAC Missouri 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.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2010-06-044
Installation ID Number: 029-0016
Permit Number:

APAC Missouri Inc.
County Road 54-68
Linn Creek, MO 65052

Parent Company:
APAC Missouri Inc.
P.O. Box 1117
Columbia, MO 65201

Camden County, S16, T38N, R16W

PROJECT DESCRIPTION

This asphalt plant was originally a portable plant (PORT-0066) and previously permitted to operate at APAC Missouri Inc.’s Linn Creek Quarry with a stationary rock-crushing plant also owned by APAC. The asphalt plant will remain located at the Linn Creek Quarry and became a stationary plant at this site. This installation (029-0016), which now includes the stationary rock-crushing plant and the stationary asphalt plant, is located in Linn Creek, of Camden County, Missouri, an attainment area for all criteria pollutants. The existing rock-crushing plant was originally permitted under Permit No. 032005-019. Per Special Condition 6 of Permit No. 032005-019 of this stationary rock-crushing plant, portable plants owned by APAC Missouri Inc. that may come to this installation in the future are allotted a daily impact up to 35.5 µg/m³ at this site.

The maximum hourly design rate of the asphalt plant is 350 tons of hot mix asphalt per hour. Emissions from the drum dryer are controlled by a baghouse. The drum dryer burner may combust waste fuel oil #6 up to 0.50 % sulfur by weight and operates at 100 million British thermal units per hour (MMBTU/hr). This permit is based on burning recycled used motor oil by using #6 fuel with a 0.50 % sulfur content. The asphalt heater is fueled by #2 fuel oil and operates at 1 million BTU per hour. The plant is powered by electricity. The applicant is using one of the methods described in Attachment AA, “Best Management Practices,” to control emissions from haul roads and vehicular activity areas.

This installation is on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation’s major source level is 100 tons per year and fugitive emissions are counted toward major source applicability.

TABLES

Table 1 summarizes the emissions of this project. The potential emissions of the asphalt plant include emissions from haul roads and wind erosion. The existing actual emissions of the installation were taken from the previous year’s EIQ for the stationary rock-crushing plant and the stationary asphalt plant. The potential emissions of the installation represent the emissions of all equipment and activities of the rock-crushing plant and the asphalt
plant assuming continuous operation (8760 hours per year). The conditioned potential emissions of the asphalt plant are based on a voluntary limit of 15.0 tons per year of PM$_{10}$ emissions to comply with 10 CSR 10-6.060(5).

Table 1: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<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>67.04</td>
<td>8.43</td>
<td>198.25</td>
<td>&lt; 15.00</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>10.0</td>
<td>6.26</td>
<td>0.10</td>
<td>6.26</td>
<td>3.34</td>
</tr>
<tr>
<td>SO$_x$</td>
<td>40.0</td>
<td>116.27</td>
<td>0.04</td>
<td>134.28</td>
<td>26.01</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>40.0</td>
<td>84.94</td>
<td>2.26</td>
<td>227.61</td>
<td>19.00</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>73.74</td>
<td>1.32</td>
<td>77.39</td>
<td>16.50</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>203.32</td>
<td>5.34</td>
<td>241.22</td>
<td>45.49</td>
</tr>
<tr>
<td>Lead Compounds</td>
<td>⁵ 0.01</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>⁵ 2.0</td>
<td>4.89</td>
<td>N/D</td>
<td>4.89</td>
<td>1.09</td>
</tr>
<tr>
<td>POM</td>
<td>0.01</td>
<td>1.42</td>
<td>N/D</td>
<td>1.42</td>
<td>0.317</td>
</tr>
<tr>
<td>Total HAPs</td>
<td>25.0</td>
<td>1.42</td>
<td>N/D</td>
<td>1.49</td>
<td>4.08</td>
</tr>
</tbody>
</table>

N/D = Not Determined  
¹ Potential emissions of the asphalt plant includes emissions from haul roads and wind erosion.  
² Includes emissions from the 2009 EIQ for the asphalt plant and the 2009 EIQ for the rock-crushing plant.  
³ Potential emissions of the installation includes emissions from Permit No. 032005-019 for the rock-crushing plant and emissions calculated for the asphalt plant based upon this permit.  
⁴ Conditioned potential emissions are based on a voluntary limit of 15.0 tons per year of PM$_{10}$ emissions to comply with 10 CSR 10-6.060(5).  
⁵ Screening Model Action Level (SMAL)

Table 2: Ambient Air Quality Impact Analysis

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>¹ NAAQS/RAL (µg/m³)</th>
<th>² Averaging Time</th>
<th>² Maximum Modeled Impact (µg/m³)</th>
<th>³ Limited Impact (µg/m³)</th>
<th>⁴ Background (µg/m³)</th>
<th>⁴ Daily Limit (tons/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$ (same)</td>
<td>150.0</td>
<td>24-hour</td>
<td>101.57</td>
<td>N/A</td>
<td>110.37</td>
<td>1,879</td>
</tr>
<tr>
<td>PM$_{10}$ (separate)</td>
<td>150.0</td>
<td>24-hour</td>
<td>101.57</td>
<td>13.53</td>
<td>116.47</td>
<td>1,879</td>
</tr>
<tr>
<td>POM</td>
<td>0.16</td>
<td>Annual</td>
<td>0.127</td>
<td>0.022</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

N/A = Not Applicable  
¹ National Ambient Air Quality Standards (NAAQS) or Risk Assessment Level (RAL).  
² Modeled impact at maximum capacity with controls of only APAC Missouri Inc.’s asphalt plant.  
³ Background includes a PM$_{10}$ level of 20.0 µg/m³ for haul roads and stockpiles. When operating with only same owner plants, the background also includes a PM$_{10}$ level of 90.37 µg/m³ for APAC Missouri Inc.’s rock-crushing plant per Permit No. 032005-019. When operating with same owner and separate owner plants and an additional PM$_{10}$ level of 26.10 µg/m³ for plants not owned by APAC Missouri Inc. is also included in the background.  
⁴ Daily limit of APAC Missouri Inc.’s asphalt plant is indirectly limited from the voluntary 15.0 ton per year PM$_{10}$ emissions limit to comply with 10 CSR 10-6.060(5).  
⁵ Operation with other plants owned by APAC Missouri Inc.  
⁶ Operation with other plants not owned by APAC Missouri Inc.  
⁷ Polycyclic Organic Matter (POM)
The following equipment was modeled using the SCREEN3 screen modeling software. The stack characteristic entered into the modeled are listed in Table 3.

Table 3: SCREEN3 Input Parameters

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>Stack Height (m)</th>
<th>Stack Inside Diameter (m)</th>
<th>Stack Gas Exit Velocity (m/s)</th>
<th>Stack Gas Exit Temperature (K)</th>
<th>Dispersion Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dryer</td>
<td>7.5</td>
<td>1.1</td>
<td>27.0</td>
<td>400</td>
<td>Rural</td>
</tr>
</tbody>
</table>

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 drum mix asphalt plant were calculated using emission factors from AP-42 Section 11.1 “Hot Mix Asphalt Plants,” April 2004. Sulfur oxide (SO$_x$) emissions were calculated using the SO$_2$ and SO$_3$ emission factors from AP-42 Section 1.3 “Fuel Oil Combustion,” September 1998 and assuming half of the sulfur up to 0.1 pound per ton of product is absorbed into the product. The asphalt plant is controlled by a baghouse, so the fabric filter controlled emission factor was used to calculate PM$_{10}$ emissions. Emissions from plant load-out were calculated using predictive equations found in AP-42 Table 11.1-14. Default values were used for asphalt volatility and mix temperature. Emissions from the asphalt heater were calculated using emission factors from AP-42 Section 1.3. Emissions from aggregate handling 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 greater than 1.5% weight.

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% control efficiency is applied to the emission calculations for the use of BMPs for PM$_{10}$ emissions. A 40% control efficiency is applied to the emission calculations for the use of BMPs for PM$_{2.5}$ emissions. 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% 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 the pollutants listed in Table 2. 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 (SMAL). 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 Missouri Inc. shall demonstrate compliance with the NAAQS.

- When other plants that are owned by APAC Missouri Inc., which are referred to as same owner plants, are located at the site, APAC Missouri Inc. must calculate the daily impact of each plant and limit the total impact of all plants below the NAAQS. During this operating scenario, this stationary asphalt plant shall not exceed 13.53 µg/m$^3$ in a 24-hour time period. Attachment A or an equivalent form, such as an electronic form, approved by the Air Pollution Control Program shall be used to demonstrate compliance to the NAAQS for PM$_{10}$. When only this asphalt plant is in operation at this site, which is referred to as solitary operation, APAC Missouri Inc. can operate for 24 hours without violating NAAQS and record keeping to show compliance to the NAAQS is not necessary. However, APAC Missouri Inc. shall continue record keeping for annual PM$_{10}$ emissions per Special Condition 3.

- When plants that are not owned by APAC Missouri Inc., which are referred to as separate owner plants, are located at the site, APAC Missouri 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 Missouri Inc. that are operating at the site. This total is limited below the NAAQS. APAC Missouri Inc. will limit the total impact of all plants they own and operate at the site to 103.90 µg/m³ when any plants they do not own are located at the site. APAC Missouri Inc. is not permitted to operate with any plant that is not owned by APAC Missouri Inc. that has a separate owner background greater than 26.10 µg/m³. Attachment B or an equivalent form, such as an electronic form, approved by the Air Pollution Control Program shall be used to demonstrate compliance.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of PM₁₀ are conditioned below de minimis levels.

APPLICABLE REQUIREMENTS

APAC Missouri 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. The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.

- A Basic Operating Permit application is required for this installation within 30 days of equipment startup.

- *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 10-3.090

SPECIFIC REQUIREMENTS

- 40 CFR 60 Subpart I, "Standards of Performance for Hot Mix Asphalt Facilities" applies to the equipment.

- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPS) or National Emission Standards for Hazardous Air Pollutants for Source Categories (MACTS) apply to the proposed equipment.

- *Restriction of Emission of Sulfur Compounds*, 10 CSR 10-6.260
STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), 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 June 9, 2010, received June 15, 2010, designating APAC Missouri Inc. as the owner and operator of the installation.


Attachment A: PM₁₀ Ambient Impact Tracking Sheet
Concurrent (Same Owner) Operation ONLY
APAC Missouri Inc. 029-0016
Project Number: 2010-06-044

Site Name: APAC Missouri Inc.
Site Address: County Road 54-68 Linn Creek, MO 65052
Site County: Camden County, S16, T38N, R16W

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

Date | APAC Missouri Inc. Stationary asphalt plant
| Plant ID: 029-0016 | Ambient Impact Factor
| (µg/m³) | 1'Daily Impact
| (tons) | Ambient Producti
| µg/m³ | (µg/m³)
| tion | N/A

| APAC Missouri Inc. Stationary rock-crushing plant
| Plant ID: 029-0016 | Ambient Impact Factor
| (µg/m³) | 1'Daily Impact
| (tons) | Ambient Producti
| µg/m³ | (µg/m³)
| tion | N/A

| Same Owner Plant
| Plant Name:
| Plant ID:
Permit #:

| Separate Owner Plant
| Plant Name:
| Plant ID:
Permit #:

Date | APAC Missouri Inc.
| Stationary asphalt plant
| Plant ID: 029-0016 | Ambient Impact Factor
| (µg/m³) | 1'Daily Impact
| (tons) | Ambient Producti
| µg/m³ | (µg/m³)
| tion | N/A

| APAC Missouri Inc.
| Stationary rock-crushing plant
| Plant ID: 029-0016 | Ambient Impact Factor
| (µg/m³) | 1'Daily Impact
| (tons) | Ambient Producti
| µg/m³ | (µg/m³)
| tion | N/A

Example | 1,872 | 0.0072 | 13.48 | 14,400 | 0.0063 | 90.72 | N/A | N/A | N/A | 0.0072 | 0.0063 | N/A | 20.0 | 89.12

1 Calculate the impact for APAC Missouri Inc. by multiplying the daily production by the impact factor.
2 Input the impact for any plants owned by Asphalt Products, Inc. that are operating on the site.
3 Background includes a PM₁₀ level of 20.0 µg/m³ for haul roads and stockpiles.
4 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 B: PM$_{10}$ Ambient Impact Tracking Sheet

### Concurrent (Separate Owner) and Concurrent (Same and Separate Owner) Operation ONLY

**APAC Missouri Inc. 029-0016**  
**Project Number: 2010-06-044**

Site Name: APAC Missouri Inc.  
Site Address: County Road 54-68 Linn Creek, MO 65052  
Site County: Camden County, S16, T38N, R16W

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

<table>
<thead>
<tr>
<th>Date</th>
<th>APAC Missouri Inc. Stationary asphalt plant (tons)</th>
<th>Ambient Impact Factor (µg/m$^3$/ton)</th>
<th>Daily Production (tons)</th>
<th>Ambient Impact Factor (µg/m$^3$/ton)</th>
<th>Daily Production (tons)</th>
<th>Ambient Impact Factor (µg/m$^3$/ton)</th>
<th>Daily Production (tons)</th>
<th>Ambient Impact Factor (µg/m$^3$/ton)</th>
<th>Daily Production (tons)</th>
<th>Ambient Impact Factor (µg/m$^3$/ton)</th>
<th>Daily Production (tons)</th>
<th>Ambient Impact Factor (µg/m$^3$/ton)</th>
<th>Daily Production (tons)</th>
<th>Ambient Impact Factor (µg/m$^3$/ton)</th>
<th>Daily Impact (µg/m$^3$)</th>
<th>³Back-ground Level (µg/m$^3$)</th>
<th>⁴TOTAL Level (µg/m$^3$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>1,872</td>
<td>0.0072</td>
<td>13.48</td>
<td>14,400</td>
<td>0.0063</td>
<td>90.72</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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1. Calculate the impact for APAC Missouri Inc. by multiplying the daily production by the impact factor.  
2. Input the impact for any plants owned by Asphalt Products, Inc. that are operating on the site.  
3. Background includes a PM$_{10}$ level of 20.0 µg/m$^3$ for haul roads and stockpiles.  
4. Calculate the total impact by adding the applicable impacts and background. A total of 150.0 µg/m$^3$ or less is necessary for compliance.
This sheet covers the period from ______________ to ______________ (Copy as needed)

(Month, Day Year)  (Month, Day Year)

<table>
<thead>
<tr>
<th>Month</th>
<th>Production (tons)</th>
<th>Emission Factor (lb/ton)</th>
<th>Monthly Emissions¹ (lbs)</th>
<th>Monthly Emissions² (tons)</th>
<th>12-Month Total Emissions³ (tons)</th>
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</table>

¹ Multiply the monthly production by the emission factor.
² Divide the monthly emissions (lbs) by 2000.
³ Add the monthly emissions (tons) to the sum of the monthly emissions from the previous eleven months. A total of less than **15.0** tons from the asphalt plant is necessary for compliance.
Attachment AA: Best Management Practices

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

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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.)