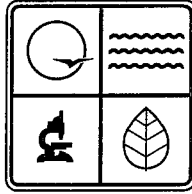


STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES  
MISSOURI AIR CONSERVATION COMMISSION



**PERMIT BOOK**

**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: **042007-011** Project Number: **2007-01-073**  
Owner: **APAC-Missouri, Inc.** PORT-0581  
Owner's Address: **P.O. Box 1117, Columbia, MO 65205**  
Installation Name: **APAC-Missouri, Inc.**  
Installation Address: **Hwy 36, 5 miles east of Brookfield, Brookfield, MO 64628**  
Location Information: **Linn County, S15, T57N, R19W**

Application for Authority to Construct was made for:

The installation of a new generic portable asphalt plant. Asphalt is produced through a Drum Mix Dryer. The portable asphalt plant has a maximum hourly design rate (MHDR) of 450 tons per hour (tph). 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 (listed as attachments starting on page 2) are applicable to this permit.

APR 11 2007

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.** Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the 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 as provided in RSMo 643.075. If you choose to appeal, the Air Pollution Control Program must receive your written declaration within 30 days of receipt of this permit.

If you choose not to appeal, this certificate, the project review, 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 Department of Natural Resources has established the Outreach and Assistance Center to help in completing future applications or fielding complaints about the permitting process. You are invited to contact them at 1-800-361-4827 or (573) 526-6627, or in writing addressed to Outreach and Assistance Center, P.O. Box 176, Jefferson City, MO 65102-0176.

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 Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention Construction Permit Unit.

2007-01-073  
PORT-0581

APAC-Missouri, Inc.

P.O. Box 1117, Columbia, MO 65205

APAC-Missouri, Inc.

Hwy 36, 5 miles east of Brookfield, Brookfield, MO 64628

Linn County, S15, T57N, R19W

The installation of a new generic portable asphalt plant. Asphalt is produced through a Drum Mix Dryer. The portable asphalt plant has a maximum hourly design rate (MHDR) of 450 tons per hour (tph). This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

Page No.	2
Permit No.	
Project No.	2007-01-073

**GENERAL SPECIAL CONDITIONS:**

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

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*The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075); 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. **Portable Equipment Identification Requirement**  
To assure that each component is properly identified as being a part of this portable asphalt plant, (PORT-0581) APAC-Missouri, Inc. 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 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 asphalt plant.
2. **Relocation of Portable Asphalt Plant**
  - A. This portable asphalt plant shall move from the initial site reviewed in this permit (Brookfield) within 24 months of starting operations, and shall not operate at any subsequent site location longer than 24 consecutive months without an intervening relocation.
  - B. A complete "Portable Source Relocation Request" application must be submitted to the Air Pollution Control Program prior to any relocation of this portable asphalt plant.
    - 1.) If the portable asphalt plant is moving to a site previously permitted, and if there are no other new plants at the site, then the application must be received by the Air Pollution Control Program at least seven (7) days prior to the relocation.
    - 2.) If the portable asphalt plant is moving to a new site, or if there are other plants or equipment at the site that have not been evaluated for concurrent operation, then the application must be received by the Air Pollution Control Program at least twenty-one (21) days prior to the relocation. The application must include written notification of any concurrently operating plants.
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.

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Permit No.	
Project No.	2007-01-073

**SITE-SPECIFIC SPECIAL CONDITIONS:**

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

Site Name: Brookfield

Site Address: Hwy 36, 5 miles east of Brookfield, Brookfield, MO 64628

Site County: Linn County, S15, T57N, R19W

1. **Best Management Practices**  
APAC-Missouri, Inc. 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<sub>10</sub>)**
  - A. The operator(s) for APAC-Missouri, Inc.'s plant (PORT-0581) shall ensure, while operating at this site, that the ambient impact of PM<sub>10</sub> at or beyond the nearest property boundary does not exceed 150 µg/m<sup>3</sup> in any 24-hour period, in accordance with the Federal NAAQS requirements (40 CFR 50.6).
  - B. The total daily ambient impact of PM<sub>10</sub> at this site shall include the combined impact of subject plant and any ambient background concentration from installations or equipment located on the same site as the subject plant.
  - C. To demonstrate compliance with special condition 2A, the operator(s) shall maintain a daily record of material processed.
    - 1.) During solitary operation no record keeping is required.
    - 2.) During concurrent, same owner operations, also use Attachment A-1, or other equivalent form(s), for this purpose.
    - 3.) During concurrent, separate owners operations (colocation), use Attachment A-2, or other equivalent form(s), for this purpose.
    - 4.) During concurrent, same and separate owners operations (colocation), also use Attachment A-2, or other equivalent form(s), for this purpose.
3. **Annual Emission Limit of Particulate Matter Less Than Ten Microns in Diameter (PM<sub>10</sub>)**
  - A. The operator(s) shall ensure that APAC-Missouri, Inc.'s portable asphalt plant emits less than 15 tons of PM<sub>10</sub> 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<sub>10</sub>. Attachment B, *Monthly PM<sub>10</sub> Emissions Tracking Record*, or other equivalent form(s), will be used for this purpose.
4. **Moisture Content Testing of Storage Piles Requirement**
  - A. The moisture content of the stockpiled rock will reduce particulate emissions. APAC-Missouri, Inc. claimed the moisture content of the stored rock to be greater than or equal to 1.5 wt.%, which shall be verified by testing.
  - B. Testing shall be conducted according to approved methods, such as those prescribed by the *American Society for Testing Materials (ASTM D-2216 or C-566)*, EPA AP-42 Appendix C.2, or other method(s) approved by the Director.
  - C. The operator may obtain a copy of the test results of the inherent moisture content from the supplier(s) of the aggregate. Otherwise, the operator shall obtain test samples from each source of untested aggregate. The written analytical report shall include the raw data and moisture content (wt.%) of each sample, the test date, and the original signature of the individual performing the test. Within 30 days of completion of the required tests, the report shall be filed on-site or at the APAC-Missouri, Inc. main office.
  - D. If the moisture content result of the first test is less than 1.5 wt.%, a second test must be performed within 30 days. If the result of the second test is less than 1.5 wt.%, APAC-Missouri, Inc. shall apply for a new construction permit to account for the revised information or install wet spray devices on the affected units.

Page No.	4
Permit No.	
Project No.	2007-01-073

**SITE-SPECIFIC SPECIAL CONDITIONS:**

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

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5. Baghouse(s) Control System Requirements
  - A. APAC-Missouri, Inc. shall install and operate baghouse(s) to restrict the emission of particulate matter. The baghouse(s) must be used whenever these units are in operation. The baghouse(s) shall be installed on the following units: Mineral Filler Silo and Drum Dryer.
  - B. APAC-Missouri, Inc. shall install instruments to monitor the operating pressure drop across the baghouse. All instruments and control equipment shall be calibrated, maintained and operated according to the manufacturer's preventive maintenance recommendations. The operator(s) shall check and record the pressure drop across the baghouse filter once per operating day during silo loading. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
  - C. The operator(s) shall conduct and document a quarterly inspection and maintenance of the baghouse for structural component failures, for leaks and wear, and for the cleaning sequence of the baghouse. Replacement bags shall be kept on hand at all times to replace defective bags (The bags shall be made of fibers appropriate for the operating conditions expected to occur). All inspections, corrective actions, and instrument calibrations shall be recorded.
  
6. Performance Testing for New Source Performance Standards (NSPS)
  - A. APAC-Missouri, Inc. shall submit the enclosed testing plan to the Enforcement section of the Air Pollution Control Program for all equipment applicable to NSPS Subpart "I". APAC-Missouri, Inc. shall contact the Enforcement section to obtain all requirements for testing, and the plan must be submitted to the Enforcement section at least 30 days prior to the proposed test date.
  - B. Testing must be performed no later than 60 days after achieving the maximum production rate of the process, and in any case no later than 180 days after initial startup. Testing shall be performed at no less than 90% of the maximum production rate. The performance test results shall be submitted to the Enforcement section no later than 30 days after completion of any required testing.
  
7. Restriction on Minimum Distance to Nearest Property Boundary  
The primary emission point of the portable asphalt plant, which is the drum mix dryer, shall be located at least 1000 feet from the nearest residence 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 to any Missouri Department of Natural Resources' personnel upon request.
  
9. Reporting Requirement  
The operator(s) shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedances of the limitations imposed by this permit.
  
10. Power Generation  
The plant is powered by generic diesel generator(s), each of which must be rated at a MHDR of more than 600 horsepower due to lower emission factors for this class of generator. Except for a warm-up period not to exceed 2 hours, the generator(s) may not run unless the rest of the plant is running.

# TECHNICAL REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT

## PROJECT DESCRIPTION

Hot Mix Asphalt (HMA) is composed of non-metallic aggregate, sand, mineral filler and other materials with liquid asphaltic cement. These materials are mixed, heated, and dried in the drum dryer. Generic diesel engine(s) power the equipment consuming no more than 25 gallons per hour of fuel. Processed HMA is delivered as sellable product. The emission points are listed in the attached spreadsheet summary. This installation is classified under the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2, Item 27]. The installation is located in Linn County, an attainment area for all criteria air pollutants.

**Table 1. Other Permits Issued for PORT-0581**

Permit Number	Completed	Description
No Permits-new plant		

## EMISSIONS EVALUATION

Criteria air pollutants will be emitted from this operation. The main air pollutants of concern are PM<sub>10</sub> and CO. The potential emissions were calculated from the maximum hourly design rate (MHDR) of the equipment, AP-42 emission factors, stack testing results from the subject plant, 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". The applicant has voluntarily requested to be limited to de minimis levels of all criteria pollutants. Therefore, based on the conditioned potential emissions, the operation is considered a *de minimis* source under 10 CSR 10-6.060 section (5).

The asphalt plant has a voluntary annual emission limit of less than 15 tons of PM<sub>10</sub> in any 12-month period. A composite PM<sub>10</sub> emission factor was developed for the asphalt plant. The composite emission factor is incorporated into the monthly record keeping table, Attachment B. If the conditioned potential emissions of PM<sub>10</sub> were 15 tons per year or greater, then the operation would not be considered a *de minimis* source.

**Table 2: Emissions Summary (tons per year)**

Air Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (EIQ)	Potential Emissions of the Application	*New Installation Conditioned Potential	Emission Factor (lb/ton)
PM <sub>10</sub>	15.0	N/A	N/A	54.07	<15.00	0.0220
SO <sub>x</sub>	40.0	N/A	N/A	21.74	6.03	N/A
NO <sub>x</sub>	40.0	N/A	N/A	109.28	30.32	N/A
VOC	40.0	N/A	N/A	64.34	17.85	N/A
CO	100.0	N/A	N/A	269.48	74.76	N/A
HAPs	10.0/25.0	N/A	N/A	7.75	2.15	N/A

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

\* Conditioned potential based on voluntary limit to de minimis levels. Other pollutants proportionately reduced.

## 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 2000 feet to the nearest residence. The ambient impact at this site shall not exceed the National Ambient Air Quality Standard (NAAQS) of 150 µg/m<sup>3</sup> of PM<sub>10</sub> at or beyond the nearest property boundary in any single 24-hour period. 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 µg/m<sup>3</sup> of PM<sub>10</sub>. To ensure conformity with NAAQS, the remaining process emissions are limited to an impact of less than 130 µg/m<sup>3</sup> of PM<sub>10</sub> at or beyond the nearest property boundary.

The plant is permitted to operate under four (4) scenarios. The PM<sub>10</sub> ambient impact record keeping requirements for each scenario are as follows.

- Solitary Operation: No record keeping is required.

- Concurrent, Same Owner: The plant must track its own daily PM<sub>10</sub> ambient impact **AND** the daily PM<sub>10</sub> ambient impact of other plants that are owned by APAC-Missouri, Inc. Attachment A-1, or equivalent form(s), can be used for this purpose.
- Concurrent, Separate Owners: The plant must track its own daily PM<sub>10</sub> ambient impact to ensure compliance with this limit. Attachment A-2, or equivalent form(s), can be used for this purpose. The ambient impact from other companies contributes to the background level.
- Concurrent, Same and Separate Owners: The plant must track its own daily PM<sub>10</sub> ambient impact **AND** that of any other plants owned and operated by APAC-Missouri, Inc. The ambient impact from other companies contributes to the background level.

**Table 3: Ambient Air Quality Impact Analysis of PM<sub>10</sub>, 24-Hour Averaging Time**

Operation	Ambient Impact Factor (µg/m <sup>3</sup> ton)	Modeled Impact (µg/m <sup>3</sup> )	*Background (µg/m <sup>3</sup> )	NAAQS (µg/m <sup>3</sup> )	Daily Production Limit (tons)
1. Solitary	0.0023	25.32	20.00	150.00	N/A
2. Concurrent, Same Owner	0.0023	25.32	20.00	150.00	**
3. Concurrent, Separate Owners	0.0023	25.32	124.68	150.00	**
4. Concurrent, Same and Separate Owners	0.0023	25.32	124.68	150.00	**

\* Background PM<sub>10</sub> level from haul roads, stock pile areas, and other plant(s).

\*\* The operator(s) must balance production among concurrently operating plants, with the ambient impact factors for each, such that NAAQS is not exceeded. Other ambient impact factors are listed in Attachments A-1 and A-2.

### **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
- *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
- *Restriction of Emission of Sulfur Compounds*, 10 CSR 10-6.260
- 40 CFR Part 60 Subpart "I", *Standards of Performance for Asphaltic Concrete Plants*, of the New Source Performance Standards (NSPS)
- 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 (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

\_\_\_\_\_  
 Jeannie Kozak  
 Environmental Engineer

\_\_\_\_\_  
 Date

### **PERMIT DOCUMENTS**

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, designating APAC-Missouri, 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*.
- Noyes Data Corporation, Orlemann, et al. 1983, *Fugitive Dust Control*.
- EPA Factor Information Retrieval (FIRE) Version 6.21.
- Spreadsheet calculations of potential-to-emit and ambient impact.
- Northeast Regional Office Site Survey.
- Best Management Practices
- Stack test data from subject plant, by Eagle Emissions Testing Company, Inc. on July 20, 2006.



**Attachment A-1: Daily Ambient PM<sub>10</sub> Impact Tracking Record  
 APAC-Missouri, Inc., PORT-0581 – Portable Asphalt Plant**

Project Number: 2007-01-073  
 County, CSTR: Linn County (S15, T57N, R19W)  
 Primary Unit Size: 450 tph  
 Distance to Nearest Property Boundary: 1000 feet

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

Date	APAC-Missouri, Inc. PORT-0581 Project # 2007-01-073		APAC Plant Name: Plant ID: Permit #:	APAC Plant Name: Plant ID: Permit #:	APAC Plant Name: Plant ID: Permit #:	<sup>3</sup> Back-ground PM <sub>10</sub> Level ( $\mu\text{g}/\text{m}^3$ )	<sup>4</sup> TOTAL PM <sub>10</sub> Level ( $\mu\text{g}/\text{m}^3$ )
	Daily Production (tons)	Ambient Impact Factor ( $\mu\text{g}/\text{m}^3/\text{ton}$ )	<sup>1</sup> Daily PM <sub>10</sub> Impact ( $\mu\text{g}/\text{m}^3$ )	<sup>2</sup> Daily PM <sub>10</sub> Impact ( $\mu\text{g}/\text{m}^3$ )	<sup>2</sup> Daily PM <sub>10</sub> Impact ( $\mu\text{g}/\text{m}^3$ )		
		0.0220				20.00	
		0.0220				20.00	
		0.0220				20.00	
		0.0220				20.00	
		0.0220				20.00	
		0.0220				20.00	
		0.0220				20.00	
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		0.0220				20.00	
		0.0220				20.00	
		0.0220				20.00	
		0.0220				20.00	
		0.0220				20.00	
		0.0220				20.00	

Note 1: The Daily PM<sub>10</sub> Impact ( $\mu\text{g}/\text{m}^3$ ) for each plant is calculated by multiplying the Daily Production (tons) by the matching Ambient Impact Factor.  
 Note 2: Background PM<sub>10</sub> Level ( $\mu\text{g}/\text{m}^3$ ) is from Haul Roads and Stockpiles.  
 Note 3: The TOTAL PM<sub>10</sub> Level ( $\mu\text{g}/\text{m}^3$ ) is calculated by summing the Daily PM<sub>10</sub> Ambient Impact(s) and the Background PM<sub>10</sub> Level. A TOTAL PM<sub>10</sub> Level of less than 150  $\mu\text{g}/\text{m}^3$  in any 24-hour period indicates compliance.

**Attachment A-2: Daily Ambient PM<sub>10</sub> Impact Tracking Record  
APAC-Missouri, Inc., PORT-0581 – Portable Asphalt Plant**

Project Number: 2007-01-073  
 County, CSTR: Linn County (S15, T57N, R19W)  
 Primary Unit Size: 450 tph  
 Distance to Nearest Property Boundary: 1000 feet

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

Date	APAC-Missouri, Inc. PORT-0581 Project # 2007-01-073		APAC Plant Name: Plant ID: Permit #:	APAC Plant Name: Plant ID: Permit #:	APAC Plant Name: Plant ID: Permit #:	<sup>3</sup> Back-ground PM <sub>10</sub> Level ( $\mu\text{g}/\text{m}^3$ )	<sup>4</sup> TOTAL PM <sub>10</sub> Level ( $\mu\text{g}/\text{m}^3$ )
	Daily Production (tons)	Ambient Impact Factor ( $\mu\text{g}/\text{m}^3/\text{ton}$ )	<sup>1</sup> Daily PM <sub>10</sub> Impact ( $\mu\text{g}/\text{m}^3$ )	<sup>2</sup> Daily PM <sub>10</sub> Impact ( $\mu\text{g}/\text{m}^3$ )	<sup>2</sup> Daily PM <sub>10</sub> Impact ( $\mu\text{g}/\text{m}^3$ )		
		0.0220				124.68	
		0.0220				124.68	
		0.0220				124.68	
		0.0220				124.68	
		0.0220				124.68	
		0.0220				124.68	
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		0.0220				124.68	
		0.0220				124.68	
		0.0220				124.68	

Note 1: The Daily PM<sub>10</sub> Impact ( $\mu\text{g}/\text{m}^3$ ) for the rock-crushing plant is calculated by multiplying the Daily Production (tons) by the matching Ambient Impact Factor.  
 Note 2: The Daily PM<sub>10</sub> Impact ( $\mu\text{g}/\text{m}^3$ ) for other plants owned by APAC Missouri, Inc. can be obtained from the operators of these plants. A value of zero (0) should be entered if there are no other plants owned by APAC Missouri, Inc. at the site.  
 Note 3: Background PM<sub>10</sub> Level ( $\mu\text{g}/\text{m}^3$ ) is from Haul Roads and Stockpiles and from the operations of asphalt, concrete, or rock-crushing plants owned by other companies.  
 Note 4: TOTAL PM<sub>10</sub> Level ( $\mu\text{g}/\text{m}^3$ ) is calculated by summing the Daily PM<sub>10</sub> Ambient Impact(s) and the Background PM<sub>10</sub> Level. A TOTAL PM<sub>10</sub> Level of less than 150  $\mu\text{g}/\text{m}^3$  in any 24-hour period indicates compliance.

**Attachment B: Monthly PM<sub>10</sub> Emissions Tracking Record  
APAC-Missouri, Inc., PORT-0581 – Portable Asphalt Plant**

Limit of 14.96 tpy PM<sub>10</sub> due to 0.04 tpy PM<sub>10</sub> background from AC heater

Project Number: 2007-01-073  
 County, CSTR: Linn County (S15, T57N, R19W)  
 Primary Unit Size: 450 tph  
 Distance to Nearest Property Boundary: 1000 feet

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

Month	Monthly Production (tons)	Composite PM <sub>10</sub> Emission Factor (lbs/ton)	<sup>1</sup> Monthly PM <sub>10</sub> Emissions (lbs)	<sup>2</sup> Monthly PM <sub>10</sub> Emissions (tons)	<sup>3</sup> 12-Month PM <sub>10</sub> Emissions (tons/year)
<i>Example</i>	44,000	0.0302	1328.8	0.66	14.95
		0.0220			
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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 **14.96** 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<sup>1</sup>” 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.

<sup>1</sup> 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.

Mr. Brett Geger  
Environmental Manager  
APAC-Missouri, Inc.  
P.O. Box 1117  
Columbia, MO 65205

RE: New Source Review Permit - Project Number: 2007-01-073

Dear Mr. Geger:

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 2007-01-073, and your future operating permit, if required, is necessary for continued compliance.

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, please contact Jeannie Kozak at (573) 751-4817, or write the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, Missouri 65102. Thank you for your attention to this matter.

Sincerely,

**AIR POLLUTION CONTROL PROGRAM**

Kendall B. Hale  
New Source Review Unit Chief

KBH: jkl

Enclosures

c: Northeast Regional Office  
PAMS File: 2007-01-073  
Permit Number: