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: 22007-007  Project Number: 2006-12-081
Owner: Missouri Partners, Inc.
Owner’s Address: 800 State Hwy 248, Building III, Branson, MO 65616
Installation Name: Missouri Partners, Inc. (MPI), Buchanan Quarry
Installation Address: 1150 Buchanan Road, Branson, MO 65616
Location Information: Taney County, S7, T23N, R21W

Application for Authority to Construct was made for:

The installation of a new portable rock crushing plant. The rock crushing plant is a Generic Plant. Rock is processed through no more than four crushers, one screen, 30 conveyor/bins, and one pug mill. The rock crushing plant has a maximum hourly design rate (MHDR) of 500 tons per hour (tph). Best Management Practices (BMPs) are used on haul roads and stockpile areas. 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.

FEB 13 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.
GENERAL SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075); by the Missouri Rules listed in Title 10, Division 10 of the Codes of State Regulations (specifically 10 CSR 10-6.060); by 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority"; by 10 CSR 10-6.010 "Ambient Air Quality Standards" and 10 CSR 10-6.060 subsections (5)(D) and (6)(A); and by control measures requested by the applicant, in their permit application, to reduce the amount of air pollutants being emitted, in accordance with 10 CSR 10-6.060 paragraph (6)(E)3. Furthermore, one or more of the Subparts of 40 CFR Part 60, New Source Performance Standards (NSPS), applies to this installation.

1. Generic Plant Designation and Maximum Combined Hourly Design Rate
   Missouri Partners, Inc. (MPI), Buchanan Quarry’s portable rock crushing plant (PORT-0580) has been designated to be a Generic Plant Operation. The combined Maximum Hourly Design Rate (MHDR) for the primary unit(s) and each of the following generic equipment types shall not exceed the maximum installation capacities listed below at any time the installation is in operation.

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Maximum Combined Hourly Design Rate</th>
<th>Maximum Number of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Unit (Primary Crusher)</td>
<td>500 tons per hour</td>
<td>1</td>
</tr>
<tr>
<td>Crushers including primary crusher</td>
<td>1,700 tons per hour</td>
<td>4</td>
</tr>
<tr>
<td>Conveyors/Bins</td>
<td>12,000 tons per hour</td>
<td>30</td>
</tr>
<tr>
<td>Screens (wet screening is not included)</td>
<td>2,000 tons per hour</td>
<td>4</td>
</tr>
<tr>
<td>Pugmills</td>
<td>500 tons per hour</td>
<td>1</td>
</tr>
<tr>
<td>Diesel Engines/Generators</td>
<td>2000 horsepower</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Generic Plant Equipment Identification Requirement
   A. Within fifteen (15) days of startup, Missouri Partners, Inc. (MPI), Buchanan Quarry shall submit to the Air Pollution Control Program’s Permitting Section, and the Southwest Regional Office, the following information for the generic plant (PORT-0580):
      1.) A Master List of all equipment that will be permitted for use with the generic plant (PORT-0580). This master list shall include the following information for each piece of equipment. The manufacturer’s name, the model number, the serial number, the actual MHDR, the date of manufacture, any company-assigned equipment number, and any other additional information such as sizes and/or dimensions that is necessary to uniquely identify all of the equipment.
      2.) A list of the core equipment that will always be utilized with the generic plant (PORT-0580). The core equipment associated with the generic plant shall include at least one (1) primary unit. Core equipment items are rate-controlling components of the process flow (e.g., primary crusher and/or primary screen). The maximum hourly design rate of the generic plant is defined to be the sum of the MHDR(s) of the core equipment. Any arrangement of the generic plant’s equipment must be such that the core equipment is not bypassed in the process flow.
      3.) A determination on the applicability of 40 CFR Part 60, Subpart “OOO”, Standards of Performance for Nonmetallic Mineral Processing Plants, for each piece of equipment. Missouri Partners, Inc. (MPI), Buchanan Quarry shall indicate whether or not each piece of equipment is subject to Subpart “OOO” and provide the justification for this applicability determination.
      4.) Missouri Partners, Inc. (MPI), Buchanan Quarry shall submit notification to Air Pollution Control Program and the Regional Office if the core equipment is changed and/or if new equipment is added to the supplemental equipment list.
   B. To assure that each piece of equipment is properly identified as being a part of this generic portable rock crushing plant (PORT-0580), Missouri Partners, Inc. (MPI), Buchanan Quarry shall provide and maintain suitable, easily read permanent markings on each component of the plant. These markings shall be the equipment’s serial number or a company assigned identification number that uniquely identifies the individual component. These identification numbers must be submitted to the Air Pollution Control Program and the Regional Office no later than fifteen (15) days after start-up of the generic plant.
   C. Missouri Partners, Inc. (MPI), Buchanan Quarry shall at all times maintain a list of the specific equipment currently being utilized with the generic portable rock crushing plant (PORT-0580). The
GENERAL SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

installation shall make this list of currently used equipment available to any Missouri Department of Natural Resources' personnel upon request.

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

4. Relocation of Portable Plant
A. The portable generic rock crushing plant shall not be located at any 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 generic rock crushing plant.
   1) If the portable generic 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 generic 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.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

Site ID No.: 213-0031
Site Name: Buchanan Quarry
Site Address: 1150 Buchanan Road, Branson, MO 65616
Site County: Taney County, S7, T23N, R21W

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

2. National Ambient Air Quality Standards (NAAQS) Limitation for Particulate Matter Less Than Ten Microns in Diameter (PM$_{10}$)
   A. The operator(s) for Missouri Partners, Inc. (MPI), Buchanan Quarry’s plant shall ensure, while operating at this site, that the ambient impact of PM$_{10}$ at or beyond the nearest property boundary does not exceed 150 µg/m$^3$ in any 24-hour period, in accordance with the Federal NAAQS requirements (40 CFR 50.6).
   B. The total daily ambient impact of PM$_{10}$ at this site shall include the combined impact of the plant and any ambient background concentration from installations or equipment located on the same site as the subject plant.
   C. To demonstrate compliance during colocation with other asphalt, concrete, or rock-crushing plants, the operator(s) shall maintain a daily record of material processed.
      1.) For solitary location, use Attachment A-1, Daily Ambient PM$_{10}$ Impact Tracking Record, or equivalent forms.
      2.) For colocation with plants owned and operated by the same owner, use Attachment A-1, Daily Ambient PM$_{10}$ Impact Tracking Record, or equivalent forms.
      3.) For colocation with plants owned and operated by separate owners, use Attachment A-2, Daily Ambient PM$_{10}$ Impact Tracking Record, or other equivalent forms, for this purpose.
      4.) For colocation with plants owned and operated by same AND separate owners, use Attachment A-2, Daily Ambient PM$_{10}$ Impact Tracking Record, or other equivalent forms.

3. Annual Emission Limit of Nitrogen Oxides (NO$_x$)
   A. The operators shall ensure that Missouri Partners, Inc. (MPI), Buchanan Quarry’s rock crushing plant emits less than 40 tons of NO$_x$ into the atmosphere in any 12-month period.
   B. To demonstrate compliance, the operators shall maintain a daily record of material processed and NO$_x$. Attachment B, Monthly NO$_x$, Emissions Tracking Record, or other equivalent form(s), will be used for this purpose.

4. Usage of Wet Suppression Control System on Equipment
   A. Missouri Partners, Inc. (MPI), Buchanan Quarry shall install and operate wet spray devices to restrict the emission of particulate matter. These wet spray devices must be used to control fugitive emissions whenever these units are in operation. The wet spray devices shall be installed on all of the wet screening equipment (EP-08).
   B. Watering may be suspended during periods of freezing conditions, when use of the wet spray devices may damage the equipment. During these conditions, the operator(s) shall adjust the production rate to control fugitive emissions from these units. The operator shall record a brief description of such events in a daily log.

5. Moisture Content Testing Requirement for Inherent Moisture Content
   A. The inherent moisture content of the rock will reduce particulate emissions. Missouri Partners, Inc. (MPI), Buchanan Quarry claimed the inherent moisture content of the processed 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. The first test shall be no later than 45 days after startup.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

Testing shall be conducted for three consecutive years during the months of June through September, while the rock crushing plant is active at this site. If the test results have been consistently greater than 1.5 wt% and there is no reported emission exceedances from the plant, then no further testing is required and this site shall be deemed to have met this condition on all subsequent permits. Verification of the results will be performed during a routine inspection. If the test results have been less than 1.5 wt% and/or there is substantial change in the emissions from the plant, then Missouri Partners, Inc. (MPI), Buchanan Quarry shall apply for a new construction permit to account for the revised information or operate a wet suppression system capable of maintaining visible emissions standards for each unit within 30 days.

C. The operator shall obtain test samples before processing (before entering the Primary Crusher, EP01) and after processing (prior to load-in to bins and/or storage piles). During the sample processing run only, any spray devices shall be turned off during the processing from which test samples are obtained. 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 Missouri Partners, Inc. (MPI), Buchanan Quarry main office.

A. Missouri Partners, Inc. (MPI), Buchanan Quarry shall submit the enclosed testing plan to the Enforcement section of the Air Pollution Control Program for all equipment applicable to NSPS Subpart “OOO”. Missouri Partners, Inc. (MPI), Buchanan Quarry 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. 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 Process Configuration of Primary Emission Point(s)
The maximum hourly design rate of the plant is equal to the sum of the design rate(s) of the primary emission point(s). Missouri Partners, Inc. (MPI), Buchanan Quarry has designated the following unit(s) as the primary emission point(s) of the rock crushing plant: primary crusher (EP-01). Bypassing the primary emission point(s) for processing is prohibited.

8. Restriction on Minimum Distance to Nearest Property Boundary
The primary emission point of the rock crushing plant, which is the primary crusher (EP-01), shall be located at least 325 feet from the nearest property boundary whenever it is operating at this site.

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

10. 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.

11. Power Generation
No diesel engines or generators shall be operated for any purpose other than powering processing equipment. Each diesel engine/generator shall be rated at no less than 600 horsepower (450 kW). No more than three diesel engines/generators shall be used.
PROJECT DESCRIPTION

Rock, composed of non-metallic minerals, is blasted, loaded into front-end loaders, and transported to processing. There are no stockpiles for the shot rock, as it is transported to processing and is processed quickly enough to completely avoid accumulation around the processing area. The shot rock is fed from the front end loaders to a grizzly feeder, which feeds into the primary crusher. The rock may also be further processed with the following generic equipment: up to three secondary crushers, up to four screens, up to 30 conveyors/bins, and a pug mill. Generic wet screening may also be used to process the rock. Processing equipment is powered with up to three diesel engine(s), each of which have a minimum rating of 600 horsepower (450 kW). The processed rock is fed directly by conveyor to the stockpile(s) for the crushed rock. The crushed rock is transported from the stockpiles by front end loaders and unloaded into dump trucks, which transport the crushed rock for further use outside of the scope of this permit. The emission points are listed in the attached spreadsheet summary. This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2]. The installation is located in Taney County, an attainment area for all criteria air pollutants.

This permit review was conducted to allow this plant to colocate with multiple asphalt, concrete, or rock-crushing plants. This plant is therefore permitted to operate under the following four (4) scenarios.

1. Solitary Location: No other plants may be located at the site.
2. Colocation, Same Owner: Colocation with plants owned by Missouri Partners, Inc.
3. Colocation, Separate Owners: Colocation with plants owned by companies other then Missouri Partners, Inc.
4. Colocation, Same and Separate Owners: Colocation with Missouri Partners, Inc. plants AND plants owned by other companies.

Table 1. Other Permits Issued for Site 213-0031

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Completed</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Permits – new plant</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

EMISSIONS EVALUATION

Criteria air pollutants will be emitted from this operation. The main air pollutants of concern are PM$_{10}$ and NO$_x$. The potential emissions were calculated from the maximum hourly design rate (MHDR) of the equipment, appropriate emission factors, control device efficiencies, and the limiting operating hours at MHDR. The sources of the emission factors and control efficiencies are listed in the section "Permit Documents". Based on the conditioned potential emissions, the operation is considered a de minimis source under 10 CSR 10-6.060 section (5).

The rock crushing plant has voluntarily limited themselves to less than de minimis levels for all criteria pollutants. They are therefore limited to less than 40 tons of NO$_x$ in any 12-month period. A composite emission factor for NO$_x$ was developed for the rock crushing plant. The composite emission factor is incorporated into the monthly record keeping table, Attachments B. If the conditioned potential emission of NO$_x$ was 40 tons per year or greater, then the owner would be considered a minor source under 10 CSR 10-6.060 section (6).

The existing potential emissions and the existing actual emissions from the Emission Inventory Questionnaire (EIQ) are not available for this project because this is a new plant. The potential emissions of the application and the new installation conditioned potential are summarized in the following table.
Table 2: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>N/A</td>
<td>N/A</td>
<td>42.75</td>
<td>14.80</td>
<td>N/A</td>
</tr>
<tr>
<td>SO$_x$</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>25.72</td>
<td>5.14</td>
<td>N/A</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>203.71</td>
<td>&lt;40.00</td>
<td>0.0930</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>5.21</td>
<td>1.04</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>N/A</td>
<td>N/A</td>
<td>54.11</td>
<td>10.82</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>N/A</td>
<td>N/A</td>
<td>0.10</td>
<td>0.02</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note: N/A = Not Applicable

* Conditioned potential of PM$_{10}$ based on daily production limit from ambient impact analysis. Conditioned potential of NO$_x$ from voluntary request to limit to de minimis levels. Other pollutants reduced proportionately to NO$_x$.

**Ambient Air Quality Impact Analysis**

Screening tools were used to evaluate the ambient air impact of the hourly emissions from this plant at a distance of 325 feet to the nearest property boundary. The ambient impact at this site shall not exceed the National Ambient Air Quality Standard (NAAQS) of 150 µg/m$^3$ of particulate matter less than ten microns (PM$_{10}$) at or beyond the nearest property boundary in any single 24-hour period. Ambient impact factors for PM$_{10}$ were developed for this plant, and they are included in the record keeping tables, Attachments A-1 and A-2. An ambient background level of PM$_{10}$ from potential colocated plants is included in Attachment A-2.

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$^3$ of PM$_{10}$. To ensure conformity with NAAQS, the remaining process emissions are limited to an impact of less than 130 µg/m$^3$ of PM$_{10}$ at or beyond the nearest property boundary.

Table 3: Ambient Air Quality Impact Analysis of PM$_{10}$, 24-Hour Averaging Time

<table>
<thead>
<tr>
<th>Operation</th>
<th>Ambient Impact Factor (µg/m$^3$/ton)</th>
<th>Modeled Impact (µg/m$^3$)</th>
<th>*Background (µg/m$^3$)</th>
<th>NAAQS (µg/m$^3$)</th>
<th>Daily Production Limit (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Solitary Location</td>
<td>0.0313</td>
<td>130.0</td>
<td>20.0</td>
<td>150.0</td>
<td>4,153</td>
</tr>
<tr>
<td>2. Colocation, Same Owner</td>
<td>0.0313</td>
<td>130.0</td>
<td>20.0</td>
<td>150.0</td>
<td>**</td>
</tr>
<tr>
<td>3. Colocation, Separate Owners</td>
<td>0.0332</td>
<td>100.0</td>
<td>50.0</td>
<td>150.0</td>
<td>3,014</td>
</tr>
<tr>
<td>4. Colocation, Same and Separate Owners</td>
<td>0.0332</td>
<td>100.0</td>
<td>50.0</td>
<td>150.0</td>
<td>**</td>
</tr>
</tbody>
</table>

* Background PM$_{10}$ level of 20.00 µg/m$^3$ from haul roads and stockpiles and 30.00 µg/m$^3$ from the colocation or concurrent operation of other installations that have been limited to a combined total of 30.00 µg/m$^3$ or less in their construction permits.

** The operator(s) must balance production among colocated plants, with the ambient impact factors for each, such that NAAQS is not exceeded. Other ambient impact factors are to be listed in Attachment 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
- 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

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:
- The Application for Authority to Construct form, designating Missouri Partners, Inc. as the owner and operator of the installation.
- Environmental Protection Agency (EPA) AP-42, Compilation of Air Pollutant Emission Factors; Volume I, Stationary Point and Area Sources, Fifth Edition.
- Spreadsheet calculations of potential-to-emit and ambient impact.
- Southwest Regional Office Site Survey.
- Best Management Practices
### Attachment A-1: Daily Ambient PM$_{10}$ Impact Tracking Record

**Missouri Partners, Inc. (MPI), Buchanan Quarry, PORT-0580 – Generic Rock Crushing Plant**

**For Use during**

1. Solitary Location, and
2. Colocation with Plants Owned and Operated by the Same Owner

---

**Project Number:** 2006-12-081  
**County, CSTR:** Taney County (S7, T23N, R21W)  
**Primary Unit Size:** 500 tph  
**Distance to Nearest Property Boundary:** 325 feet  

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

(Copy this sheet as needed.)

| Date | Missouri Partners, Inc. (MPI), Buchanan Quarry  
PORT-0580  
Project # 2006-12-081 | Missouri Partners, Inc. (MPI) Plant Name:  
Plant ID:  
Permit #: | Missouri Partners, Inc. (MPI) Plant Name:  
Plant ID:  
Permit #: | Missouri Partners, Inc. (MPI) Plant Name:  
Plant ID:  
Permit #: | Missouri Partners, Inc. (MPI) Plant Name:  
Plant ID:  
Permit #: | Missouri Partners, Inc. (MPI) Plant Name:  
Plant ID:  
Permit #: | Missouri Partners, Inc. (MPI) Plant Name:  
Plant ID:  
Permit #: | Missouri Partners, Inc. (MPI) Plant Name:  
Plant ID:  
Permit #: | Missouri Partners, Inc. (MPI) Plant Name:  
Plant ID:  
Permit #: | Missouri Partners, Inc. (MPI) Plant Name:  
Plant ID:  
Permit #: | Missouri Partners, Inc. (MPI) Plant Name:  
Plant ID:  
Permit #: |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Daily Production (tons)</td>
<td>Ambient Impact Factor (µg/m$^3$)</td>
<td>Daily Production (tons)</td>
<td>Ambient Impact Factor (µg/m$^3$)</td>
<td>Daily Production (tons)</td>
<td>Ambient Impact Factor (µg/m$^3$)</td>
<td>Daily Production (tons)</td>
<td>Ambient Impact Factor (µg/m$^3$)</td>
<td>Daily Production (tons)</td>
<td>Ambient Impact Factor (µg/m$^3$)</td>
<td>Daily Production (tons)</td>
<td>Ambient Impact Factor (µg/m$^3$)</td>
<td>Daily Production (tons)</td>
</tr>
<tr>
<td>Example</td>
<td>1,200</td>
<td>0.0321</td>
<td>38.52</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0313</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Note 2: Background PM$_{10}$ Level (µg/m$^3$) is from haul roads and stockpiles.

Note 3: The TOTAL PM$_{10}$ Level (µg/m$^3$) is calculated by summing the Daily PM$_{10}$ Ambient Impact(s) and the Background PM$_{10}$ Level. A TOTAL PM$_{10}$ Level of less than 150 µg/m3 in any 24-hour period indicates compliance.
# Attachment A-2: Daily Ambient PM\textsubscript{10} Impact Tracking Record

Missouri Partners, Inc. (MPI), Buchanan Quarry, PORT-0580 – Generic Rock Crushing Plant

*For Use during*

1. Colocation with Plants Owned and Operated by Separate Owners, and
2. Colocation with Plants and Owned and Operated by Same AND Separate Owners

---

**Project Number:** 2006-12-081  
**County, CSTR:** Taney County (S7, T23N, R21W)  
**Primary Unit Size:** 500 tph  
**Distance to Nearest Property Boundary:** 325 feet

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Missouri Partners, Inc. (MPI), Buchanan Quarry PORT-0580 Project # 2006-12-081</th>
<th>Missouri Partners, Inc. (MPI) Plant Name: Plant ID: Permit #:</th>
<th>Missouri Partners, Inc. (MPI) Plant Name: Plant ID: Permit #:</th>
<th>Missouri Partners, Inc. (MPI) Plant Name: Plant ID: Permit #:</th>
<th>Missouri Partners, Inc. (MPI) Plant Name: Plant ID: Permit #:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Daily Production (tons)</td>
<td>Ambient Impact Factor (µg/m\textsuperscript{3}ton)</td>
<td>Daily Production (tons)</td>
<td>Ambient Impact Factor (µg/m\textsuperscript{3}ton)</td>
<td>Daily Production (tons)</td>
</tr>
<tr>
<td>Example</td>
<td>1,200</td>
<td>0.0321</td>
<td>38.52</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>0.0332</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0332</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0332</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0332</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0332</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0332</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0332</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0332</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0332</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0332</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0332</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0332</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

**Note 2:** Background PM\textsubscript{10} Level (µg/m\textsuperscript{3}) is from haul roads, stockpiles and other installations, as long as the other installations have been limited in their construction permits to a combined ambient impact of 30 µg/m\textsuperscript{3}.

**Note 3:** The TOTAL PM\textsubscript{10} Level (µg/m\textsuperscript{3}) is calculated by summing the Daily PM\textsubscript{10} Ambient Impact(s) and the Background PM\textsubscript{10} Level. A TOTAL PM\textsubscript{10} Level of less than 150 µg/m3 in any 24-hour period indicates compliance.
**Attachment B: Monthly NO\textsubscript{x} Emissions Tracking Record**

Missouri Partners, Inc. (MPI), Buchanan Quarry, PORT-0580 – Generic Rock Crushing Plant

Project Number: 2006-12-081  
County, CSTR: Taney County (S7, T23N, R21W)  
Primary Unit Size: 500 tph  
Distance to Nearest Property Boundary: 325 feet

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

<table>
<thead>
<tr>
<th>Month</th>
<th>Monthly Production (tons)</th>
<th>Composite NO\textsubscript{x} Emission Factor (lbs/ton)</th>
<th>\textsuperscript{1}Monthly NO\textsubscript{x} Emissions (lbs)</th>
<th>\textsuperscript{2}Monthly NO\textsubscript{x} Emissions (tons)</th>
<th>\textsuperscript{3}12-Month NO\textsubscript{x} Emissions (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>44,000</td>
<td>0.0302</td>
<td>1328.8</td>
<td>0.66</td>
<td>9.08</td>
</tr>
<tr>
<td></td>
<td>0.0930</td>
<td>0.0930</td>
<td>0.0930</td>
<td>0.0930</td>
<td>0.0930</td>
</tr>
</tbody>
</table>

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

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

Note 3: The 12-Month Emissions (tons/year) are a rolling total calculated by adding the Month’s Emissions (tons) to the Monthly Emissions (tons) of the previous eleven (11) months. A total of less than 40 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” 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.

---

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

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

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

3. Usage of Documented Watering –
   A. The operator(s) shall control the fugitive emissions from all the vehicle activity areas around the storage piles at the installation by consistently and correctly using the application of a water spray. Documented watering will be applied in accordance with a recommended application rate of 100 gallons per day per 1,000 square feet of unpaved/untreated surface area of vehicle activity areas around the storage piles as necessary to achieve control of fugitive emissions from these areas while the plant is operating. (Refer to example for documented watering of haul roads.)
   B. The operator(s) shall maintain a log that documents daily water applications. This log shall include, but is not limited to, date and volumes (e.g., number of tanker applications and/or total gallons used) of water application. The log shall also record rationale for not applying water on day(s) the plant is in operations (e.g., meteorological situations, precipitation events, freezing, etc.)
   C. Meteorological precipitation of any kind, (e.g. a quarter inch or more rainfall, sleet, snow, and/or freeze thaw conditions) which is sufficient in the amount or condition to achieve control of fugitive emissions from these areas while the plant is operating.
   D. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads. The operator(s) shall record a brief description of such events in the same log as the documented watering.
   E. The operator(s) shall record the date and the amount of water applied for each application on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.
Mr. Terry Wilson  
General Manager  
Missouri Partners, Inc.  
800 State Hwy 248, Building III  
Branson, MO 65616

RE: New Source Review Permit - Project Number: 2006-12-081

Dear Mr. Wilson:

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

Operation in accordance with the conditions and requirements in your permit, and with the New Source Review application submitted for project 2006-12-081, 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 regarding this permit, please contact me at (573) 751-4817, or write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale  
New Source Review Unit Chief

KBH: jkk

Enclosures

C: Southwest Regional Office  
PAMS File 2006-12-081  
Permit Number: