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: 092007-003 Project Number: 2006-06-049 175-0047
Owner: Norris Asphalt Paving Company
Owner’s Address: P.O. Box 695, Ottumwa, IA 52501
Installation Name: Norris Aggregate Products – Plant No. 60
Installation Address: 2652 South Highway 3, Huntsville, MO 65259
Location Information: Randolph County, S9/16/17, T53N, R15W

Application for Authority to Construct was made for:

The modification of an existing stationary rock crushing plant to make it a generic plant and add equipment. The installation has a maximum hourly design rate of 600 tons per hour (tph) and uses Best Management Practices and no more than 4 crushers, 4 screens, and 30 conveyors/bins. 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.

SEP  5  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
Norris Aggregate Products’ stationary rock crushing plant (175-0047) has been designated to be a generic plant. The combined MHDR for the primary unit 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>Combined MHDR</th>
<th>Maximum Number of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Crusher (primary unit)</td>
<td>600 tph</td>
<td>1</td>
</tr>
<tr>
<td>Secondary and Tertiary Crushers (each at 400 tph)</td>
<td>1,200 tph</td>
<td>3</td>
</tr>
<tr>
<td>Conveyors and Bins (each at 400 tph)</td>
<td>12,000 tph</td>
<td>30</td>
</tr>
<tr>
<td>Screens (each at 400 tph)</td>
<td>1,600 tph</td>
<td>4</td>
</tr>
<tr>
<td>Wet Pugmills (none)</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Wet Screens (none)</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Diesel Engines/Generators (none)</td>
<td>N/A</td>
<td>0</td>
</tr>
</tbody>
</table>

2. Generic Plant Equipment Identification Requirement
A. Within fifteen (15) days of actual startup, Norris Aggregate Products shall submit to the Air Pollution Control Program’s Permitting Section, and the Northeast Regional Office, the following information for the generic plant (175-0047):
   A Master List of all equipment that will be permitted for use with the generic plant (175-0047). This list shall include the following information for each unit listed in the table above. 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 each unit.
   A list of the core equipment that will always be utilized with the generic plant (175-0047). 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 MHDR of generic plants is defined as the sum of the MHDRs of the primary unit(s). Any arrangement of the generic plant’s equipment must be such that the primary unit is not bypassed in the process flow.
   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. Norris Aggregate Products shall indicate whether or not each piece of equipment is subject to Subpart OOO and provide the justification for this applicability determination.
   Norris Aggregate Products shall submit notification to the Air Pollution Control Program and the Regional Office if the core equipment changes or if new equipment is added to the Master List. If new equipment is to be added to the Master List, a permit modification will first be required.
B. To assure that each piece of equipment is properly identified as being a part of this generic stationary rock crushing plant (175-0047), Norris Aggregate Products 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. Norris Aggregate Products shall at all times maintain a list of the specific equipment currently being utilized with the generic stationary rock crushing plant (175-0047). The installation shall immediately
GENERAL SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

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

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

4. Superseding Condition
   The conditions of this permit supersede all special conditions found in the previously issued construction permit(s) (0887-002, 0891-004, 1192-004, 0196-018, and 112001-023) from the Air Pollution Control Program.

5. 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.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

Site ID No.: 175-0047
Site Name: Huntsville Quarry
Site Address: 2652 South Highway 3, Huntsville, MO 65259
Site County: Randolph County, S9, 16, 17, T53N, R15W

1. Best Management Practices
   Norris Aggregate Products 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 operators for Norris Aggregate Products' rock crushing plant (175-0047) 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 rock crushing plant and any ambient background concentration from installations or equipment located on the same site as the rock crushing plant.
   C. To demonstrate compliance with special condition 2A, the operators shall maintain a daily record of material processed.
      1.) During solitary operation no such record keeping is required.
      2.) During concurrent, same owner operations, Attachment A-1, or other equivalent form(s), shall also be used for this purpose.
      3.) During concurrent separate owners operations, Attachment A-2, or other equivalent form(s) shall be used for this purpose.
      4.) During concurrent, same AND separate owners operations, Attachment A-2, or other equivalent form(s) can also be used for this purpose.

3. Annual Emission Limit of Particulate Matter Less Than Ten Microns in Diameter (PM$_{10}$)
   A. The operator(s) shall ensure that Norris Aggregate Products' rock crushing plant emits less than 15 tons of PM$_{10}$ into the atmosphere in any 12-month period.
   B. To demonstrate compliance, the operator(s) shall maintain a daily record of material processed and PM$_{10}$. Attachment B, Monthly PM$_{10}$ Emissions Tracking Record, or other equivalent form(s), will be used for this purpose.

4. Moisture Content Testing Requirement for Inherent Moisture Content
   A. The inherent moisture content of the rock will reduce particulate emissions. Norris Aggregate Products claimed the inherent moisture content of the processed rock to be greater than or equal to 1.5 wt%, which has already been verified by testing.
   B. Norris Aggregate Products provided adequate documentation of testing from the past several years that demonstrates that the moisture content of the rock is consistently above 1.5%. The testing was 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. Testing was conducted for three consecutive years during the months of June through September, while the rock crushing plant was active at this site. Since the test results have been consistently greater than 1.5 wt% and there have been no reported emission exceedances from the plant, no further testing is required and this site has therefore been deemed to have met this condition on all subsequent permits.
   C. Verification of the results summary submitted to the Air Pollution Control Program may performed during a routine inspection, so this report shall be filed on-site or at Norris Aggregate Products' main office. (The results summary contained twelve moisture content values of rock taken periodically during the months of June through September from 2004 to 2006.)
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

5. Performance Testing for New Source Performance Standards (NSPS)
   A. If any equipment applicable to NSPS Subpart OOO has not been performance tested, the company shall submit the enclosed testing plan to the Enforcement section of the Air Pollution Control Program for this equipment. Norris Aggregate Products 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.

6. Restriction on Process Configuration of Primary Emission Points
   A. Norris Aggregate Products has designated the following unit as the primary emission point of the rock crushing plant: primary crusher (EP-0.1.1). Bypassing the primary emission point for processing is prohibited.

7. Restriction on Minimum Distance to Nearest Property Boundary
   A. The primary emission point of the rock crushing plant, which is the primary crusher, shall be located at least 800 feet from the nearest property boundary whenever it is operating at this site.
TECHNICAL REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT

PROJECT/INSTALLATION DESCRIPTION

This existing installation is a stationary rock-crushing plant known as the Huntsville Quarry. The purpose of this project is to add equipment and to make this installation a generic plant, thus requiring Norris Aggregate Products to generate a Master List to describe all equipment that currently exists or may be used in the future as part of this installation.

Rock, composed of non-metallic minerals, is drilled and blasted. Front-end loaders are used to collect the shot rock and make storage piles by the blasting site. Shot rock from these storage piles is loaded by front-end loaders into haul trucks, and transported to other stockpiles by the primary crusher. Front-end loaders then take this rock and feed it into the primary crusher, from which point it may be further processed with any equipment as long as it is on the Master List generated by Norris Aggregate Products. The spreadsheet attachment that lists all of the emission points for this installation may also be used to reference all allowable equipment used as part of installation 175-0047.

Other Considerations

- Processed rock is loaded into stockpiles directly from processing equipment by conveyor (or stacker) only. No other type of loading or unloading of crushed rock into stockpiles is permitted.
- Processing equipment is powered with electric line power. No generators may be used.
- Best Management Practices are used on all haul roads and stockpile vehicular activity areas.
- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].
- The installation is located in Randolph County, an attainment area for all criteria air pollutants.
- Other permits issued for this installation are listed in the table below.

Table 1. Other Permits Issued for Installation 175-0047

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Completed</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0887-002</td>
<td>1987</td>
<td>Section 5/6</td>
</tr>
<tr>
<td>0891-004</td>
<td>1991</td>
<td>Section 5/6</td>
</tr>
<tr>
<td>1192-004</td>
<td>1992</td>
<td>Section 5/6</td>
</tr>
<tr>
<td>0196-018</td>
<td>1996</td>
<td>Section 5/6</td>
</tr>
<tr>
<td>112001-023</td>
<td>2001</td>
<td>Corrections and Amendments</td>
</tr>
</tbody>
</table>

Concurrent Operation

Norris Aggregate Products (175-0047) is permitted to operate under the following four scenarios:

1. Solitary (No daily record keeping required.) – Operations when the plant is located at this site by itself. Norris Aggregate Products 175-0047 is not required to keep daily PM$_{10}$ ambient impact records and can operate for 24 hours per day under this scenario.
2. Concurrent, Same Owners (Attachment A-1) – Operations when other asphalt, concrete, rock-crushing, or rock-screening plants owned by Norris Aggregate Products are located at this site. 175-0047 shall track the daily PM$_{10}$ ambient impact of all plants at the site to ensure compliance with NAAQS.
3. Concurrent, Separate Owners (Attachment A-2) – Operations when other asphalt, concrete, rock-crushing, or rock-screening plants owned by other companies are located at this site. Plants owned by Norris Aggregate Products are allowed 52.28 µg/m$^3$ of PM$_{10}$, plants owned by other companies are allowed 77.72 µg/m$^3$ of PM$_{10}$, and 20.00 µg/m$^3$ of PM$_{10}$ is from haul roads and stock piles from using Best Management Practices.
4. Concurrent, Same and Separate Owners (Attachment A-2) – Operations when other asphalt, concrete, rock-crushing, or rock-screening plants owned by other companies are located at this site at the same time as such plants owned by Norris Aggregate Products. Plants owned by Norris Aggregate Products are allowed 52.28 µg/m$^3$ of PM$_{10}$, plants owned by other companies are allowed 77.72 µg/m$^3$ of PM$_{10}$, and 20.00 µg/m$^3$ of PM$_{10}$ is from Best Management Practices.

These scenarios are summarized in the Ambient Air Quality Impact Analysis section.
EMISSIONS EVALUATION

The only criteria air pollutant that will be emitted from this operation is PM$_{10}$. The potential emissions were calculated from the MHDR of the equipment, AP-42 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 annual emission limit of less than 15 tons of PM$_{10}$ in any 12-month period. A composite PM$_{10}$ emission factor was developed for the rock crushing plant, and is incorporated into the monthly record keeping table, Attachment B. If the conditioned potential emissions of PM$_{10}$ were 15 tons per year or greater, then the owner would be required to comply with increment analysis.

Table 2: 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>14.94</td>
<td>51.68</td>
<td>&lt;15.00</td>
<td>0.0197</td>
</tr>
<tr>
<td>SO$_x$</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>40.0</td>
<td>7.42</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>0.61</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>1.60</td>
<td>N/A</td>
<td>N/A</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>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note: N/A = Not Applicable
*PM$_{10}$ limited to 15 tons per year to remain a de minimis source.

AMBIENT AIR QUALITY IMPACT ANALYSIS

Screening tools were used to evaluate the ambient air impact from this operation, evaluated at a distance of 800 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 PM$_{10}$ at or beyond the nearest property boundary in any single 24-hour period. For sources agreeing to 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.

The stationary rock-crushing plant is permitted to operate under four (4) scenarios described in the Project/Installation Description section and summarized in the following table.

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

<table>
<thead>
<tr>
<th>Operation Description</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 – Attachment A-1</td>
<td>0.00708</td>
<td>101.96</td>
<td>20.00</td>
<td>150.00</td>
<td>N/A</td>
</tr>
<tr>
<td>2. Concurrent, Same Owner – Attachment A-1</td>
<td>0.00708</td>
<td>**</td>
<td>20.00</td>
<td>150.00</td>
<td>**</td>
</tr>
<tr>
<td>3. Concurrent, Separate Owners – Attachment A-2</td>
<td>0.00621</td>
<td>52.28</td>
<td>97.72</td>
<td>150.00</td>
<td>8,415</td>
</tr>
<tr>
<td>4. Concurrent – Same and Separate Owners – Attachment A-2</td>
<td>0.00621</td>
<td>**</td>
<td>97.72</td>
<td>150.00</td>
<td>**</td>
</tr>
</tbody>
</table>

*Background PM$_{10}$ level of 20.00 µg/m$^3$ from haul roads and stockpiles and 77.72 µg/m$^3$ from the operation of asphalt, concrete, or rock-crushing plants owned by other companies.

** The operators must balance production among concurrently operating plants owned by Norris Aggregate Products such that NAAQS is not exceeded. The daily PM$_{10}$ ambient impact from other plants owned by Norris Aggregate Products can be obtained from the operators of these plants.
**APPLICABLE REQUIREMENTS**

The owner is subject to compliance with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements.

- **Submission of Emission Data, Emission Fees and Process Information**, 10 CSR 10-6.110
- **Operating Permits**, 10 CSR 10-6.065
- An 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 Visible Air Contaminants**, 10 CSR 10-6.220
- **Restriction of Emission of Odors**, 10 CSR 10-6.090
- **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 (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

_____________________________  _______________________
Jeannie Kozak                      Date
Environmental Engineer

**PERMIT DOCUMENTS**

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, designating Norris Aggregate Products 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.
- Northeast Regional Office Site Survey.
- Best Management Practices
Attachment A-1: Daily Ambient PM₁₀ Impact Tracking Record
Norris Aggregate Products, 175-0047 – Generic Rock Crushing Plant

This form is to be used only for the scenario: Concurrent, Same Owners.

Project Number: 2006-06-049
County, CSTR: Randolph County (S9/16/17, T53N, R15W)
Primary Unit Size: 1,200 tph
Distance to Nearest Property Boundary: 800 feet

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Norris Aggregate Products 175-0047</th>
<th>Ambient Impact Factor (µg/m³/ton)</th>
<th>¹Daily PM₁₀ Impact (µg/m³)</th>
<th>²Back-ground PM₁₀ Level (µg/m³)</th>
<th>³TOTAL PM₁₀ Level (µg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>example</td>
<td>1.000</td>
<td>0.00708</td>
<td>7.08</td>
<td>0.00500</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td>0.00708</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.00708</td>
<td>20.00</td>
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<tr>
<td></td>
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<tr>
<td></td>
<td>0.00708</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1: The Daily PM₁₀ Impact (µg/m³) for each plant is calculated by multiplying the Daily Production (tons) by the matching Ambient Impact Factor.
Note 2: Background PM₁₀ Level (µg/m³) is from Haul Roads and Stockpiles.
Note 3: The TOTAL PM₁₀ Level (µg/m³) is calculated by summing the Daily PM₁₀ Ambient Impacts and the Background PM₁₀ Level. A TOTAL PM₁₀ Level of less than 150 µg/m³ in any 24-hour period indicates compliance.
**Attachment A-2: Daily Ambient PM$_{10}$ Impact Tracking Record**

**Norris Aggregate Products, 175-0047 – Generic Rock Crushing Plant**

Use this form only for the scenarios: (A) Concurrent, Separate Owners, and (B) Concurrent, Same AND Separate Owners.

Project Number: 2006-06-049  
County, CSTR: Randolph County (S9/16/17, T53N, R15W)  
Primary Unit Size: 1,200 tph  
Distance to Nearest Property Boundary: 800 feet

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Norris Aggregate Products 175-0047 Project # 2006-06-049</th>
<th>Norris Aggregate Products Plant ID:</th>
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<th>Norris Aggregate Products Plant ID:</th>
<th>²Background PM$_{10}$ Level (µg/m$^3$)</th>
<th>³TOTAL PM$_{10}$ Level (µg/m$^3$)</th>
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<td></td>
<td>Daily Production (tons)</td>
<td>Ambient Impact Factor (µg/m$^3$/ton)</td>
<td>'Daily PM$_{10}$ Impact (µg/m$^3$)</td>
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**Note 1:** The Daily PM$_{10}$ Impact (µg/m$^3$) for the stationary rock-crushing plant is calculated by multiplying the Daily Production (tons) by the matching Ambient Impact Factor.

**Note 2:** The Daily PM$_{10}$ Impact (µg/m$^3$) for other plants owned by Norris Aggregate Products can be obtained from the operators of these plants.

**Note 2:** Background PM$_{10}$ Level (µg/m$^3$) is from Haul Roads and Stockpiles and from the operations of asphalt, concrete, or rock-crushing plants owned by other companies.

**Note 3:** 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/m$^3$ in any 24-hour period indicates compliance.
Attachment B: Monthly PM$_{10}$ Emissions Tracking Record
Norris Aggregate Products, 175-0047 – Generic Rock Crushing Plant

Project Number: 2006-06-049
County, CSTR: Randolph County (S9/16/17, T53N, R15W)
Primary Unit Size: 1,200 tph
Distance to Nearest Property Boundary: 800 feet

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

<table>
<thead>
<tr>
<th>Month</th>
<th>Monthly Production (tons)</th>
<th>Composite PM$_{10}$ Emission Factor (lbs/ton)</th>
<th>$^1$Monthly PM$_{10}$ Emissions (lbs)</th>
<th>$^2$Monthly PM$_{10}$ Emissions (tons)</th>
<th>$^3$12-Month PM$_{10}$ Emissions (tons/year)</th>
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</thead>
<tbody>
<tr>
<td>Example</td>
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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 15.00 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.

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

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

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

3. **Usage of Documented Watering** –
   A. The operator(s) shall control the fugitive emissions from all the vehicle activity areas around the storage piles at the installation by consistently and correctly using the application of a water spray. Documented watering will be applied in accordance with a recommended application rate of 100 gallons per day per 1,000 square feet of unpaved/untreated surface area of vehicle activity areas around the storage piles as necessary to achieve control of fugitive emissions from these areas while the plant is operating. (Refer to example for documented watering of haul roads.)
   B. The operator(s) shall maintain a log that documents daily water applications. This log shall include, but is not limited to, date and volumes (e.g., number of tanker applications and/or total gallons used) of water application. The log shall also record rationale for not applying water on day(s) the plant is in operations (e.g., meteorological situations, precipitation events, freezing, etc.)
   C. Meteorological precipitation of any kind, (e.g. a quarter inch or more rainfall, sleet, snow, and/or freeze thaw conditions) which is sufficient in the amount or condition to achieve control of fugitive emissions from these areas while the plant is operating.
   D. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads. The operator(s) shall record a brief description of such events in the same log as the documented watering.
   E. The operator(s) shall record the date and the amount of water applied for each application on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.
Mr. Jackie Sisk
Environmental Engineer
Norris Aggregate Products
P.O. Box 695
Ottumwa, IA 52501

RE: New Source Review Permit - Project Number: 2006-06-049

Dear Mr. Sisk:

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

Operation in accordance with the conditions and requirements in your permit, the New Source Review application submitted for project 2006-06-049, and your amended operating permit is necessary for continued compliance. Please review your amended operating permit, as it will contain all applicable requirements for your rock crushing plant, including any special conditions from your New Source Review permit.

The section of the permit entitled “Technical Review of Application for Authority to Construct” should not be separated from the main portion of your permit. The entire permit must be retained in your files. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Jeannie Kozak at the department’s Air Pollution Control Program, P.O. Box 176, Jefferson City, Missouri 65102 at (573) 751-4817 Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale, P. E.
New Source Review Unit Chief

KBH: jkl

Enclosures

 c: Northeast Regional Office
     PAMS File 2006-06-049
     Permit Number: