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: 092007-004 Project Number: 2006-06-047-003-0002
Owner: Norris Asphalt Paving Company
Owner’s Address: P. O. Box 695, Ottumwa, IA 52501
Installation Name: Norris Aggregate Products
Installation Address: 16298 Business Hwy 71, Savannah, MO 64485
Location Information: Andrew County, S27/28/33/34, T59N, R35W

Application for Authority to Construct was made for:

The modification of an existing stationary rock-crushing plant to make it a generic plant, to increase the maximum hourly design rate from 500 tons per hour (tph) to 600 tph, and to add equipment. Rock is processed through no more than 4 crusher(s), 4 screen(s), and 30 conveyor(s)/bin(s). Best Management Practices will be used to control fugitive emissions from haul roads and storage piles. 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.

EFFECTIVE DATE

MO 780-1204 (1-03)
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 (003-0002) 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(s) (Primary Crusher)</td>
<td>600 tons per hour</td>
<td>1</td>
</tr>
<tr>
<td>Crusher(s), including primary crusher</td>
<td>1,800 tons per hour</td>
<td>4</td>
</tr>
<tr>
<td>Conveyor(s), Storage Bin(s)</td>
<td>12,000 tons per hour</td>
<td>30</td>
</tr>
<tr>
<td>Screen(s)</td>
<td>1,600 tons per hour</td>
<td>4</td>
</tr>
<tr>
<td>Diesel Engine(s)</td>
<td>2,300 horsepower</td>
<td>2</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 Kansas City Regional Office, the following information for the generic plant (003-0002):
      1.) A Master List of all equipment that will be permitted for use with the generic plant (003-0002). 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 (003-0002). 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. 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.
      4.) Norris Aggregate Products shall submit notification to the AIR POLLUTION CONTROL PROGRAM and the Kansas City 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 stationary rock-crushing plant (003-0002), 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 Kanas City 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 (003-0002). The installation shall make this list of currently used equipment available to any Missouri Department of Natural Resources’ personnel
GENERAL SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

3. 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.

4. 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.

5. Superseding Condition
   The conditions of this permit supersede all special conditions found in the previously issued construction permit(s) (082002-002, 102004-002, 082005-006) from the Air Pollution Control Program.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

Site ID No.: 003-0002
Site Name: Breit Quarry
Site Address: 16298 Business Hwy 71, Savannah, MO 64485
Site County: Andrew County, S27/28/33/34, T59N, R35W

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 operator(s) for Norris Aggregate Products’ rock-crushing plant (003-0002) 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 rock-crushing plant is permitted to operate under two (2) scenarios: Solitary and concurrent (same owner) operations. 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 during both operating scenarios, the operator(s) shall maintain a daily record of material processed. Attachment A, or other equivalent form(s), shall 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 40.20 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), shall be used for this purpose.

4. Moisture Content Testing Requirement for Inherent Moisture Content
A. 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 be performed during a routine inspection, so this report shall be filed on-site or at Norris Aggregate Products’ main office.

A. Norris Aggregate Products shall submit the enclosed testing plan to the Enforcement section of the Air Pollution Control Program for all equipment applicable to NSPS Subpart “OOO”. 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
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

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). Norris Aggregate Products has designated the following unit(s) as the primary emission point(s) of the rock crushing plant: Primary Crusher. 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, 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 DESCRIPTION

Equipment currently at the site include one (1) primary crusher, two (2) secondary crushers, three (3) screens, and twenty-one (21) conveyors/bins, each with different maximum hourly design rates. The installation would like to increase the MHD of the primary crusher from 500 tph to 600 tph, add one (1) secondary crusher, one (1) screen, and nine (9) conveyors/bins, and make the plant a generic plant.

Rock, composed of non-metallic minerals, is drilled/blasted, loaded into haul trucks, and transported to processing. Rock is processed through feeder(s), crusher(s), screen(s), conveyor(s), and bin(s). Processing equipment is powered with diesel engine(s). 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 Andrew County, an attainment area for all criteria air pollutants.

The rock-crushing plant is permitted to operate under two (2) separate scenarios and they are described below.

- Solitary: Operation when the rock-crushing plant is the only plant at the site.
- Concurrent (Same Owners): Operations when other plants owned by Norris Asphalt Paving Company are at the site.

Table 1: Other Permits Issued for Site 003-0002

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Completed</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>082002-002</td>
<td>08/13/2002</td>
<td>New rock-crushing plant.</td>
</tr>
<tr>
<td>102004-002</td>
<td>10/08/2004</td>
<td>Modify for colocation.</td>
</tr>
</tbody>
</table>

EMISSIONS EVALUATION

Criteria air pollutants will be emitted from this operation. The main air pollutant of concern is PM10. The potential emissions were calculated from the maximum hourly design rate (MHD) of the equipment, appropriate emission factors, control device efficiencies, and the limiting operating hours at MHD. The sources of the emission factors and control efficiencies are listed in the section “Permit Documents”. This review was conducted in accordance with section 5 of Missouri State Rules CSR 10-6.060, Construction Permits Required. The conditioned potential emissions of the project are below de minimis levels.

The installation has an annual emission limit of less than 40.20 tons of PM10 in any consecutive 12-month period. The values were obtained by adding the de minimis level of PM10 (15 tpy) to the existing actual emissions for the installation (25.20 tpy obtained from the 2006 Emissions Inventory Questionaire (EIQ)). A PM10 emission factor was developed for the plant and incorporated into the monthly record keeping table, Attachment B. The rock-crushing plant is permitted to operate two (2) diesel engines with a combined maximum design rate of 2,300 horsepower. The diesel engines shall only be operated to power equipment during production and during warmup and shutdown periods.

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>PM10</td>
<td>15.0</td>
<td>50.00</td>
<td>25.20</td>
<td>16.63</td>
<td>&lt;40.20</td>
<td>0.05139</td>
</tr>
<tr>
<td>SOx</td>
<td>40.0</td>
<td>15.15</td>
<td>2.35</td>
<td>N/A</td>
<td>10.70</td>
<td>N/A</td>
</tr>
<tr>
<td>NOx</td>
<td>40.0</td>
<td>119.99</td>
<td>35.78</td>
<td>N/A</td>
<td>84.77</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>3.07</td>
<td>4.31</td>
<td>N/A</td>
<td>2.17</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>31.87</td>
<td>7.70</td>
<td>N/A</td>
<td>22.52</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>0.06</td>
<td>N/A</td>
<td>N/A</td>
<td>0.04</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note: N/A = Not Applicable

* Existing potential emissions calculated from emission factors from AP-42 and equipment currently at the site. This is based on conditioned potential.
PM10 conditioned potential based on limit in permit conditions. Other pollutants proportionately reduced according to PM10 conditioned potential.

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 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/m³ of PM10 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/m³ of PM10. To ensure conformity with NAAQS, the remaining process emissions are limited to an impact of less than 130 µg/m³ of PM10 at or beyond the nearest property boundary.

To demonstrate compliance with NAAQS, the installation shall keep record during each operating scenario as described below.

- **Solitary Operation:** The installation shall track its daily PM10 ambient impact to ensure compliance with the limit of 130 µg/m³. 20.00 µg/m³ is reserved for the use of Best Management Practices. Attachment A, or equivalent form(s), shall be used for this purpose.
- **Concurrent (Same Owner) Operations:** The installation shall track not only its daily PM10 ambient impact but also that of all the other plants located at the site to ensure that the combined daily PM10 ambient impact from all plants is below 130 µg/m³. 20.00 µg/m³ is reserved for the use of Best Management Practices. Attachment A, or equivalent form(s), shall be used for this purpose.

Table 3: Ambient Air Quality Impact Analysis of PM10, 24-Hour Averaging Time

<table>
<thead>
<tr>
<th>Operation</th>
<th>Ambient Impact Factor (µg/m³/ton)</th>
<th>Modeled Impact (µg/m³)</th>
<th>*Background (µg/m³)</th>
<th>NAAQS (µg/m³)</th>
<th>Daily Production Limit (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Solitary</td>
<td>0.01120</td>
<td>130.00</td>
<td>20.00</td>
<td>150.00</td>
<td>11,607</td>
</tr>
<tr>
<td>2. Concurrent, Same Owner</td>
<td>0.01120</td>
<td>**</td>
<td>20.00</td>
<td>150.00</td>
<td>**</td>
</tr>
</tbody>
</table>

* Background PM10 level of 20.00 µg/m³ from haul roads and stockpiles.

** The operator(s) must balance production among concurrently operating plants, with the ambient impact factors for each, such that NAAQS is not exceeded. Ambient impacts from other plants owned by Norris Asphalt Paving Company 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 10-3.090**
- **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.
PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, designating Norris Asphalt Paving Company 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.
- Kansas City Regional Office Site Survey.
- Best Management Practices
- Moisture content testing data submitted by Norris Aggregate Products.
Attachment A: Daily Ambient PM₁₀ Impact Tracking Record
Norris Aggregate Products, 003-0002– Generic Rock-Crushing Plant
For Use During Solitary and Concurrent (Same Owner) Operations

Project Number: 2006-06-047
County, CSTR: Andrew County (S27/28/33/34, T59N, R35W)
Primary Unit Size: 600 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 003-0002 Project # 2006-06-047</th>
<th>Ambient Impact Factor (µg/m³/ton)</th>
<th>Daily PM₁₀ Impact (µg/m³)</th>
<th>Daily PM₁₀ Impact (µg/m³)</th>
<th>Daily PM₁₀ Impact (µg/m³)</th>
<th>Daily PM₁₀ Impact (µg/m³)</th>
<th>Back-ground PM₁₀ Level (µg/m³)</th>
<th>TOTAL PM₁₀ Level (µg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>0.01120</td>
<td>20.00</td>
<td>20.00</td>
</tr>
</tbody>
</table>

Note 1: The Daily PM₁₀ Impact (µg/m³) for the stationary rock-crushing plant is calculated by multiplying the Daily Production (tons) by the matching Ambient Impact Factor.
Note 2: The Daily PM₁₀ Impact (µg/m³) for the other plants owned by Norris Asphalt Paving Co. can be obtained from the operator(s) of these plants. A value of zero (0) should be entered during solitary operation of the stationary rock-crushing plant.
Note 3: Background PM₁₀ Level (µg/m³) is from Haul Roads and Stockpiles.
Note 4: The TOTAL PM₁₀ Level (µg/m³) is calculated by summing the Daily PM₁₀ Ambient Impact(s) and the Background PM₁₀ Level. A TOTAL PM₁₀ Level of less than 150 µg/m³ in any 24-hour period indicates compliance.
### Norris Aggregate Products, 003-0002 – Generic Rock-Crushing Plant

**Project Number:** 2006-06-047  
**County, CSTR:** Andrew County (S27/28/33/34, T59N, R35W)  
**Primary Unit Size:** 600 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>^1Monthly PM$_{10}$ Emissions (lbs)</th>
<th>^2Monthly PM$_{10}$ Emissions (tons)</th>
<th>^312-Month PM$_{10}$ Emissions (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</td>
<td>0.05139</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 40.20 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. Jackie Sisk  
Environmental Engineer  
Norris Asphalt Paving Company  
P. O. Box 695  
Ottumwa, IA 52501  

RE: New Source Review Permit - Project Number: 2006-06-047

Dear Mr. Sisk:

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 2006-06-047, and your amended operating permit, if required, 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 me at (573) 751-4817, or you may write to me at 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: cwy l

Enclosures

c: Kansas City Regional Office  
PAMS File 2006-06-047  
Permit Number: