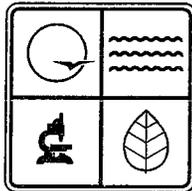


STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION



PERMIT BOOK

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **012007 - 004** Project Number: **2006-06-044**
Owner: **Norris Asphalt Paving Company**
Owner's Address: **PO Box 695, Ottumwa, IA 52501**
Installation Name: **Norris Aggregate Products- Plant No. 81**
Installation Address: **38139 230th Street, Ravenwood, MO 64479**
Location Information: **Nodaway County, S31 and 36, T65N, R33W**

Application for Authority to Construct was made for:

The modification of an existing portable rock-crushing plant. Rock is processed through 1 pug mill, 1 wet screen, 6 crushers, 6 screen(s), and 40 conveyors/bins. The portable rock-crushing plant has a maximum hourly design rate (MHDR) of 600 tons per hour (tph). Best Management Practices will be used to control fugitive emissions from haul roads and storage piles. This review was conducted in accordance with Section (6), 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.

JAN - 3 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.

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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' portable rock-crushing plant (PORT-0512) 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.

Equipment Type	Maximum Combined Hourly Design Rate	Maximum Number of Units
Primary Unit(s) (Primary Crusher)	600 tons per hour	1
Secondary Crusher(s)	2,000 tons per hour	5
Conveyor(s), Bin(s)	16,000 tons per hour	40
Screen(s)	2,400 tons per hour	6
Wet Screen(s)	600 tons per hour	1
Pug Mill(s)	600 tons per hour	1
Diesel Engine(s)/Generator(s)	2,200 total horsepower	3

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/Northeast Regional Office, the following information for the generic plant (PORT-0512):
 - 1.) A Master List of all equipment that will be permitted for use with the generic plant (PORT-0512). 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-0512). 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 PORT-0512 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 PORT-0512 shall submit notification to the 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-0512), 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

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GENERAL SPECIAL CONDITIONS:

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

utilized with the generic portable rock-crushing plant (PORT-0512). The installation shall make this list of currently used equipment available to any Missouri Department of Natural Resources' personnel upon request.

3. Relocation of Portable Rock-Crushing Plant
 - A. If this portable Rock-C plant moves from the initial site reviewed in this permit (Gooden Quarry, S31 and 36, T65N, R33W, Site ID: 147-0017), then the portable rock-crushing plant shall not be operated 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 rock-crushing plant.
 - 1.) If the portable rock-crushing 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 rock-crushing 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 operations, 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.
4. Performance Testing for New Source Performance Standards (NSPS)
 - 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" that have not been tested for compliance. 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.
5. Operating Permit Applicability

If this portable rock-crushing plant does not move from the initial site (Gooden Quarry, S31 and 36, T65N, R33W, Site ID: 147-0017) within 24 consecutive months, then Norris Aggregate Products' portable rock-crushing plant, PORT-0512, shall submit an operating permit application. The Air Pollution Control Program must receive this application no later than 30 days after the exceedance of the 24 months.
6. 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.
7. 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.
8. Superseding Condition

The conditions of this permit supersede all special conditions found in the previously issued construction permits (012005-004 and 052006-020) from the Air Pollution Control Program.

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SITE-SPECIFIC SPECIAL CONDITIONS:

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

These special conditions apply to the following sites:

Site Name	Site ID Number	Site Address	County, Section, Township, and Range
Amazonia	003-0012	9355 State Hwy F, Amazonia, MO 64421	Andrew County, S18/19, T59N, R35W
Barnard	147-0029	36714 Jet Road, Barnard, MO 64424	Nodaway County, S9/10, T62N, R35W
Bethany	081-0017	29365 Outer Road, Bethany, MO 64424	Harrison County, S1/2, T63N, R28W
Braymer	025-0017	6500 Oliver Road, Cowgill, MO 64637	Caldwell County, S24, T55N, R28W
Breit	003-0002	16298 Business Hwy 71, Savannah, MO 64485	Andrew County, S27/28/33/34, T59N, R35W
Edinburg	079-0030	Hwy 190 & Hwy 146, Trenton, MO 64683	Grundy County, S15/16, T61N, R25W
Gallatin	061-0003	21901 State Hwy 13, Gallatin, MO 64640	Daviess County, S32/33, T60N, R27W
Gooden	147-0017	38139 230 th Street, Ravenwood, MO 64479	Nodaway County, S31/36, T65N, R34W
Huntsville	175-0047	2652 South Hwy 3, Huntsville, MO 65259	Randolph County, S9/16/17, T53N, R15W
Jefferies	081-0018	East Bayport Road, Blythdale, MO 64426	Harrison County, S3/4, T66N, R 26W
Maitland	087-0002	34635 Holt 190, Maitland, MO 64466	Holt County, S27/28, T62N, R37W
Mercer	129-P005	RR1, Princeton, MO 64673	Mercer County, S21/22, T66N, R23W
New Point	087-P015	23351 Hwy B, Oregon, MO 64473	Holt County, S27/28, T61N, R37W
Pattonsburg	061-0029	Route 3, Pattonsburg, MO 64670	Daviess County, S17, T61N, R28W
Princeton	129-0003	RR1, Princeton, MO 64673	Mercer County, S34/35, T64N, R24W
Route C	061-0016	16664 State Rt C, Pattonsburg, MO 64670	Davies County, S30, T61N, R28W
Trenton	079-0016	38 NW Hwy 146, Trenton, MO 64683	Grundy County, S24, T61N, R25W

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 (PM₁₀)**
 - A. The operator(s) for Norris Aggregate Products' portable rock-crushing plant (PORT-0512) shall ensure, while operating at this site, that the ambient impact of PM₁₀ at or beyond the nearest property boundary does not exceed 150 µg/m³ in any 24-hour period, in accordance with the Federal NAAQS requirements (40 CFR 50.6).
 - B. The total daily ambient impact of PM₁₀ at this site shall include the combined impact of the portable rock-crushing plant and any ambient background concentration from installations or equipment located on the same site as the portable rock-crushing plant.

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SITE-SPECIFIC SPECIAL CONDITIONS:

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

- C. To demonstrate compliance, the operator(s) shall maintain a daily record of material processed.
 - 1.) During solitary operation, use Attachment A-1, or other equivalent form(s), for this purpose.
 - 2.) During concurrent, same owner operations, also use Attachment A-1, or other equivalent form(s), for this purpose.
 - 3.) During concurrent, separate owners operations, use Attachment A-2, or other equivalent form(s), for this purpose.
 - 4.) During concurrent, same **AND** separate owners operations, also use Attachment A-2, or other equivalent form(s), for this purpose.
3. Annual Emission Limit of Particulate Matter Less Than Ten Microns in Diameter (PM₁₀)
 - A. The operator(s) shall ensure that Norris Aggregate Products' portable rock-crushing plant emits less than 50 tons of PM₁₀ into the atmosphere in any 12-month period.
 - B. To demonstrate compliance, the operator(s) shall maintain a daily record of material processed and PM₁₀. Attachment B, *Monthly PM₁₀ Emissions Tracking Record*, or other equivalent form(s), will be used for this purpose.
4. Annual Emission Limit of Nitrogen Oxides (NOx)
 - A. The operator(s) shall ensure that Norris Aggregate Products' portable rock-crushing plant emits less than 40 tons of NOx into the atmosphere in any 12-month period.
 - B. To demonstrate compliance, the operator(s) shall maintain a daily record of material processed and NOx. Attachment C, *Monthly Nitrogen Oxides (NOx) Emissions Tracking Record*, or other equivalent form(s), will be used for this purpose.
5. Usage of Wet Suppression Control System on Equipment
 - A. Norris Aggregate Products 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 the following units:
 - 1.) The primary crusher (EP-01.1)
 - 2.) The secondary crushers (5) (EP-01.2)
 - 3.) The screens (6) (EP-02)
 - B. Norris Aggregate Products claimed carryover control for all conveyors. This type of control is given to equipment immediately following another equipment controlled by a spray bar. Therefore, all conveyors shall either be directly controlled by a spray bar or be located immediately following another equipment controlled by a spray bar.
 - C. 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.
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 portable 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 portable rock-crushing plant, which is the primary crusher, shall be located at least 600 feet from the nearest property boundary whenever it is operating at this site.
9. Restriction on the Use of Diesel Engine(s)/Generator(s)
 - A. The portable rock-crushing plant, PORT-0512, shall not operate its diesel engine(s) for any purpose other than warming up before production (not to exceed two hours) and powering equipment during production.
 - B. The portable rock-crushing plant, PORT-0512, shall only operate diesel engine(s) with horsepower

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SITE-SPECIFIC SPECIAL CONDITIONS:

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

greater than 600. If the company decides that it would like to use diesel engines with horsepower less than 600, a new permit review will be required.

TECHNICAL REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT

PROJECT DESCRIPTION

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 Nodaway County, an attainment area for all criteria air pollutants.

The portable rock-crushing plant, PORT-0512, is permitted to operate under the following scenarios.

- Solitary Operation: No other plants at the site.
- Concurrent, Same Owner Operations: Concurrent operations with plants owned by Norris Aggregate Products.
- Concurrent, Separate Owners Operations: Concurrent operations with plants owned by other companies.
- Concurrent Separate **AND** Same Owners Operations: Concurrent operations with plants owned by Norris Aggregate Products **AND** plants owned by other companies.

The concurrently operating plants must be asphalt, concrete, or rock-crushing plants.

The generic rock-crushing plant is permitted to operate a maximum of six (6) crushers, six (6) screens, forty (40) conveyors, one (1) wet screen, and one (1) pug mill. The wet screen and pug mill are processes saturated with water. The plant is also permitted to operate a maximum of three (3) diesel engines with a combined horsepower of 2,200.

Table 1. Other Permits Issued for PORT-0512

Permit Number	Completed	Description
012005-004	January 2005	Section 5/6 – Portable rock-crushing plant
052006-020	May 2006	Section 5/6 – Add equipment

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 (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 minor source under 10 CSR 10-6.060 section (6).

The portable rock-crushing plant has an annual emission limit of less than 50 tons of PM₁₀ in any 12-month period. Composite PM₁₀ emission factors were developed for the plant at each site and given in Table 2 to be used in record keeping table, Attachment B. If the conditioned potential emissions of PM₁₀ were 50 tons per year or greater, then the owner would be required to submit dispersion modeling results.

The conditioned potentials of Nitrogen Oxides (NO_x) at all sites are above the *de minimis* level of 40 tons per year. The company can either submit stack parameters for all combustion sources at the site so ambient impact analysis could be conducted, or accept an annual emission limit of less than 40 tons of NO_x. The company decided to accept the annual emission limit of less than 40 tons of NO_x. A composite NO_x emission factor was developed for the portable rock-crushing plant and incorporated in Attachment C.

Table 2: Emissions Summary (tons per year)

Pollutants	Sites	Regulatory <i>De Minimis</i> Levels	Existing Actual Emissions (2005 EIQ)	Potential Emissions of the Application	*New Installation Conditioned Potential	Emission Factor (lb/ton)
SOx	All	40.0	0.46	28.29	5.05	N/A
NOx	All	40.0	6.95	224.08	<40	51.16**
VOC	All	40.0	0.57	5.74	1.02	N/A
CO	All	100.0	1.50	59.52	10.63	N/A
HAPs	All	10.0/25.0	N/A	0.11	0.02	N/A
PM ₁₀	Amazonia	15.0	11.16	130.13	<50	0.04952
PM ₁₀	Barnard	15.0	11.16	105.75	<50	0.04024
PM ₁₀	Bethany	15.0	11.16	115.83	<50	0.04407
PM ₁₀	Braymer	15.0	11.16	102.32	<50	0.03894
PM ₁₀	Breit	15.0	11.16	155.09	<50	0.05901
PM ₁₀	Edinburg	15.0	11.16	109.01	<50	0.04148
PM ₁₀	Gallatin	15.0	11.16	104.08	<50	0.03960
PM ₁₀	Gooden	15.0	11.16	113.41	<50	0.04315
PM ₁₀	Huntsville	15.0	11.16	121.18	<50	0.04611
PM ₁₀	Jefferies	15.0	11.16	116.41	<50	0.04430
PM ₁₀	Maitland	15.0	11.16	147.48	<50	0.05612
PM ₁₀	Mercer	15.0	11.16	112.34	<50	0.04275
PM ₁₀	New Point	15.0	11.16	108.44	<50	0.04126
PM ₁₀	Pattonsburg	15.0	11.16	106.03	<50	0.04035
PM ₁₀	Princeton	15.0	11.16	119.59	<50	0.04551
PM ₁₀	Route C	15.0	11.16	127.92	<50	0.04867
PM ₁₀	Trenton	15.0	11.16	119.14	<50	0.04533

Note: N/A = Not Applicable

* PM₁₀ and NOx conditioned potential from limit in permit conditions. Conditioned potentials of SOx, VOC, CO, and HAPs proportionally reduced according to NOx 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 600 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.

The portable plant is permitted to operate under four scenarios.

- Solitary Operation: The plant must track its daily PM₁₀ ambient impact to ensure compliance with NAAQS. Attachment A-1 can be used for PM₁₀ tracking purposes.
- Concurrent, Same Owner Operations: The plant must track not only its own daily PM₁₀ ambient impact, but also that of all other plants to ensure compliance with NAAQS. Attachment A-1, or other equivalent forms, can be used for this purpose.
- Concurrent, Separate Owners Operations: The plant shall limit itself to a daily PM₁₀ ambient impact of 96.46 µg/m³. Attachment A-2, or other equivalent forms, can be used to ensure compliance with this limit. The remaining 33.54 µg/m³ can be used by plants owned by other companies.
- Concurrent, Same **AND** Separate Owners Operations: The plant must track its own daily PM₁₀ ambient impact **AND** also that of all other plants owned by Norris Aggregate Products. Attachment A-2, or other equivalent forms, can be used for this purpose. The combined daily PM₁₀ ambient impact from all plants owned by Norris Aggregate Products shall be less than 96.46 µg/m³. The remaining 33.54 µg/m³ can be used by plants owned by other companies.

Screening tools were used to develop an ambient impact factor for the portable rock-crushing plant at each site for each scenario. The ambient impact factors are given in Table 3 and also incorporated into record keeping tables, Attachment A-1 and Attachment A-2.

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

Operation	Ambient Impact Factor (µg/m ³ /ton)	Modeled Impact (µg/m ³)	*Background (µg/m ³)	NAAQS (µg/m ³)	Daily Production Limit (tons)
1. Solitary	0.01655	130.00	20.00	150.00	7,854
2. Concurrent, Same Owner	0.01655	**	20.00	150.00	**
3. Concurrent, Separate Owner	0.01395	96.46	53.54	150.00	6,912
4. Concurrent, Same and Separate Owners	0.01395	**	53.54	150.00	**

* Background PM₁₀ level of 20.00 µg/m³ from haul roads and stockpiles and 33.54 µg/m³ from the operations of asphalt, concrete, or rock-crushing plants owned by other companies.

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

APPLICABLE REQUIREMENTS

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

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
- *Operating Permits*, 10 CSR 10-6.065
- If this portable rock-crushing plant remains at the initial site reviewed in this permit longer than 24 consecutive months, then the owner shall submit an Operating Permit Application. The Air Pollution Control Program must receive this application no later than 30 days after the exceedance of 24 months.
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-3.090
- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400
- *Restriction of Emission of Sulfur Compounds*, 10 CSR 10-6.260
- 40 CFR Part 60 Subpart "OOO", *Standards of Performance for Nonmetallic Mineral Processing Plants*, of the New Source Performance Standards (NSPS)
- The National Emission Standards for Hazardous Air Pollutants (NESHAPs) and the currently promulgated Maximum Achievable Control Technology (MACT) regulations do not apply to the proposed equipment.

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

 Jeannie Kozak
 Environmental Engineer

 Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, designating 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*.
- Noyes Data Corp., Orlemann, et al.1983, *Fugitive Dust Control*.
- EPA Factor Information Retrieval (FIRE) Version 6.21.
- Spreadsheet calculations of potential-to-emit and ambient impact.
- Southwest, Southeast, Northeast, Kansas City and St. Louis Regional Office Site Survey.
- Best Management Practices

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 Emissions¹” 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 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.

Mr. Jackie Sisk
Environmental Engineer
Norris Aggregate Products
PO Box 695
Ottumwa, IA 52501

RE: New Source Review Permit - Project Number: 2006-06-044

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 2006-06-044, 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 portable 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, please contact me at (573) 751-4817, or write to the Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

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

KH: jkk

Enclosures

c: Northeast, Kansas City Regional Office
PAMS File: 2006-06-044
Permit Number: