

**AIR EMISSION PERMIT NO. 14500029- 001
IS ISSUED TO**

Meridian Aggregates Co., A Limited Partnership

Meridian Aggregates Co., A Limited Partnership - St. Cloud
1450 Division Street
Waite Park, Stearns County, Minnesota 56387

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit application(s):

Permit Type	Application Date
Total Facility Operating Permit	06/15/96

This permit authorizes the Permittee to construct, modify and operate the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit and with all general conditions listed in Minn. R. 7007.0800, subp. 16, which are incorporated by reference. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: State ; Non-major for PSD/NSR

Issue Date: February 27, 1997

Expiration: Non-expiring
All Title I Conditions do not expire.

Michael J. Sandusky
Acting Division Manager
Air Quality Division

for Peder A. Larson
Commissioner
Minnesota Pollution Control Agency

PJC:lao

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NOTICE TO THE PERMITTEE:

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	(612)296-6300
Outside Metro Area	1-800-657-3864
TTY	(612)282-5332

The rule governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

PERMIT SHIELD:

Subject to the limitations in Minn. R. 70007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Any requirements which have been determined not to apply are listed in Table A of this permit.

The permit shield, however does not apply to: Minn. R. ch. 7030 (Noise Pollution Control).

FACILITY DESCRIPTION:

The facility is a non-metallic mineral processing facility. The facility consists of drilling and blasting in the quarry, transport of materials to a primary crusher, followed by processing material into a number of products via crushers, screens, conveyors, stackers, chutes, bins, hoppers, feeders, etc. Major products are railroad ballast and construction aggregate. The facility did not qualify for the General Permit for non-metallic mineral processing facilities because there is a dryer at the facility. Limitations are in the permit which keeps the source non-major for New Source Review purposes and for Title V purposes; the permit is a state permit.

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/27/97

Facility Name: Meridian Aggregates - St Cloud

Permit Number: 14500029 - 001

Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.

Subject Item:**Total Facility**

What to do	Why to do it
Process Throughput: less than or equal to 1,800,000 tons/year using 12 Month Rolling Sum calculated by the 30th day of the month for the previous month.	Title I Condition: Limit taken to avoid classification as major source and modification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2
Maintain records of production limit (processing throughput) and monthly calculations on-site.	Title I Condition: Compliance demonstration to show compliance with Title I emission limit
Number of Units in Operation at any time shall be limited to a maximum of: 10 crushers 20 screens 100 transfer points (this includes fugitive transfer points)	Title I Condition: Limit taken to avoid classification as major source and modification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2
Maintain records indicating the number of pieces of equipment in operation at the stationary source at any time. Stored equipment that is not operative or is being repaired is not included in the equipment limitation.	Title I Condition: Compliance demonstration to show compliance with Title I emission limit
Record keeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350, subp. 2), including records of the emissions resulting from those changes. The Permittee is not required to keep these records for changes in number of process units in operation at any time, as long as the number of units remain limited to those approved in this permit, as listed above.	Minn. R. 7007.0800, subp. 5(B)
Fines Crushing: Less than 50,000 tons per calendar year. "Fines crushing" is defined as the crushing of material to a maximum size of 3/16 inch or smaller.	Title I Condition: Limit taken to avoid classification as major source and modification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2
Fines crushing: Maintain records of amount of fines crushing performed each calendar year. Records must indicate dates and tons of material produced or processed, as well as a description of the material.	Title I Condition: Compliance demonstration to show compliance with Title I emission limit
Feed material moisture content: Greater than or equal to 1.5 percent.	Title I Condition: Limit taken to avoid classification as major source and modification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2
Labeling of Process Equipment: Permanently affix the manufacturer's serial number (or otherwise unique identifying number) to each piece of crushing, screening, transfer operation, and stationary internal combustion engine equipment for tracking purposes within 60 days of permit issuance. The number shall be permanently affixed and maintained so that it is readable and visible at all times from a safe distance. This number shall correspond to the number contained in records regarding the piece of equipment.	Minn. Stat. 116.07, subp. 4a; Minn. R. 7007.0800, subp. 2; Minn. R. 7007.1100
NSPS Equipment Description and Notification: When additional equipment is added to the Permittee's operations, an NSPS Equipment Description and Notification must be submitted on a form approved by the Commissioner and/or a record must be made as described below. The NSPS Equipment Description and Notification form (NM-EQ) shall be used to provide the required NSPS notifications. All NSPS affected facilities owned or operated by the Permittee must be accounted for in the NSPS Equipment Description and Notification form submitted at the time of permit application or in these subsequent updates. If a piece of equipment is not subject to NSPS, the Permittee must keep records to demonstrate that it did not need to be included in a notification.	Minn. Stat. 116.07, subp. 4a; Minn. R. 7007.0800, subp. 2; Minn. R. 7007.1100.
The Permittee shall not install or operate any equipment at the stationary source which is an affected facility under any New Source Performance Standard (NSPS) under 40 CFR pt. 60 other than 40 CFR pt. 60, subp. OOO and subp. Kb. If the Permittee wishes to do so, the Permittee shall apply for an amendment to this permit. The Permittee shall comply with any applicable requirements of OOO and Kb, including the need to maintain records showing the dimensions of storage vessels with a design capacity less than 75 cubic meters.	Minn. Stat. 116.07, subp. 4a; Minn. R. 7007.0800, subp. 2; Minn. R. 7007.1100.

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/27/97

Facility Name: Meridian Aggregates - St Cloud

Permit Number: 14500029 - 001

Test moisture content of each different feed material source (sampled at an area representative of the feed source and physically capable of being sampled), as follows: a. Use American Society for Testing and Materials (ASTM) method numbers D 2216-92 or D 4643-93 (or equivalent). b. Keep records of each moisture content test summarizing the method used, results, date, time, and initials of person performing test. c. Test weekly, when operating, unless three consecutive tests at the stationary source location show moisture contents of greater than or equal to 1.5 percent after which testing is no longer required until the source of the feed material changes.	Title I Condition: Compliance demonstration to show compliance with Title I emission limit
When testing indicates that feed material moisture content is less than 1.5%, or in situations where it is infeasible to sample and test, or where the Permittee elects not to sample and test, Permittee must operate a moisture addition device at or immediately prior to the initial crusher or initial screen where unprocessed feed material is being fed to achieve a moisture content of at least 1.5%. Moisture addition during operation shall continue until subsequent moisture content testing demonstrates that feed material moisture content is at least 1.5%. Daily, when operating, either: (i) keep records of the date, water flow rate, material throughput rate, and initials of the person making the record and the time the record was made; or (ii) conduct moisture content testing daily on the feed material after water application, and if results show moisture content is less than 1.5%, increase water to insure moisture content is at least 1.5% and retest to verify.	Title I Condition: Compliance demonstration to show compliance with Title I emission limit
If applicable, keep records indicating that feed material is being removed from below the water table - or from below the surface of a waterway (e.g., creek, river, lake) - or that the feed material is recycled asphalt pavement. Records shall include a description of the source, the corresponding dates, and the initials of the person making the record. If feed material is removed from below the water table or below the surface of a waterway, then testing for moisture content is not required nor is moisture addition.	Title I Condition: Compliance demonstration to show compliance with Title I emission limit
Air Pollution Control Equipment: Operate all pollution control equipment listed in GI-05A whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Shutdowns: Notify the Commissioner at least 24 hours in advance of shutdown of any process or control equipment if the shutdown would cause an increase in the emission of air contaminants. At the time of notification, notify the Commissioner of the cause of the shutdown and the estimated duration. Notify the Commissioner again when the shutdown is over.	Minn. R. 7019.1000, subp. 1
Breakdowns: Notify the Commissioner immediately of a breakdown of more than one hour duration of any process or control equipment if the breakdown causes an increase in the emission of air contaminants. At the time of notification or as soon thereafter as possible, the permittee shall also notify the Commissioner of the cause of the breakdown and the estimated duration. Notify the Commissioner again when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.	Minn. R. 7007.0800, subp. 4(D)
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, such as for system breakdowns, repairs, calibration checks, and zero and span adjustments (as applicable). Monitoring records should reflect any such periods of process shutdown.	Minn. R. 7007.0800, subp. 4(D)
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Oral Notification of Deviations Endangering Human Health or the Environment: Within 24 hours of discovery, orally notify the Commissioner of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7007.0800, subp. 6(A)

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/27/97

Facility Name: Meridian Aggregates - St Cloud

Permit Number: 14500029 - 001

Discovery of Deviations Endangering Human Health or the Environment Report (written): due two working days after discovery of deviation, submit a written description of any deviation endangering human health or the environment to the Commissioner. Include the following information in this written description: cause of the deviation; exact dates of the period of the deviation; if the deviation has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7007.0800, subp. 6(A)
Application for Permit Amendment: If you need a permit amendment, submit application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Emission Fees: due 60 days after receipt of an MPCA bill	Minn. R. 7002.0005 through Minn. R. 7002.0095
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises, to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.	Minn. R. 7007.0800, subp. 9(A)
Record keeping: Retain all records at the stationary source or a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
Extension Requests: The permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not federally enforceable.	Minn. R. 7030.0010 - 7030.0080

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/27/97

Facility Name: Meridian Aggregates - St Cloud

Permit Number: 14500029 - 001

Subject Item: GP 001 NSPS Equipment**Associated Items:** EU 001 NSPS Crushers

EU 002 Other NSPS equipment

What to do	Why to do it
Construction or Reconstruction: Notification of construction or reconstruction postmarked no later than 30 days after the start of construction as defined in 40 CFR Section 60.2, except for mass-produced (prefabricated) affected facilities.	40 CFR Section 60.7(a)(1); Minn. R. 7019.0100
Actual Initial Startup: Notification of actual initial startup date postmarked within 15 days after such date.	40 CFR Section 60.7(a)(3); Minn. R. 7019.0100
Initial Performance Testing: Shall be completed within 60 days of obtaining maximum capacity but no later than 180 days after initial startup date.	40 CFR Sections 60.8(a), 60.675, 60.676; Minn. R. 7017.2015, Minn. R. 7011.3350
Performance Test Notification: Performance test notification shall be postmarked at least 30 days prior to conducting a performance test.	40 CFR Section 60.8(d); Minn. R. 7017.2015
Replacement: Notification shall be postmarked within 60 days after making the replacement.	40 CFR Sections 60.670(d) and 60.676; Minn. R. 7011.3350
Recordkeeping: maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.	40 CFR Section 60.7(b); Minn. R. 7019.0100

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/27/97

Facility Name: Meridian Aggregates - St Cloud

Permit Number: 14500029 - 001

Subject Item: GP 002 Fugitive Sources (non-process equipment)**Associated Items:** FS 901 Fugitive transfer points

FS 902 Piles

FS 903 Unpaved Roads

What to do	Why to do it
<p>The Permittee shall comply with the requirements of Minn. R. 7011.0150. This means that all reasonable measures shall be taken to prevent avoidable amounts of particulate matter from becoming airborne. In a practical manner this refers to preventing avoidable visible dust emissions beyond the lot line surrounding the stationary source. Control of non-process dust emissions can be achieved through such measures as applying water or commercially available dust suppressants to stock piles, unpaved roads and handling areas. The following requirements also apply:</p>	<p>Title I Condition: Limit to avoid classification as major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; limit to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7011.0150</p>
<ol style="list-style-type: none"> 1. Record date and time of action and initials of person making the record. 2. Record amount of water or dust suppressant applied. 3. If a commercially available dust suppressant is used, it shall be applied in accordance with the manufacturer's guidelines. A copy of these manufacturer's guidelines must be kept by the Permittee. 4. Record the location (e.g., on a site sketch) of water or dust suppressant application. 5. Install a rain gauge at the site and record the precipitation in the previous 24 hours for each day of operation at the site. 6. Make and record basic weather observations according to the Weather Summary Criteria listed in Appendix A that best characterizes each operating day. 7. Unpaved roads at the site shall be posted with speed limit signs indicating a maximum speed of 10 mph. 8. Equipment to apply water or dust suppressant shall always be available at the site or on call for use at the site within a given operating day. 	<p>Title I Condition: Limit to avoid classification as major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; limit to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7011.0150</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/27/97

Facility Name: Meridian Aggregates - St Cloud

Permit Number: 14500029 - 001

Subject Item: EU 001 NSPS Crushers**Associated Items:** GP 001 NSPS Equipment

GP 003 Process Units

What to do	Why to do it
Opacity: less than 15 percent opacity	40 CFR Section 60.672(c); Minn. R. 7011.3350

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/27/97

Facility Name: Meridian Aggregates - St Cloud
Permit Number: 14500029 - 001

Subject Item: EU 002 Other NSPS equipment
Associated Items: GP 001 NSPS Equipment
GP 003 Process Units

What to do	Why to do it
Opacity: less than 10 percent opacity	40 CFR Section 60.672(b); Minn. R. 7011.3350

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/27/97

Facility Name: Meridian Aggregates - St Cloud

Permit Number: 14500029 - 001

Subject Item: EU 003 Equipment not subject to NSPS and put into operation before 7/9/69**Associated Items:** GP 003 Process Units

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0710, subp. 1(B)

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/27/97

Facility Name: Meridian Aggregates - St Cloud
Permit Number: 14500029 - 001

Subject Item: EU 004 Equipment not subject to NSPS and put into operation on or after 7/9/69

Associated Items: GP 003 Process Units

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(b)

TABLE A: LIMITS AND OTHER REQUIREMENTS

02/27/97

Facility Name: Meridian Aggregates - St Cloud

Permit Number: 14500029 - 001

Subject Item: EU 710 Dryer**Associated Items:** CE 009 Centrifugal Collector - Medium Efficiency
SV 710

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0610, subp. 1(a)(1)
Opacity: less than or equal to 20 percent opacity except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0610, subp. 1(A)(2)
Process Throughput: less than or equal to 20,000 tons/year using 12 Month Rolling Sum calculated by the 30th day of the month for the previous month.	Title I Condition: Limit taken to avoid classification as major source and modification under 40 CFR Section 52.21 and Minn. R. 7007.0300; limit to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Maintain records of production limit (processing throughput) and monthly calculations on-site.	Title I Condition: Compliance demonstration to show compliance with Title I emission limit

TABLE B: SUBMITTALS

02/27/97

Facility Name: Meridian Aggregates - St Cloud
Permit Number: 14500029 - 001

Table B lists the submittals you must send to the Commissioner. Table B is divided into two sections, for source-specific submittal requirements and for submittals required of all permittees. Source-specific submittals are further organized as either one-time only or recurrent requirements. You may also be subject to additional reporting requirements contained in the compliance schedule located in Table C of this permit. All submittals must be postmarked or received by the date specified in the table, and certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Submittals which must be provided on standardized forms approved by the Commissioner are noted in Tables B and C.

Send any application for a permit or permit amendment to: Permit Information Coordinator, Permit Section, Air Quality Division, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4914. Also send the Permit Information Coordinator notices of: accumulated insignificant activities, installation of control equipment, replacement of an emissions unit, and changes that contravene a permit term.

Send all other submittals to: Compliance Tracking Coordinator, Compliance Determination Unit, Air Quality Division, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

02/27/97

Facility Name: Meridian Aggregates - St Cloud
Permit Number: 14500029 - 001

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility

TABLE B: RECURRENT SUBMITTALS

02/27/97

Facility Name: Meridian Aggregates - St Cloud

Permit Number: 14500029 - 001

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance. The first report covers January 1 - June 30. The second report covers July 1 - December 31.	Total Facility
Compliance Certification	due 30 days after end of each calendar year following Permit Issuance (for the previous calendar year). To be submitted on a form approved by the Commissioner. The report covers all deviations experienced during the calendar year.	Total Facility
Emissions Inventory Report	due 91 days after end of each calendar year following Permit Issuance (April 1). To be submitted on a form approved by the Commissioner.	Total Facility

APPENDICES
Meridian Aggregates Permit No. 14500029-001

Weather Summary Criteria

NM-EQ NSPS Equipment Description and Notification

**WEATHER SUMMARY CRITERIA
FOR
LARGE STATIONARY SOURCE NON-PROCESS DUST CONTROL OPTION
NONMETALLIC MINERAL PROCESSING GENERAL PERMIT**

Sky Conditions

CLR	<1/10 cloud coverage
SCT (Ptly Cldy)	1/10-5/10 cloud coverage (opaque)
BKN (Mstly Cldy)	6/10-9/10 cloud coverage (opaque)
OVC (Cloudy)	10/10 cloud coverage (opaque)
THN OVC	Sky is completely covered with high thin clouds and <5/10 cloud coverage is opaque

Note: The cloud coverage is a cumulative total of all cloud layers.

Weather Conditions

Fog	May also be associated with drizzle and may obstruct sky
Drizzle	Small particles of rain many times associated with fog
Lt Rain	Continuous falling at a light rate (good horizontal visibility)
Mod Rain	Continuous falling at a mod. rate (horiz. visibility decreased)
Hvy. Rain	Continuous falling at heavy rate; in sheets (horizontal visibility low)
T-Strm	Thunderstorm -- thunder, lightning, and usually mod. to hvy. rain
Hail	Associated with thunderstorms
Frz Rain	Rain that freezes on contact of cold objects; glazing
Sleet	Mixture of rain and ice pellets
Ice Pellets	Clear/mostly translucent pellets of ice -- not easily broken/crushed
Snw Grns/Snw Pellets	Hard/crunchy opaque (white) pellets of snow -- easily crushed
Lt Snow	Falling at a light rate; flurries (good horizontal visibility)
Mod Snow	Falling at a moderate rate (horizontal visibility decreased)
Hvy Snow	Falling at a heavy rate (poor horizontal visibility)

Wind Scale

0-10 MPH	Light Breeze	Leaves rustle
10-20 MPH	Light Wind	Small tree branches move; wind extends light flag
20-30 MPH	Mod. Wind	Large branches in motion; umbrella used with difficulty
30-40 MPH	Mod. Gale	Whole trees in motion; difficulty walking against wind
40-50 MPH	Strong Gale	Twigs break off of trees

Temperature

Approximate using a range of 5 degrees Fahrenheit if the actual temperature is not known.



MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY DIVISION
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

REPORTING FORM **NM-EQ**
NSPS EQUIPMENT DESCRIPTION AND NOTIFICATION
General Permit
Nonmetallic Mineral Processing
5/6/96

1) AQD File No.: _____

2) AQD Permit No.: _____

3) Company Name: _____

A) Type of Equipment	B) Serial No. or Unique ID No.	C) Rated Capacity (ton/hr)	D) Date of Manufacture	E) Date of Installation	F) Was/ is Unit a Replacement?	G) Notified/ Notifying Construction Date*	H) Notified/ Notifying Anticipated Start Date	I) Notified/ Notifying Start Date	J) Initial NSPS Performance Test Date
Example: <i>Jaw Crusher</i>	<i>C-001</i>	<i>350</i>	<i>1987</i>	<i>4/89</i>	<i>No</i>	<i>Prefab</i>	<i>3/89</i>	<i>5/89</i>	<i>7/89</i>

* - Enter "Prefab" in this column if the unit can be considered a mass-produced facility and does not require a construction notification under NSPS.

CERTIFICATION

As a responsible official (defined in Minn. R. 7007.0100, subp. 21), I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Person(s) certifying this form:

Owner:

Mr./Ms. _____

Title: _____

Signature: _____

Phone: (____) _____ Fax: (____) _____ Date: _____

Operator (if different):

Mr./Ms. _____

Title: _____

Signature: _____

Phone: (____) _____ Fax: (____) _____ Date: _____

INSTRUCTIONS TO FILL OUT THE NSPS EQUIPMENT DESCRIPTION AND NOTIFICATION FORM (NM-EQ)

Use this form to describe equipment that you own/operate which is subject to the New Source Performance Standard (NSPS) regulation, 40 CFR pt. 60, subp. OOO, for nonmetallic mineral processing and to make the required notifications. If you have equipment which is not subject to the NSPS regulation (see criteria below), you do not need to include it on this form (but you do need to retain documentation to demonstrate, if needed, that it is not subject to the NSPS). The same holds true if you acquire used or rental equipment not subject to NSPS. If the used or rental equipment is subject to NSPS, and all the notification and initial performance testing requirements have been complied with, you do not need to retest the equipment. You do need to include the information for this equipment in a submittal of this NM-EQ form to update the list of your NSPS equipment in the file associated with your general permit. You may copy the form as often as you need to but only need to sign one page. If you are the Permittee for a stationary source location which is a multiple-party site, you must take all reasonable measures to insure that all equipment being operated has met the notification and testing requirements of the NSPS. You are not required to repeat the notices and tests if they have been done, but must be able to indicate where the documentation can be found (e.g., the AQD file associated with the general permit held by one or more of your subcontractors).

General criteria for NSPS equipment:

- Equipment must be located at a site where crushing takes place
- Cumulative manufacturer's rated capacity of all initial crushers on site (whether they are currently operating or not) must be over 150 tons per hour. *Initial crusher* is defined in this NSPS regulation (Subpart OOO) and in a practical sense means the first crusher in a series of one or more crushers into which material is fed without prior processing through another crusher.
- Regulated Equipment: Crushers, Screens, Belt Conveyors, Storage Bins (including surge bins), Bucket Elevators, Bagging Operations, Enclosed Truck or Railcar Loading Stations. (Grinding mills are also regulated by the NSPS but do not qualify for coverage under the general permit.)
- Equipment must be manufactured after August 31, 1983.
- If the crushing operation is part of a plant that produces asphalt, then only the equipment that operates in front of the asphalt operation is covered by Subpart OOO. Equipment that is involved in the actual production of asphalt is potentially subject to a different NSPS regulation.

A) Type of Equipment - The information in this column should give a brief description of the piece of equipment, such as "jaw crusher," as given in the example. If the equipment was purchased used or is rented, indicate that here.

Note: There are certain types of equipment which may appear to fall into one of the above categories, but are not regulated by the NSPS standard, although they are covered under the general permit. They are:

- *Stacking conveyors* - Belt conveyors that are used only for the creation of stockpiles are not covered by this regulation. If you would like to be able to use a stacker as a normal conveyor at some other time, you may want to include it as a conveyor for NSPS notification and testing purposes, so that you have that flexibility in the future. If you have used a stacking conveyor as a normal transfer conveyor in the past, you should report that conveyor as an “affected facility” (assuming it meets all of the other criteria for the NSPS).
- *Loading hoppers* - Any hopper used to feed any other piece of equipment (e.g., crusher, loadout station, etc.).
- Any other type of transfer operation besides belt conveyors, enclosed truck/railcar loading stations, bucket elevators, and storage bins.

B) Serial No. or Unique ID No. - Use a serial number or some other type of identification number that is unique to each piece of equipment that you list on this form. Make sure this number is one that remains consistent, and is regularly used by your company to identify equipment. You will need to use this number when you submit such things as testing reports to the MPCA and in the records you keep.

C) Rated Capacity - List the capacity of each piece of equipment in tons per hour (tph).

D) Date of Manufacture - Provide the year that the piece of equipment was manufactured. This information is needed to determine whether or not the piece of equipment is subject to the NSPS regulations.

E) Date of Installation - This is the year that the piece of equipment was first installed *at any site* that you operate. For example, if you brought a screen onto site A in 1984, moved it to site B in 1987, and then moved it to site C in 1990, you would put ‘1984’ in this column. If possible, include the month that the unit was first installed.

F) Was/ is Unit a Replacement? - If a piece of equipment which was manufactured prior to August 31, 1983, is replaced by a similar piece of equipment that was manufactured *after* August 31, 1983, and is of equal or smaller size (capacity in tons per hour), that piece of equipment is not subject to the NSPS regulations (if it would otherwise qualify). As a result, you would not be required to have a performance test done on that equipment. A notification would need to be sent to the MPCA for that change, which needs to include certain information. In order to qualify for this provision, you cannot own or operate the equipment that was replaced after the new equipment becomes operational. The replacement must also happen simultaneously with removal of the old equipment. You cannot use this provision if the replacement equipment was brought on site several weeks after the original equipment was removed. Nor can you use this provision if an entire production line is being replaced.

To illustrate, suppose you wanted to replace a 350 tons per hour jaw crusher which was built in 1967, with a 300 tons per hour jaw crusher built in 1988. Normally, the new jaw crusher would fall under the NSPS regulation. But because it is equal to or smaller than the original jaw crusher, and if the original crusher is no longer owned or operated by your company, you would

not need to test the new crusher for NSPS purposes. You would need to send a notification to the MPCA concerning the change, before you make it.

This information is requested to make sure a piece of equipment actually needs to be tested or not. If the piece of equipment is a “replacement,” you need to submit documentation of that with this notification (e.g., dated receipt from equipment supplier).

G) Notified/ Notifying Construction Date - The NSPS requires that companies notify the MPCA when they begin to construct a piece of equipment which is subject to the regulation. Enter the date that the notice was or is being submitted to the MPCA.

Many times, companies will buy equipment that is manufactured by somebody else, or “prefabricated,” and merely put the piece of equipment into the process line. If this is the case, you are not required to send a construction notification to the MPCA. In short, if somebody asked you who manufactured a piece of equipment, like a belt conveyor, and you answer someone other than your own company, that equipment is “Prefabricated.” No construction notice would be required for it. Enter “Prefab” in this column for any equipment to which this exemption applies.

H) Notified/ Notifying Anticipated Start Date - Regardless of who constructed a piece of equipment, the NSPS requires that you notify the MPCA of the first date that you believe an affected facility will begin to operate for the very first time. A new notice is not required each time a piece of NSPS equipment moves to a new site. Enter the date that the notice was or is being submitted to the MPCA.

I) Notified/ Notifying Start Date - The NSPS also requires that you provide the MPCA with the date that the piece of equipment started to operate *for any reason*. Again, this is only required when the equipment starts operation at its first location. If the equipment moves to another site, you do not have to submit this particular NSPS notification. Enter the date that the notice was or is being submitted to the MPCA.

J) Date of Initial NSPS Performance Test - If you have had the piece of equipment tested for NSPS purposes, and the test was done according to Minnesota’s rules for performance testing, enter the date of that test here and retain records which confirm compliance.

TECHNICAL SUPPORT DOCUMENT
For
DRAFT AIR EMISSION PERMIT NO. 14500029-008
(AQD # 2110A)

This technical support document is for all the interested parties of the draft permit and to meet the requirements that have been set forth by the federal regulations and Minnesota Rules (40 CFR, Section 70.7(a)(5) and Minn. Rules pt. 7007.0850, subp. 1.) The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the preliminary determination to issue the draft permit.

1. General Information

1.1. Applicant and Stationary Source Location:

Applicant/Address	Stationary Source/Address (SIC Code: 1423)
Meridian Aggregates Company, A Limited Partnership	Meridian Aggregates - St. Cloud
5575 DTC Parkway Suite 325	1450 West Division St.
Englewood, CO 80111	P.O. Box 69
	Waite Park, MN 56302
	Stearns County

1.2. Description Of The Permit Action

The permit is a state operating permit, with flexible operating scenarios for a stationary source which is a nonmetallic mineral processing facility. The facility does not qualify for the general permit for nonmetallic mineral processing facilities because there is an aggregate dryer at the facility. Other than including the dryer, this permit is essentially the same as the general permit. Limitations are placed on the facility to keep the source non-major for PSD and for Title V.

1.3. Emissions of the Facility

Table 1. Total Facility Potential to Emit Summary and Attainment Status:

Pollutant	Potential to Emit (Tons/year =TPY)	Attainment or Unclassified? (Yes or No)
Particulate Matter (PM)	196.3	Not Applied
Particulate Matter less than 10 micron (PM10)	48.1	Yes
Sulfur Dioxide (SO2)	8.4	Yes
Nitrogen Oxides (NOx)	95.7	Yes
Volatile Organic Compounds (VOCs)/Ozone	56.7	Yes
Carbon Monoxide (CO)	95.14	Yes

Lead	0	Yes
Hazardous Air Pollutants (add as needed)	0	Not Applied

Table 2. Facility Classification

Classification (put x in appropriate box)	Major	Synthetic Minor	Minor	N/A
Prevention of Significant Deterioration		X		
Non Attainment Area (list pollutant)				X
Title V Operating Permit Program		X		

2. Regulatory and/or Statutory Basis of Emission Limit

Summary of Emission Limit and Regulatory and/or Statutory Basis of the Emission Limit

Subject Item: EU001

NSPS Crushers

Emission Limit and/or Special Conditions: Opacity: less than 15 percent

Factual and legal basis for above: 40 CFR § 60.672(c); Minn. R. 7011.3350

Comments: All the crushers subject to NSPS Subp. 000 are included in this designation.

Subject Item: EU002

Other equipment subject to NSPS

Emission Limit and/or Special Conditions: Opacity: less than 10 percent

Factual and legal basis for above: 40 CFR § 60.672(b); Minn. R. 7011.3350

Comments: The equipment other than the crushers which are subject to NSPS Subp. 000 are included in this designation.

Subject Item: EU003

Equipment not subject to NSPS, and put into operation prior to 7/9/69

Emission Limit and/or Special Conditions: Opacity: less than or equal to 20 percent, except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and 40 percent shall be permissible for four additional minutes in any 60-minute period.

Factual and legal basis for above: Minn. R. 7011.0710, subp. 1(B).

Subject Item: EU004

Equipment not subject to NSPS, and put into operation on or after 7/9/69

Emission Limit and/or Special Conditions: Opacity: \leq 20 percent

Factual and legal basis for above: Minn. R. 7011.0715, subp. 1(B)

Subject Item: EU005

Pre-approved internal combustion engines

Emission Limit and/or Special Conditions: Allowed fuel: Diesel fuel, natural gas, liquefied petroleum gas(LPG)/propane, and gasoline. The Permittee shall monthly record the amount of each fuel used during the previous month and do the calculation on the Stationary Internal Combustion Engines Fuel Use form NM-EN, provided in the Appendix to this permit, by the 15th of the following month. The total of the calculation must be less than 95, as described on the form.

Factual and legal basis for above: Title I Condition: limit taken to avoid classification as major source under PSD and Part 70.

Subject Item: EU710

Dryer, with cyclone (CE009)

Emission Limit and/or Special Conditions:

A. Total Particulate Matter: ≤ 0.3 gr/dscf, unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.

B. Opacity: ≤ 20 percent, except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and 40 percent shall be permissible for four additional minutes in any 60-minute period.

C. Process Throughput: $\leq 20,000$ tons/year, using 12-month rolling sum.

Factual and legal basis for above:

A. Minn. R. 7011.0610, subp. 1(A)(1)

B. Minn. R. 7011.0610, subp. 1(A)(2)

C. Title I Condition: limit taken to avoid classification as major source under PSD and Part 70

Subject Item: GP001

All NSPS equipment

Emission Limit and/or Special Conditions: Notification of construction or reconstruction, of initial startup date, of replacement; performance testing after initial startup of equipment.

Factual and legal basis for above: 40 CFR 60.7, 60.8, 60.670. (NSPS General provisions, NSPS subp. OOO)

Subject Item: GP002

Fugitive Sources (fill truck pit; truck dump into primary crusher; piles; unpaved roads; truck dump into aggregate section feed hopper)

Emission Limit and/or Special Conditions: Prevent avoidable visible dust emissions. Also, control non-process dust emissions through such measures as applying water or dust suppressants. Recordkeeping for dust control is also required.

Factual and legal basis for above: Title I Condition: limit taken to avoid classification as major source under PSD and Part 70

Subject Item: Total Facility

Emission Limit and/or Special Conditions:

A. Process throughput: $\leq 1,800,000$ tons/year using 12-month rolling sum

B. Number of units in operation at any time limited to:

10 crushers

20 screens

100 transfer points

C. Fines crushing: < 50,000 tons/year

D. Feed material moisture content: $\geq 1.5\%$

E. Labeling of process equipment

Factual and legal basis for above:

A, B, C, D Title I Condition: limit taken to avoid classification as major

E. Minn. Stat. 116.07; Minn. R. 7007.0800, subp. 2; Minn. R. 7007.1100

Comments: Records are to be kept to document process throughput and number of units in operation. Permittee must demonstrate that feed material moisture content is $\geq 1.5\%$ by testing, using a moisture addition device or removing feed material from below the water table.

D. Emissions calculations and the basis for permit limits are based on moisture level of $\geq 1.5\%$.

3. Conclusion

Based on the information provided by Meridian Aggregates, Inc., the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 14500029-008 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Possible Attachments:

1. GI-07 Facility Emission Summary

2. PE forms for Calculations

Need further information?

Permit Engineer: Paula Connell

Telephone No.: (612) 282-2605