

AIR EMISSION PERMIT NO. 12300007-001

IS ISSUED TO

AGGREGATE INDUSTRIES INC - YARD A

1177 Childs Road

St. Paul, Ramsey County, MN 55106

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	01/31/1996 (Updated 2005)

This permit authorizes the Permittee to 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. 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 are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: State; Limits to Avoid Pt 70/Limits to Avoid NSR

Issue Date: March 30, 2006

Expiration: Permit does not expire
All Title I Conditions do not expire.

Richard J. Sandberg, Manager
Air Quality Permits Section
Industrial Division

for Sheryl A. Corrigan
Commissioner
Minnesota Pollution Control Agency

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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	(651) 296-6300
Outside Metro Area	1-800-657-3864
TTY	(651) 282-5332

The rules 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. 7007.1800, 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. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

The facility is an aggregate distribution and storage facility. It receives aggregate by barge, unloads it, and conveys it to one of several storage piles based on size and material type. The aggregate is stored until it is loaded to truck for off-site transport. The facility operates a natural gas-fired aggregate heater that is used between November and April to reduce moisture content and make some materials more easily conveyed. The primary emissions from the facility are PM and PM₁₀ from the process equipment, as well as fugitive emissions from the stockpiles and unpaved roads.

PERMIT DESCRIPTION:

The permitting action is the issuance of a state total facility operating permit, and incorporates administrative order (State Implementation Plan) requirements.

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Aggregate Industries Inc - Yard A

Permit Number: 12300007 - 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
SOURCE-SPECIFIC REQUIREMENTS	hdr
Feed Material Moisture Content: greater than or equal to 1.5 percent	Title I Condition: Limit to avoid classification as major source and modification under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2
Demonstrate feed material moisture content by either 1 or 2 below: 1. 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: Monitoring for limit to avoid classification as major source and modification under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2
d. When testing indicates that feed material moisture content is less than 1.5 percent, or in situations where it is infeasible to sample and test, or where the Permittee elects not to sample and test, the Permittee must operate a moisture addition device at or immediately prior to the equipment where unprocessed feed material is being fed to achieve a moisture content greater than or equal to 1.5 percent. Moisture addition during operation shall continue until subsequent moisture content testing demonstrates that feed material moisture content is greater than or equal to 1.5 percent. 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 following a. and b. above, and if results show moisture content is less than 1.5 percent, increase water addition to insure moisture	CONTINUED: Title I Condition: Monitoring for limit to avoid classification as major source and modification under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2
OR 2. 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). Records shall include a description of the source, the corresponding dates, and the initials of the person making the record.	CONTINUED: Title I Condition: Monitoring for limit to avoid classification as major source and modification under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2
Labeling Requirements: 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 at each stationary source. This number shall correspond to the number contained in records regarding the piece of equipment.	Minn. R. 7007.0800, subp. 2
SIP REQUIREMENTS	hdr
Recordkeeping: Retain all records at the stationary source for a period of six (6) 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 recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.	Title I Condition: State Implementation Plan for PM10; Minn. R. 7007.0800, subp. 5A
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of PM10. At the time of the notification, the company shall notify the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Title I Condition: State Implementation Plan for PM10
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or a breakdown of process equipment if the process equipment breakdown causes any increase in the emissions of PM10. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. The owner or operator shall notify the Commissioner when the breakdown is over.	Title I Condition: State Implementation Plan for PM10

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Aggregate Industries Inc - Yard A

Permit Number: 12300007 - 001

Notification of Changes to PM10 Emissions: Notify the Commissioner at least 30 days in advance of any change to the facility that affects PM10 emissions in any way. This includes, but is not limited to, reduction in the amount or change in concentration, size, character, velocity, direction or location of PM10 emissions. The notification shall describe the change and why it does not cause a violation of NAAQS for PM10.	Title I Condition: State Implementation Plan for PM10
Performance Test Notifications and Submittals: Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements. Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.	Title I Condition: State Implementation Plan for PM10; Minn. Rs. 7017.2030, subp. 1-4, 7017.2018 and Minn. R. 7017.2035, subp. 1-2
OPERATIONAL REQUIREMENTS	hdr
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
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
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
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 enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
PERFORMANCE TESTING	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as specified by Minn. R. 7017.2025 following formal review of a subsequent performance test on the same unit.	Minn. R. 7017.2025
RECORDKEEPING	hdr
Recordkeeping: Retain all records at the stationary source for 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 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)
Recordkeeping: 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.	Minn. R. 7007.0800, subp. 5(B)
REPORTING/SUBMITTALS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Aggregate Industries Inc - Yard A

Permit Number: 12300007 - 001

<p>Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3.</p> <p>At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.</p>	<p>Minn. R. 7019.1000, subp. 3</p>
<p>Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2.</p> <p>At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.</p>	<p>Minn. R. 7019.1000, subp. 2</p>
<p>Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.</p>	<p>Minn. R. 7019.1000, subp. 1</p>
<p>Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description:</p> <ol style="list-style-type: none"> 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation. 	<p>Minn. R. 7019.1000, subp. 1</p>
<p>Application for Permit Amendment: If a permit amendment is needed, submit an 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.</p>	<p>Minn. R. 7007.1150 through Minn. R. 7007.1500</p>
<p>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).</p>	<p>Minn. R. 7007.1400, subp. 1(H)</p>
<p>Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance. To be submitted on a form approved by the Commissioner.</p>	<p>Minn. R. 7019.3000 through Minn. R. 7019.3100</p>
<p>Emission Fees: due 60 days after receipt of an MPCA bill.</p>	<p>Minn. R. 7002.0005 through Minn. R. 7002.0095</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-4

03/30/06

Facility Name: Aggregate Industries Inc - Yard A

Permit Number: 12300007 - 001

Subject Item: GP 001 Limits that Apply to Equipment (pre-1969) not Subject to NSPS**Associated Items:** EU 001 Crawler Crane

EU 006 Loadout Bin

EU 008 Conveyor

EU 011 Conveyor

EU 014 Conveyor

EU 020 Conveyor

EU 021 Loadout Bin

EU 025 Stocking Hopper

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. 7011.0710, subp. 1(A)
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

A-5

03/30/06

Facility Name: Aggregate Industries Inc - Yard A

Permit Number: 12300007 - 001

Subject Item: GP 002 Limits that Apply to Equipment (post-1969) not Subject to NSPS

Associated Items: EU 003 Hopper
 EU 004 Conveyor
 EU 005 Radial Stacker
 EU 007 Heater Conveyor
 EU 009 Loadout Bin
 EU 010 Loadout Bin
 EU 012 Loadout Bin
 EU 013 Loadout Bin
 EU 015 Diesel Backhoe
 EU 016 Hopper
 EU 017 Hopper
 EU 018 Conveyor
 EU 019 Radial Stacker
 EU 022 Conveyor
 EU 023 Conveyor
 EU 024 Loadout Bin

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. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Aggregate Industries Inc - Yard A

Permit Number: 12300007 - 001

Subject Item: GP 003 SIP Requirements - Storage Piles

- Associated Items:** FS 001 Stock Piles Sand, Gravel & Limestone Products
 FS 002 Stock Piles Sand, Gravel & Limestone Products
 FS 003 Stock Piles Sand, Gravel & Limestone Products
 FS 004 Stock Piles Sand, Gravel & Limestone Products
 FS 005 Stock Piles Sand, Gravel & Limestone Products
 FS 006 Stock Piles Sand, Gravel & Limestone Products
 FS 007 Stock Piles Sand, Gravel & Limestone Products
 FS 008 Stock Piles Sand, Gravel & Limestone Products
 FS 009 Stock Piles Sand, Gravel & Limestone Products
 FS 010 Stock Piles Sand, Gravel & Limestone Products
 FS 011 Stock Piles Sand, Gravel & Limestone Products
 FS 012 Stock Piles Sand, Gravel & Limestone Products
 FS 013 Stock Piles Sand, Gravel & Limestone Products
 FS 014 Stock Piles Sand, Gravel & Limestone Products
 FS 015 Stock Piles Sand, Gravel & Limestone Products
 FS 016 Stock Piles Sand, Gravel & Limestone Products
 FS 017 Stock Piles Sand, Gravel & Limestone Products
 FS 018 Stock Piles Sand, Gravel & Limestone Products

What to do	Why to do it
Operations: Do not operate the product pile conveyors unless the free fall height from the conveyor belt to the product pile is 10 feet or less.	Title I Condition: State Implementation Plan for PM10
If the steady wind speed exceeds 30 miles per hour, or when wind gusts exceed 45 miles per hour, then the operation of the radial stacker equipment shall be confined to the downwind side of the pile.	Title I Condition: State Implementation Plan for PM10
Obtain and record wind measurements from the National Weather Service (St. Paul/Holman Field) or an on-site wind gauge.	Minn. R. 7007.0800, subp. 4D

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Aggregate Industries Inc - Yard A

Permit Number: 12300007 - 001

Subject Item: EU 026 Heater

Associated Items: SV 001

What to do	Why to do it
<p>Operation: Operate the aggregate heater only during the months of November through April. Do not operate this unit on Sundays during the months of November through April. Operate this unit for not more than 10 hours each day that the unit is allowed to operate. Notwithstanding the previous sentence, the unit shall be operated in a manner that prevents the actual total hours of operation from exceeding 16 hours in any 24-hour period from Monday through Saturday in the months of November through April.</p>	<p>Title I Condition: State Implementation Plan for PM10</p>
<p>Allowed fuels. Natural gas, no other fuels shall be used.</p>	<p>Title I Condition: Limit to avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2</p>
<p>Recordkeeping: Record the following data daily: a. Burner startup and shutdown time to the minute with each burn recorded separately; b. Fuel type and consumption; c. Approximate amount of material in tons heated by the unit operator; and d. Actual amount of heated materials in tons established based on daily sales records.</p>	<p>Title I Condition: State Implementation Plan for PM10; Minn. R. 7007.0800, subp. 5A</p>
<p>Recordkeeping: For each month by the 15th of the following month, summarize the daily data listed above.</p>	<p>Title I Condition: State Implementation Plan for PM10; Minn. R. 7007.0800, subp. 5A</p>
<p>Notification: Notify the Commissioner if the hours limitations are exceeded.</p>	<p>Title I Condition: State Implementation Plan for PM10</p>
<p>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.</p>	<p>Minn. R. 7011.0610, subp. 1(A)(1)</p>
<p>Particulate Matter < 10 micron: less than or equal to 15.1 lbs/hour (PTE is 11.37 lb/hr)</p>	<p>Title I Condition: State Implementation Plan for PM10</p>
<p>Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.</p>	<p>Minn. R. 7011.0610, subp. 1(A)(2)</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Aggregate Industries Inc - Yard A

Permit Number: 12300007 - 001

Subject Item: FS 019 Haul Roads

What to do	Why to do it
<p>Water unpaved roads located within the property boundaries of the facility. Watering shall be subject to the following conditions:</p> <ul style="list-style-type: none"> a. Water application rate shall be at least 0.03 gallons for each square foot at least once every 24 hours. b. 0.1 inch or more rainfall during the past 24 hours shall substitute for one daily water application. This shall be measured by an onsite rain gauge. c. Water application shall not be required when there is snow cover or the ground is frozen. d. Water application shall not be required when there is no traffic on the roads. e. Following any day when water is not applied based on absence of traffic, water shall be applied within 3 hours of the recommencement of traffic. 	<p>Title I Condition: State Implementation Plan for PM10</p>
<p>Recordkeeping (unpaved roads): Maintain a daily log which shall include the following information:</p> <ul style="list-style-type: none"> a. which roads were watered; b. date and time of watering; c. method of application for each application. <p>If water was not applied because the facility was not in operation, there was no traffic on the roads, or there was rainfall, the log shall note the reason for no watering. The method of rainfall measurement shall be either National Weather Service (St. Paul/Holman Field) data or on-site rain gauge.</p>	<p>Title I Condition: State Implementation Plan for PM10; Minn. R. 7007.0800, subp. 5A</p>
<p>To eliminate track-out of mud onto the paved roads, wash the entire concrete exit driveway at least twice per day in non-frozen conditions.</p>	<p>Title I Condition: State Implementation Plan for PM10</p>
<p>High pressure wash the paved surface of Childs Road (to the side gutters) in front of the facility at least once per day when trucks are hauling from the facility. The washing shall be conducted in both directions to the extent that track-out of sediment from the facility can be seen on Childs Road.</p>	<p>Title I Condition: State Implementation Plan for PM10</p>
<p>Recordkeeping (paved roads): Maintain a daily log which shall state the date and time of washing. If water was not applied because trucks were not hauling, the log shall note the reason for no watering.</p>	<p>Title I Condition: State Implementation Plan for PM10; Minn. R. 7007.0800, subp. 5A</p>

TABLE B: SUBMITTALS

B-1 03/30/06

Facility Name: Aggregate Industries Inc - Yard A
Permit Number: 12300007 - 001

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send any application for a permit or permit amendment to:

AQ Permit Technical Advisor
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Unless another person is identified in the applicable Table, send all other submittals to:

AQ Compliance Tracking Coordinator
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue NW (6204N)
Washington, D.C. 20460

TABLE B: RECURRENT SUBMITTALS

B-2 03/30/06

Facility Name: Aggregate Industries Inc - Yard A

Permit Number: 12300007 - 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 semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 31 days after end of each calendar year following Permit Issuance (for the previous calendar year). To be submitted to the Commissioner on a form approved by the Commissioner. This report covers all deviations experienced during the calendar year.	Total Facility

APPENDIX MATERIAL

Facility Name: Aggregate Industries Inc - Yard A
Permit Number: 12300007-001

WEATHER SUMMARY CRITERIA

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.

TECHNICAL SUPPORT DOCUMENT

For

AIR EMISSION PERMIT NO. 12300007-001

This Technical Support Document (TSD) is intended for all parties interested in the permit and to meet the requirements that have been set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 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 permit.

1. General Information

1.1. Applicant and Stationary Source Location:

Applicant/Address	Stationary Source/Address (SIC Code: 1422)
Aggregate Industries Inc., Yard A	1177 Childs Road St. Paul Ramsey County
Contact: Kathy Zeller Phone: (651) 683-8195	

1.2. Description of the Permit Action

Aggregate Industries Inc., Yard A is an aggregate distribution and storage facility. It receives aggregate by barge, unloads it, and conveys it to one of several storage piles based on size and material type. The aggregate is stored until it is loaded to truck for off-site transport. The facility operates a natural gas-fired aggregate heater that is used between November and April to reduce moisture content and make some materials more easily conveyed. The primary emissions from the facility are Particulate Matter (PM) and Particulate Matter less than 10 um in size (PM₁₀) from the processing equipment, as well as fugitive emissions from the stockpiles and unpaved roads.

This permitting action is the issuance of a State total facility operating permit. The facility is not eligible for the state non-metallic minerals processing plant general permit because it operates an aggregate heater, and has State Implementation Plan requirements for the PM₁₀ maintenance area.

1.4 Permit History

Permit Number and Issuance Date	Action Authorized
54D-90-OT-1, 2/20/1990	Operation of the facility.
Administrative Order Issued, 11/26/1991	New requirements related to PM ₁₀ non-attainment.

Administrative Order Amended, 8/25/1992	Revision to requirements related to PM ₁₀ non-attainment
Amendment 1, 7/16/1993	Replace loadout bin.
Amendment 2, 11/12/1993	Limit heater hours of operation, required documentation of heater operation.
Amendment 3, 7/29/1994	Revised testing requirements.
Administrative Amendment, 9/2/1998	Legal name change.

1.5. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary

	PM tpy	PM ₁₀ tpy	SO ₂ tpy	NO _x tpy	CO tpy	VOC tpy
Total Facility Limited Potential Emissions	83	42	0.04	6.9	5.8	0.4
Total Facility Actual Emissions (2003)	8.2	1.9	0.0004	0.008	0.06	0.004

Table 2. Facility Classification

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD			X
Part 70 Permit Program		PM ₁₀	PM, SO ₂ , NO _x , CO, VOC
Part 63 NESHAP			X

2. Regulatory and/or Statutory Basis

New Source Review

The facility is a minor source for purposes of NSR/PSD.

Part 70 Permit Program

The facility is a synthetic minor source under the Part 70 permit program. Fugitive emissions are not factored into the PTE since this facility is not subject to an NSPS.

New Source Performance Standards (NSPS)

The facility is not subject to NSPS, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, because no crushing is performed on-site.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

There are no National Emission Standards for Hazardous Air Pollutants applicable to the operations at this facility.

Minnesota State Rules

Portions of the facility are subject to the following Minnesota Standards of Performance:

- Minn. R. 7011.0610 Standards of Performance for Fossil-Fuel-Burning Direct Heating Equipment
- Minn. R. 7011.0710 Standards of Performance for Pre-1969 Industrial Process Equipment
- Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment

Table 3. Regulatory Overview of Facility

EU, GP, or SV	Applicable Regulations	Comments:
GP001	Minn. R. 7011.0710	Standards of Performance for Pre 1969 Industrial Process Equipment. Limits are included with the emissions calculations.
GP002	Minn. R. 7011.0715	Standards of Performance for Post 1969 Industrial Process Equipment. Limits are included with the emissions calculations.
EU026	Minn. R. 7011.0610	Standards of Performance for Fossil-Fuel-Burning Direct Heating Equipment
EU026 GP003 FS019	Administrative Order	Requirements stipulated in Administrative Order for aggregate heater, haul roads, and storage piles.

3. Technical Information

3.1 Calculations of Potential to Emit

Attachment 1 contains detailed spreadsheets and supporting information prepared by EarthTech, the MPCA and the Permittee.

In general, emission factors are taken from AP-42, Fifth Edition, Chapter 11.19.2, “Crushed Stone Processing and Pulverized Mineral Processing”, 8/04. For those sources not covered in this section, emission factors from MPCA Form EC-10, “Nonmetallic Minerals Products Industry Calculation Form”, 11/98, were used. Emission factors for the aggregate heater were based on testing data included in the application.

3.2 Administrative Order

Because the facility is located in a PM₁₀ maintenance area, it is subject to requirements of an Administrative Order (AO) issued under the State Implementation Plan (SIP). Requirements were established in the Order for operation of the aggregate heater, for haul road watering, and for storage pile operation. The requirements of the Order have been incorporated into this permit action, and the limits are federally enforceable.

Changes made to Title I Conditions “State Implementation Plan (SIP) for PM₁₀ NAAQS 40 CFR pt. 50 and Minnesota SIP” are required to go through the federal SIP approval process before the change becomes effective.

3.3 Periodic Monitoring

In accordance with the Clean Air Act, it is the responsibility of the owner or operator of a facility to have sufficient knowledge of the facility to certify that the facility is in compliance with all applicable requirements.

In evaluating the monitoring included in the permit, the MPCA considers the following:

- The likelihood of violating the applicable requirements;
- Whether add-on controls are necessary to meet the emission limits;
- The variability of emissions over time;
- The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;
- The technical and economic feasibility of possible periodic monitoring methods; and
- The kind of monitoring found on similar units elsewhere.

Table 4 summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate.

Table 4. Periodic Monitoring

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
Facility	Title I Condition: Limit to avoid classification as major source and modification under 40 CFR § 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 2	Material Moisture Content	The requirement to keep the moisture content of feed material greater than or equal to 1.5% is needed because the underlying emissions calculations and basis for the permit limits are based on this moisture content level. AP-42 (referenced above) has a set of process emission factors for material with moisture content greater than or equal to 1.5% and another set for material with moisture content less than 1.5%. The testing and/or recordkeeping is required to demonstrate compliance with this permit condition. In Minnesota, most sources of natural feed material are usually over 1.5%. The compliance demonstration for this permit condition provides adequate assurance that material moisture content is greater than or equal to 1.5% without being unnecessarily burdensome.
EU026	Administrative Order	Recordkeeping: Daily burner operation time, fuel use, material heated	Requirements as stipulated in the administrative order.
FS019	Administrative Order	Daily log of road watering and washing.	Requirements as stipulated in the administrative order.
Facility	Minn. R. 7007.0800, subp. 2	Equipment Labels	The requirement to uniquely label equipment is needed so that compliance determinations can be made. The system of uniquely identifying each piece of equipment will also assist the Permittee in making sure that all the proper notices and initial performance tests are made.
Industrial Process Equipment	Minn. R. 7011.0710/0715, subp. 1	None	Based on the material moisture content, these sources will not exceed the allowable particulate limit. Therefore, additional monitoring is unnecessary.

3.4 Insignificant Activities

Aggregate Industries Inc., Yard A has several operations which are classified as insignificant activities. These are as follows:

Activity	Citation
Welder	Minn. R. 7007.1300, subp.(3)(H)(3)

3.5 Permit Organization

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements.

3.6 Comments Received

Public Notice Period: February 10 – March 13, 2006

EPA 45-day Review Period: February 10 – March 28, 2006

Comments were not received from the public during the public notice period.

Comments were not received from EPA during their review period.

4. Conclusion

Based on the information provided by Aggregate Industries Inc., the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 12300007-001, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Jeffrey Peltola, MPCA (Contractor oversight/peer review)
Michael Westereng (Peer review/pubic notice)
Scott Parr (enforcement)

Attachments: 1. PTE Summary and Calculation Spreadsheets