MINNESOTA POLLUTION CONTROL AGENCY

Air Individual Permit
Administrative Amendment
14100072-002

Permittee: **Barton Sand & Gravel - Elk River Pit 718**

Facility name: **Barton Sand & Gravel - Elk River Pit 718**
12450 Ranch Rd NW
Elk River, MN 55330
Sherburne County

Operating permit issuance date: December 10, 2015

Expiration date: Permit is non-expiring
* All Title I Conditions do not expire

Permit Reopening: October 16, 2019

Permit characteristics: State; Limits to avoid Part 70/ Limits to avoid NSR; Limits to avoid NSR

The emission units, control equipment and emission stacks at the stationary source authorized in this permit amendment are as described in the submittals listed in the Permit Applications Table.

This permit amendment supersedes Air Emission Permit No. 14100072- 001 and authorizes the Permittee to operate, construct, and modify the stationary source at the address listed above unless otherwise noted in the permit. 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.

Unless otherwise indicated, all the Minnesota rules cited as the origin of the permit terms are incorporated into the SIP under 40 CFR § 52.1220 and as such are enforceable by U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

Signature: Toni Volkmeier

This document has been electronically signed.

for Don Smith, P.E., Manager
Air Quality Permits Section
Industrial Division

for the Minnesota Pollution Control Agency

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1. Permit applications table

Permit applications:

Title description	Application receipt date	Action number
State Permit	05/18/2015	14100072- 001

2. Where to send submittals

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

Chief Air Enforcement
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by Minn. R. 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 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

Send any application for a permit or permit amendment to:

Fiscal Services – 6th Floor
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 Document Coordinator notices of:

a. Accumulated insignificant activities
b. Installation of control equipment
c. Replacement of an emissions unit, and
d. 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

Or

Email a signed and scanned PDF copy to:
submitstacktest.pca@state.mn.us
(for submittals related to stack testing)
AQRoutineReport.PCA@state.mn.us
(for other compliance submittals)
(See complete email instructions in "Routine Air Report Instructions Letter" at http://www.pca.state.mn.us/nwqh472.)

3. Facility description

The Barton Sand & Gravel - Elk River Pit 718 (Facility) is located at 12450 Ranch Road NW in Elk River, Sherburne County, Minnesota.

Barton Sand & Gravel Co. operates Elk River Pit 718, a construction sand and gravel processing operation (henceforth referred to as the 'Facility'). The processes include crushing, screening, conveying, and storage of material that is mined on-site and at other locations. Additionally, the facility processes recycled concrete and asphalt. An aggregate heater will also be added to produce an aggregate appropriate for ready-mix concrete products.

The air emissions from the Facility are particulates (PM, PM10 and PM2.5) from processing and storing sand and gravel, as well as truck loadout stations. The Facility also emits NOX, CO, and other combustion products from the natural gas and propane fueled aggregate heater. Water sprays on various processes control particulate emissions and the occurrence of fugitive dust. The Facility is not engaging in silica sand mining operations.

Permit action 14100072-101 is a MPCA-initiated administrative amendment under Minn. R. 7007.1600, subp. 1 (C) - mandatory reopenings that are needed to correct a material mistake or inaccurate statements made in establishing emissions standards, limitations, or other terms or conditions of the permit. MPCA has authority to issue this as an Administrative Amendment under Minn. R. 7007.1400, subp. 1(J).

The amendment corrects two citations in the current permit. A letter from MPCA was sent on March 31, 2017 to Barton Sand & Gravel - Elk River Pit 718 to inform the facility of this reopening. Additionally, Insignificant Activity requirement citations have been updated to reflect changes to Minn. R. 7007.1300, effective as of January 14, 2019.

4. Summary of subject items

SI ID: Description	Relationship type	Related SI ID: Description
TFAC 1: Barton Sand & Gravel - Elk River Pit 718		
ACTV 1: All IA's		
COMG 1: Main Sand and Gravel Spread	has members	EQUI 2, EQUI 3, EQUI 4, EQUI 5, EQUI 6, EQUI 7, EQUI 8, EQUI 9, EQUI 10, EQUI 11, EQUI 12, EQUI 13, EQUI 14, EQUI 15, EQUI 16, EQUI 17, EQUI 18, EQUI 19, EQUI 20, EQUI 21, EQUI 22, EQUI 23, EQUI 24, EQUI 25, EQUI 26, EQUI 27, EQUI 28, EQUI 29, EQUI 30, EQUI 31, EQUI 32, EQUI 33, EQUI 34, EQUI 35, EQUI 36, EQUI 37, EQUI 38, EQUI 39, EQUI 40, EQUI 41, EQUI 42, EQUI 43, EQUI 44, EQUI 45, EQUI 46, EQUI 47, EQUI 48, EQUI 49, EQUI 50, EQUI 51
COMG 2: Recycled Concrete and Asphalt Spread	has members	AISI 150403
COMG 3: Screening Spread Units	has members	AISI 150403
COMG 4: Aggregate Mining - NSPS subp. OOO Units Constructed/Modified After 4/22/2008	has members	EQUI 3, EQUI 47, EQUI 48, EQUI 49
COMG 5: Aggregate Mining - NSPS subp. OOO Units Constructed/Modified Before 4/22/2008	has members	EQUI 2, EQUI 4, EQUI 5, EQUI 6, EQUI 7, EQUI 8, EQUI 9, EQUI 10, EQUI 11, EQUI 12, EQUI 13, EQUI 14, EQUI 15, EQUI 16, EQUI 17, EQUI 23, EQUI 24, EQUI 25, EQUI 26, EQUI 27, EQUI 28, EQUI 29, EQUI 30, EQUI 31, EQUI 32, EQUI 33, EQUI 34, EQUI 35, EQUI 36, EQUI 37, EQUI 38, EQUI 39, EQUI 40, EQUI 42, EQUI 43, EQUI 44, EQUI 45, EQUI 46, EQUI 50, EQUI 51
COMG 6: Aggregate Mining - Units Not Subject to NSPS subp. OOO	has members	EQUI 18, EQUI 19, EQUI 20, EQUI 21, EQUI 22, EQUI 41
COMG 7: Stockpiles	has members	FUGI 3, FUGI 4, FUGI 5, FUGI 6, FUGI 7
COMG 8: Loading/Unloading	has members	EQUI 52, FUGI 8, FUGI 9, FUGI 10, FUGI 11, FUGI 12, FUGI 13
EQUI 1: Aggregate Heater		
EQUI 2: Jaw Crusher 1		
EQUI 3: Cone Crusher 1		
EQUI 4: Screens 1		
EQUI 5: Screens 2		
EQUI 6: Screens 3		
EQUI 7: Screens 6		

SI ID: Description	Relationship type	Related SI ID: Description
EQUI 8: Conveyor Set 1 - 1		
EQUI 9: Conveyor Set 1 - 2		
EQUI 10: Conveyor Set 1 - 3		
EQUI 11: Conveyor Set 1 - 4		
EQUI 12: Conveyor Set 1 - 5		
EQUI 13: Conveyor Set 1 - 6		
EQUI 14: Conveyor Set 1 - 7		
EQUI 15: Conveyor Set 1 - 8		
EQUI 16: Conveyor Set 1 - 9		
EQUI 17: Conveyor Set 1 - 10		
EQUI 18: Conveyor Set 2 - 1		
EQUI 19: Conveyor Set 2 - 2		
EQUI 20: Conveyor Set 2 - 3		
EQUI 21: Conveyor Set 2 - 4		
EQUI 22: Conveyor Set 2 - 5		
EQUI 23: Conveyor Set 2 - 6		
EQUI 24: Conveyor Set 2 - 7		
EQUI 25: Conveyor Set 2 - 8		
EQUI 26: Conveyor Set 2 - 9		
EQUI 27: Conveyor Set 2 - 10		
EQUI 28: Conveyor Set 3 - 1		
EQUI 29: Conveyor Set 3 - 2		
EQUI 30: Conveyor Set 3 - 3		
EQUI 31: Conveyor Set 3 - 4		
EQUI 32: Conveyor Set 3 - 5		
EQUI 33: Conveyor Set 3 - 6		
EQUI 34: Conveyor Set 3 - 7		
EQUI 35: Conveyor Set 3 - 8		
EQUI 36: Conveyor Set 3 - 9		
EQUI 37: Conveyor Set 3 - 10		
EQUI 38: Conveyor Set 3 - 11		
EQUI 39: Conveyor Set 3 - 12		
EQUI 40: Conveyor Set 3 - 13		
EQUI 41: Conveyor Set 3 - 14		
EQUI 42: Conveyor Set 3 - 15		
EQUI 43: Conveyor Set 3 - 16		
EQUI 44: Conveyor Set 4- 1		
EQUI 45: Conveyor Set 4- 2		
EQUI 46: Conveyor Set 4- 3		
EQUI 47: Conveyor Set 4- 4		
EQUI 48: Conveyor Set 4- 5		
EQUI 49: Conveyor Set 4- 6		
EQUI 50: Conveyor Set 4- 6		
EQUI 51: Conveyor Set 4- 7		
EQUI 52: Grizzly Feeder		
FUGI 1: Paved Haul Roads		
FUGI 2: Unpaved Haul Roads		
FUGI 3: Wash Plant/Main Stockpile Area - High Silt (multiple piles in each area)		
FUGI 4: Wash		

SI ID: Description	Relationship type	Related SI ID: Description
Plant/Main Stockpile Area - Medium Silt (multiple piles in each area)		
FUGI 5: Wash Plant/Main Stockpile Area - Low Silt (multiple piles in each area)		
FUGI 6: Stockpile Area - North (multiple piles in each area)		
FUGI 7: Stockpile Area - South (multiple piles in each area)		
FUGI 8: Wash Plant Truck Loading		
FUGI 9: Concrete & Asphalt Recycling Processing Truck Unloading		
FUGI 10: Concrete & Asphalt Recycling Processing Truck Loading		
FUGI 11: Aggregate Material Sales Load Out Truck Loading		
FUGI 12: Overburden/Aggregate Transfer Truck Loading		
FUGI 13: Overburden/Aggregate Transfer Truck Unloading		
STRU 1: Storage/Shop with a lab and scale		

5. Limits and other requirements

Requirement number	Requirement and citation
TFAC 1	**Barton Sand & Gravel - Elk River Pit 718**
5.1.1	Permit Appendices: This permit contains appendices as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in the Appendices. [Minn. R. 7007.0800, subp. 2]
5.1.2	Labeling Requirements: Permanently affix the manufacturer's serial number (or otherwise unique identifying number) to each piece of crushing, screening, and conveying 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]
5.1.3	Equipment Inventory List: The Permittee shall maintain a written list of each emission unit and fugitive source on site. This list shall include a description of the emission unit, unique ID number (assigned and affixed as required by this permit), equipment capacity, construction date, and NSPS subp. OOO applicability. The list shall correlate the units to the numbers used in this permit (EQUI, COMG) and shall include the data in Appendix A. The date of construction shall be the date the piece of equipment was manufactured or otherwise modified or reconstructed. [Minn. R. 7007.0800, subp. 2]
5.1.4	Non-Process Dust Control: All reasonable measures shall be taken to prevent avoidable amounts of particulate matter from becoming airborne. Control of non-process dust emissions can be achieved through such measures as applying water or commercially available dust suppressant to stockpiles, unpaved roads and handling areas. In addition, the following requirements apply to the Permittee: 1. Record date and time of each dust control 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. The Permittee must keep a copy of these manufacturer's guidelines. 4. Record the location (e.g., site plan) 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. Unpaved roads at the site shall be posted with speed limit signs indicating a maximum speed of 15 miles per hour. 7. 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. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.1.5	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]
5.1.6	Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated. [Minn. R. 7007.0800, subp. 16(J), Minn. R. 7007.0800, subp. 2]
5.1.7	Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution

Requirement number	Requirement and citation
	control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 16(J)]
5.1.8	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]
5.1.9	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]
5.1.10	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]
5.1.11	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)]
5.1.12	The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16. [Minn. R. 7007.0800, subp. 16]
5.1.13	For a nonroad engine that is excluded from any requirements of 40 CFR Part 1068 because it is a stationary engine, the Permittee may not move it or install it in any mobile equipment, except as allowed by the provisions of 40 CFR Part 1068. The Permittee may not circumvent or attempt to circumvent the residence-time requirements of Section (2)(iii) of the Nonroad Engine definition at 40 CFR Section 1068.30. [40 CFR 1068.101(b)(3)]
5.1.14	The Permittee shall not have engines that meet section (1)(iii) under the definition of Nonroad Engine at 40 CFR Section 1068.30 in one location within the stationary source for more than 12 consecutive months. A location is any single site at a building, structure, facility, or installation. Any engine, or engines, that replaces an engine at a location and that is intended to perform the same or similar function as the engine it replaced will be included in calculating the consecutive time period. [40 CFR 1068.30]
5.1.15	The Permittee shall conduct an inventory of all engines on-site that meet section (1)(iii) under the definition of Nonroad Engine at 40 CFR Section 1068.30, once each calendar quarter; inventories shall not take place in consecutive months. This applies to nonroad engines that are owned by the Permittee, or rented and operated by the Permittee, or brought onsite and operated by a vendor or contractor. The inventory shall include the following: 1) Date that the nonroad engine is inventoried. 2) Identification number. 3) Function of the nonroad engine (e.g. compressor, welder). 4) Location of the engine within the stationary source. 5) Statement that the nonroad engine has not been located in a single location for 12 consecutive months, and movement between locations has not been for purposes of circumvention of residence time requirements of section (2)(iii) under the definition of Nonroad Engine at 40 CFR Section 1068.30. [40 CFR 1068.30(nonrd engn)(1)(iii), Minn. R. 7007.0800, subps. 4-5]
5.1.16	A nonroad engine ceases to be a nonroad engine and becomes a new stationary engine if: 1. At any time, it meets the criteria specified in section (2)(iii) under the definition of Nonroad Engine

Requirement number	Requirement and citation
	in 40 CFR Section 1068.30. For example, a portable generator engine ceases to be a nonroad engine if it is used or will be used in a single specific location for 12 months or longer. If the Administrator or the Permitting authority determines that an engine will be or has been used in a single specific location for 12 months or longer, it ceased to be a nonroad engine when it was placed in that location. OR 2. It is otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411). [40 CFR 1068.31(e)]
5.1.17	Performance Test Notifications and Submittals: Performance Test Notification and 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 The Notification, Test Plan, and Test Report must be submitted in a format specified by the commissioner. [Minn. R. 7017.2017, Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2]
5.1.18	Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in this permit. [Minn. R. ch. 7017]
5.1.19	Monitoring Equipment Calibration - The Permittee shall either: 1. Calibrate or replace required monitoring equipment every 12 months; or 2. Calibrate at the frequency stated in the manufacturer's specifications. For each monitor, the Permittee shall maintain a record of all calibrations, including the date conducted, and any corrective action that resulted. The Permittee shall include the calibration frequencies, procedures, and manufacturer's specifications (if applicable) in the Operations and Maintenance Plan. Any requirements applying to continuous emission monitors are listed separately in this permit. [Minn. R. 7007.0800, subp. 4(D)]
5.1.20	Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change. [Minn. R. 7017.2025, subp. 3]
5.1.21	Recordkeeping: Retain all records at the stationary source, unless otherwise specified within this permit, 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). Records may be maintained in either electronic or paper format. [Minn. R. 7007.0800, subp. 5(C)]
5.1.22	Operation of Monitoring Equipment: Unless noted elsewhere in this permit, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system. [Minn. R. 7007.0800, subp. 4(D)]
5.1.23	If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. For non-expiring permits, these records shall be kept for a period of five years from the date that the change was made. The records shall be kept at the stationary source for the current calendar year of

Requirement number	Requirement and citation
	operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format. [Minn. R. 7007.1200, subp. 4]
5.1.24	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)]
5.1.25	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. 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. [Minn. R. 7019.1000, subp. 3]
5.1.26	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. 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. [Minn. R. 7019.1000, subp. 2]
5.1.27	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. [Minn. R. 7019.1000, subp. 1]
5.1.28	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: 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. [Minn. R. 7019.1000, subp. 1]
5.1.29	Fugitive Emissions Control Plan: The Permittee shall submit to the Commissioner and implement a fugitive emissions control plan within 60 days of the date of permit issuance. The plan shall identify all fugitive emission sources, primary and contingent control measures, and record keeping. The Permittee shall follow the actions and record keeping specified in the control plan. If the Commissioner determines the Permittee is out of compliance with Minn. R. 7011.0150 or the fugitive emission control plan, then the Permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors. The plan may be amended by the Permittee with the Commissioner's approval. [Minn. Stat. 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2]
5.1.30	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

Requirement number	Requirement and citation
	dates vary, depending on the type of amendment needed. Upon adoption of a new or amended federal applicable requirement, and if there are 3 or more years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150 - 7007.1500]
5.1.31	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). Performance testing deadlines from the General Provisions of 40 CFR pt. 60 and pt. 63 are examples of deadlines for which the MPCA does not have authority to grant extensions and therefore do not meet the requirements of Minn. R. 7007.1400, subp. 1(H). [Minn. R. 7007.1400, subp. 1(H)]
5.1.32	Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance. Submit in a format specified by the Commissioner. [Minn. R. 7019.3000-7019.3100]
5.1.33	Emission Fees: due 30 days after receipt of an MPCA bill. [Minn. R. 7002.0005-7002.0085]
COMG 1	**Main Sand and Gravel Spread**
5.2.1	The following requirements apply to all COMG 1 units active at the site (Barton Sand & Gravel - Elk River Pit 718). For the purposes of this permit, the main sand and gravel spread (COMG 1) is defined as the group of crushing, screening, and conveying equipment that are used for nonmetallic mineral processing. (Other spreads are defined in COMGs 2 and 3.). [Minn. R. 7007.0800, subp. 2]
5.2.2	PM/PM10/PM2.5 PreCap: If the Permittee replaces any of the main sand and gravel equipment (defined above), adds new main sand and gravel equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the requirements of COMG 1 and one of the following groups: COMG 4, COMG 5, or COMG 6. The applicability of COMG 4, COMG 5, or COMG 6 is determined by the construction date of the equipment and applicability of the NSPS subp. OOO. For modifications that solely involve equipment covered by the PM/PM10/PM2.5 PreCap, the Permittee is not required to complete PM/PM10/PM2.5 calculations described in Minn. R. 7007.1200, subp. 2. [Minn. R. 7007.3000, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)i, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.2.3	A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. [Minn. R. 7007.3000, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)i, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.2.4	The main sand and gravel spread shall consist of units at quantities at any one time not to exceed: two primary crushers with a combined capacity of 1650 tons/hr, three cone crushers with a combined capacity of 530 tons/hr, six screens with a combined capacity of 2730 tons/hr, and fifty five conveyors with combined capacity of 39,500 tons/hr. [Minn. R. 7007.3000, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)i, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.2.5	Process Throughput <= 3.0 million tons per year 12-month rolling sum. This is the maximum amount of material that may be processed by the primary crushers. [Minn. R. 7007.3000, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)i, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.2.6	Process Throughput <= 2.70 million tons per year 12-month rolling sum for the final screen. The total throughput of the final screen before the wash plant shall not exceed 2,700,000 tons of material per year. [Minn. R. 7007.0200, Minn. R. 7007.3000, Title I Condition: Avoid major source under 40 CFR

Requirement number	Requirement and citation
	52.21(b)(1)i, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.2.7	Daily Recordkeeping: On each day of operation, the Permittee shall calculate, record, and maintain the aggregate throughput for the primary crushers in tons for the previous day of operation. This shall be based on the use of belt scales immediately after the primary crushers. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.2.8	Daily Recordkeeping: On each day of operation, the Permittee shall calculate, record, and maintain the process throughput for the primary screen in tons for the previous day of operation. This shall be based on the use of belt scales located directly after the primary screen. [Minn. R. 7007.0800, subp. 2, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.2.9	Monthly Recordkeeping: By the 15th day of each month, the Permittee shall calculate, record and maintain records of: 1. The amount of aggregate crushed by the primary crushers in tons for the previous month based on the daily aggregate production records; and 2. The amount of aggregate crushed by the primary crushers in tons for the previous 12-month period by summing the production records for the previous 12 months. [Minn. R. 7007.0800, subps. 4-5, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.2.10	Monthly Recordkeeping: By the 15th day of each month, the Permittee shall calculate, record and maintain records of: 1. The amount of material processed by the primary COMG 5 screen in tons for the previous month based on the daily production records; and 2. The amount of material processed by the primary COMG 5 screen in tons for the previous 12-month period by summing the production records for the previous 12 months. [Minn. R. 7007.0800, subp. 2, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.2.11	EQUIPMENT REPLACEMENT PROCEDURES When an opacity compliance demonstration is required (see COMG 4, COMG 5, and COMG 6 Requirements) for a replacement unit, the replacement unit shall demonstrate compliance with the opacity limits within 60 days after achieving the maximum production rate of the unit, but not later than 180 days after initial startup. [40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7007.0800, subp. 2]
5.2.12	If an additional unit or replacement unit would cause an exceedance of the COMG 1 capacities defined above, a permit amendment may be required as specified by Minn. R. 7007.1150. The Permittee shall document the evaluation of whether a permit amendment is required. The Permittee shall obtain the required permit amendment prior to making a change which requires a permit amendment. [Minn. R. 7007.0800, subp. 5, Minn. R. 7007.1150-7007.1500]
5.2.13	Feed Material Moisture Content >= 1.5 percent. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)& Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.2.14	Demonstrate the feed material moisture content is greater than or equal to 1.5 percent by either Option 1 or 2: Option 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 ASTM method numbers D 2216-92 or D 4643-93 (or equivalent).

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	b. If the temperature is less than 35 degree F (1.7C), as measured at the facility during daylight operating hours, then moisture testing is not required. c. Keep records of each moisture content test summarizing the method used, results, date, time, and initials of person performing test. d. 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. e. 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 shall operate a moisture addition device at or immediately prior to the initial crusher(s) or initial screen(s) 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. When testing indicates that feed material moisture content is less than 1.5 percent and the Permittee is operating a moisture addition device, 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 weekly on the feed material after water application following a., b., and c. above, and if results show moisture content is less than 1.5 percent, increase water addition to insure moisture is 1.5 percent or greater and re-test to verify. OR Option 2. Keep records indicating instances when feed material was sourced from or is being removed from below the water table or wet processed prior to arriving at the site. Records shall include a description of the source, the corresponding dates, and the initials of the person making the record. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)& Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
COMG 2	**Recycled Concrete and Asphalt Spread**
5.3.1	The following requirements apply to all COMG 2 units active at the site (Barton Sand & Gravel - Elk River Pit 718). For the purposes of this permit, the recycled concrete and asphalt spread (COMG 2) is defined as the group of crushing, screening, and conveying equipment that are used for processing recycled concrete and asphalt. (Other spreads are defined in COMG 1 and COMG 3). [Minn. R. 7007.0800, subp. 2]
5.3.2	PM/PM10/PM2.5 PreCap: If the Permittee replaces any of the existing recycled concrete and asphalt spread equipment (defined above), adds new recycled concrete and asphalt spread equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the requirements of COMG 2 and one of the following groups: COMG 4, COMG 5, or COMG 6. The applicability of COMG 4, COMG 5, or COMG 6 is determined by the construction date of the equipment and applicability of the NSPS subp. OOO. For modifications that solely involve equipment covered by the PM/PM10/PM2.5 PreCap, the Permittee is not required to complete PM/PM10/PM2.5 calculations described in Minn. R. 7007.1200, subp. 2. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)& Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]

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5.3.3	A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)& Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.3.4	The recycled concrete and asphalt spread shall consist of units at quantities at any one time not to exceed: one jaw crusher with a capacity of 500 tons/hr, one cone crusher with a capacity of 500 tons/hr, one recycling screen with a capacity of 500 tons/hr, and ten conveyors with individual capacities of 500 tons/hr. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)& Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.3.5	Process Throughput <= 250000 tons per year 12-month rolling sum. This is the maximum amount of material that may be processed by the primary recycle crusher. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)& Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.3.6	Process Throughput <= 375000 tons per year 12-month rolling sum. This is the maximum amount of recycled material that may be processed by the recycle cone crusher. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)& Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.3.7	Daily Recordkeeping: On each day of operation, the Permittee shall calculate, record, and maintain the recycled material throughput for the recycle primary crusher in tons for the previous day of operation. This shall be based on the use of belt scales located directly after the recycle primary crusher and before the material is conveyed to the recycle screens. [Minn. R. 7007.0800, subp. 2, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.3.8	Daily Recordkeeping: On each day of operation, the Permittee shall calculate, record, and maintain the recycled material throughput for the recycle cone crusher in tons for the previous day of operation. This shall be based on the use of belt scales located on a conveyor directly after processing and before the material is stockpiled. [Minn. R. 7007.0800, subp. 2, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.3.9	Monthly Recordkeeping: By the 15th day of each month, the Permittee shall calculate, record and maintain records of: 1. The amount of recycled material crushed by the recycle primary crusher in tons for the previous month based on the daily aggregate production records; and 2. The amount of recycled material crushed by the recycle primary crusher in tons for the previous 12-month period by summing the production records for the previous 12 months. [Minn. R. 7007.0800, subp. 2, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.3.10	Monthly Recordkeeping: By the 15th day of each month, the Permittee shall calculate, record and maintain records of: 1. The amount of recycled material crushed by the recycle cone crusher in tons for the previous month based on the daily aggregate production records; and 2. The amount of recycled material crushed by the recycle cone crusher in tons for the previous 12-month period by summing the production records for the previous 12 months. [Minn. R. 7007.0800,

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	subp. 2, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.3.11	The Permittee shall keep records that the feed material is recycled concrete or recycled asphalt pavement. Records shall include a description of the source (if recycled asphalt pavement, so indicate), the corresponding dates, and the initials of the person making the record. [Minn. R. 7007.0800, subp. 5]
5.3.12	When an opacity compliance demonstration is required (see COMG 4, COMG 5, and COMG 6 Requirements) for a replacement unit, the replacement unit shall demonstrate compliance with the opacity limits within 60 days after achieving the maximum production rate of the unit, but not later than 180 days after initial startup. [40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7007.0800, subp. 2]
5.3.13	If an additional unit or replacement unit would cause an exceedance of the COMG 2 capacities defined above, a permit amendment may be required as specified by Minn. R. 7007.1150. The Permittee shall document the evaluation of whether a permit amendment is required. The Permittee shall obtain the required permit amendment prior to making a change which requires a permit amendment. [Minn. R. 7007.0800, subp. 5, Minn. R. 7007.1150-7007.1500]
COMG 3	**Screening Spread Units**
5.4.1	The following requirements apply to all COMG 3 units active at the site (Barton Sand & Gravel - Elk River Pit 718). For the purposes of this permit, the screening spread (COMG 3) is defined as the group of screening and conveying equipment that are used for blending construction aggregate. (Other spreads are defined in COMG 1 and COMG 2.). [Minn. R. 7007.0800, subp. 2]
5.4.2	PM/PM10/PM2.5 PreCap: If the Permittee replaces any of the existing screening spread equipment (defined above), adds new screening spread equipment, or modifies the existing equipment, such equipment is subject to this permit limit as well as all of the requirements of COMG 3 and one of the following groups: COMG 4, COMG 5, or COMG 6. The applicability of COMG 4, COMG 5, or COMG 6 is determined by the construction date of the equipment and applicability of the NSPS subp. OOO. For modifications that solely involve equipment covered by the PM/PM10/PM2.5 PreCap, the Permittee is not required to complete PM/PM10/PM2.5 calculations described in Minn. R. 7007.1200, subp. 2. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)& Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.4.3	A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)& Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.4.4	The screening spread shall consist of units at quantities at any one time not to exceed: one screening unit with a capacity of 800 tons/hr and fifteen conveyors with individual capacities of 500 tons/hr, each. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1), To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.4.5	Process Throughput <= 500000 tons per year 12-month rolling sum. This is the maximum amount of material that may be processed by the primary COMG 3 screen. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)& Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.4.6	Daily Recordkeeping: On each day of operation, the Permittee shall calculate, record, and maintain the process throughput for the primary screen in tons for the previous day of operation. This shall be based on the use of belt scales located directly after the primary screen. [Minn. R. 7007.0800, subp. 2,

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	Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.4.7	Monthly Recordkeeping: By the 15th day of each month, the Permittee shall calculate, record and maintain records of: 1. The amount of material processed by the primary COMG 3 screen in tons for the previous month based on the daily production records; and 2. The amount of material processed by the primary COMG 3 screen in tons for the previous 12-month period by summing the production records for the previous 12 months. [Minn. R. 7007.0800, subp. 2, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) & Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.4.8	When an opacity compliance demonstration is required for a replacement unit (see COMG 4, COMG 5, and COMG 6 Requirements), the replacement unit shall demonstrate compliance with the opacity limits within 60 days after achieving the maximum production rate of the unit, but not later than 180 days after initial startup. [40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7007.0800, subp. 2]
5.4.9	If an additional unit or replacement unit would cause an exceedance of the COMG 3 capacities defined above, a permit amendment may be required as specified by Minn. R. 7007.1150. The Permittee shall document the evaluation of whether a permit amendment is required. The Permittee shall obtain the required permit amendment prior to making a change which requires a permit amendment. [Minn. R. 7007.0800, subp. 5, Minn. R. 7007.1150-7007.1500]
5.4.10	Feed Material Moisture Content >= 1.5 percent. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)& Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.4.11	Demonstrate the feed material moisture content is greater than or equal to 1.5 percent by either Option 1 or 2: 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 ASTM method numbers D 2216-92 or D 4643-93 (or equivalent). b. If the temperature is less than 35 degree F (1.7C), as measured at the facility during daylight operating hours, then moisture testing is not required. c. Keep records of each moisture content test summarizing the method used, results, date, time, and initials of person performing test. d. 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. e. 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 shall operate a moisture addition device at or immediately prior to the initial crusher(s) or initial screen(s) 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. When testing indicates that feed material moisture content is less than 1.5 percent and the Permittee is operating a moisture addition device, daily, when operating, either: (i) Keep records of the date, water flow rate, material throughput rate, and initials of the person

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	making the record and the time the record was made; (ii) Conduct moisture content testing weekly 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 is 1.5 percent or greater and re-test to verify. OR Option 2. Keep records indicating instances when feed material was sourced from or is being removed from below the water table or wet processed prior to arriving at the site. Records shall include a description of the source, the corresponding dates, and the initials of the person making the record. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)& Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
COMG 4	**Aggregate Mining - NSPS subp. OOO Units Constructed/Modified After 4/22/2008**
5.5.1	The requirements of this group only apply to the following: Each crusher, screening operation, and belt conveyor at the site which are subject to 40 CFR pt. 60, subp. OOO, and were constructed (manufactured), modified, or reconstructed after April 22, 2008. The construction date and NSPS subp. OOO applicability shall be recorded on the Permittee's Equipment Inventory (see Total Facility requirements). [40 CFR 60.670(a), Minn. R. 7007.0800, subp. 11, Minn. R. 7011.3350]
5.5.2	The conveyors which carry material from the wash plant are exempt from the NSPS subp. OOO. [40 CFR 60.670(a)(2), Minn. R. 7011.3550]
5.5.3	When an existing unit (one which was constructed/modified/reconstructed before August 31, 1983) is replaced by a piece of equipment of equal or smaller size, as defined in 40 CFR Section 60.671, having the same function as the existing unit, and there is no increase in the amount of emissions, the new unit is exempt from the requirements in COMG 4 or COMG 5. When seeking to comply with this exemption the Permittee shall submit the information required in 40 CFR Section 60.676(a)(1 - 4). If the Permittee replaces all existing facilities (units which were manufactured before August 31, 1983) in a COMG 1, COMG 2, or COMG 3 spread with new facilities, the Permittee shall comply with the requirements of COMG 4 and COMG 5, as applicable. [40 CFR 60.670(d), Minn. R. 7011.3350]
5.5.4	Opacity <= 7 percent for screening operations and transfer points on belt conveyors and units that commenced construction, reconstruction, or modification after April 22, 2008. This limit applies within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after initial startup as required under 40 CFR Section 60.11. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350]
5.5.5	Opacity <= 12 percent for crushing units that commenced construction, reconstruction, or modification after April 22, 2008. This limit applies within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after initial startup as required under 40 CFR Section 60.11. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO, Minn. R. 7011.3350]
5.5.6	Visible Emissions: The Permittee shall check active COMG 4 units for any visible emissions once each day of operation during daylight hours. The visible emissions observations shall be completed using EPA Method 22. [Minn. R. 7007.0800, subp. 4]
5.5.7	Recordkeeping: The Permittee shall keep a record of all visible emission checks, the date and time of

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	the visible emissions check, whether or not any visible emissions were observed and of any corrective actions taken. [Minn. R. 7007.0800, subp. 5]
5.5.8	Monitoring: For any affected facility that uses wet suppression to control emissions from the affected facility, the Permittee shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee shall initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The Permittee shall record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under 40 CFR Section 60.676(b). [40 CFR 60.674(b)(1), Minn. R. 7011.3350]
5.5.9	If the Permittee ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than wet sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required under 40 CFR Section 60.676(b) shall specify the control mechanism being used instead of the water sprays. [40 CFR 60.674(b)(2), Minn. R. 7011.3350]
5.5.10	The opacity standards set forth in 40 CFR pt. 60, subp. OOO shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided. [40 CFR 60.11(c), Minn. R. 7017.2015, subp. 2(B)]
5.5.11	At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d), Minn. R. 7017.2015, subp. 2(B)]
5.5.12	Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subp. unless the Administrator: 1. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, 2. Approves the use of an equivalent method, 3. Approves the use of an alternative method the results of which it has been determined to be adequate for indicating whether a specific source is in compliance, 4. Waives the requirement for performance tests because the Permittee has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or 5. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act. [40 CFR 60.8(c), Minn. R. 7017.2015, subp. 2(A)]
5.5.13	The Permittee shall provide the Commissioner at least 7 days prior notice of any performance test, except as specified under other subparts, to afford the Commissioner the opportunity to have an observer present. [40 CFR 60.8(d), Minn. R. 7017.2015, subp. 2(A)]
5.5.14	The Permittee shall provide, or cause to be provided, performance testing facilities as follows: 1. Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

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	2. Safe sampling platform(s). 3. Safe access to sampling platform(s). 4. Utilities for sampling and testing equipment. [40 CFR 60.8(e), Minn. R. 7017.2015, subp. 2(A)]
5.5.15	Unless otherwise specified, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the control of the Permittee, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs. [40 CFR 60.8(f), Minn. R. 7017.2015, subp. 2(A)]
5.5.16	Records of Startup, Shutdown, or Malfunction: The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; and malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b), Minn. R. 7019.0100, subp. 1]
5.5.17	Recordkeeping: The Permittee shall maintain a file of all measurements, including performance test measurements; and all other information required, recorded in a permanent form suitable for inspection. The file shall be retained for a minimum of two years following the date of such measurements, maintenance, reports and records. [40 CFR 60.7(f), Minn. R. 7019.0100, subp. 1]
5.5.18	Notification of any physical or operational change which may increase emissions, in accordance with 40 CFR Section 60.7(a)(4). The notification shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Commissioner may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4), Minn. R. 7019.0100, subp. 1]
COMG 5	**Aggregate Mining - NSPS subp. OOO Units Constructed/Modified Before 4/22/2008**
5.6.1	The requirements of this group only apply to the following: Each crusher, screening operation, bucket elevator, and belt conveyor at the site which are subject to 40 CFR pt. 60, subp. OOO, and were constructed (manufactured), modified, or reconstructed before April 22, 2008. The construction date and NSPS subp. OOO applicability shall be recorded on the Permittee's Equipment Inventory (see Total Facility requirements). [40 CFR 60.670(a), Minn. R. 7007.0800, subp. 11, Minn. R. 7011.3350]
5.6.2	When an existing unit (one which was constructed/modified/reconstructed before August 31, 1983) is replaced by a piece of equipment of equal or smaller size, as defined in 40 CFR Section 60.671, having the same function as the existing unit, and there is no increase in the amount of emissions, the new unit is exempt from the requirements in COMG 4 or COMG 5. When seeking to comply with this exemption the Permittee shall submit the information required in 40 CFR Section 60.676(a)(1 - 4). If the Permittee replaces all existing facilities (units which were manufactured before August 31, 1983) in a COMG 1, COMG 2, or COMG 2 spread with new facilities, the Permittee shall comply with the requirements of COMG 4 and COMG 5, as applicable. [40 CFR 60.670(a), Minn. R. 7007.0800, subp. 11, Minn. R. 7011.3350]
5.6.3	Opacity <= 10 percent opacity for screening operations and transfer points on belt conveyors and

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	units that commenced construction, reconstruction, or modification prior to April 22, 2008. This limit applies within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after initial startup as required under 40 CFR Section 60.11. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO, Table 3, Minn. R. 7011.3550]
5.6.4	Opacity <= 15 percent opacity for crushing units that commenced construction, reconstruction, or modification prior to April 22, 2008. This limit applies within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after initial startup as required under 40 CFR Section 60.11. [40 CFR 60.672(b), 40 CFR pt. 60, subp. OOO(Table 3), Minn. R. 7011.3350]
5.6.5	Visible Emissions: The Permittee shall check active COMG 5 units for any visible emissions once each day of operation during daylight hours. The visible emissions observations shall be completed using EPA Method 22. [Minn. R. 7007.0800, subp. 4]
5.6.6	Recordkeeping: The Permittee shall keep a record of all visible emission checks, the date and time of the visible emissions check, whether or not any visible emissions were observed and of any corrective actions taken. [Minn. R. 7007.0800, subp. 5]
5.6.7	The opacity standards set forth in 40 CFR pt. 60, subp. OOO shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided. [40 CFR 60.11(c), Minn. R. 7017.2015, subp. 2(B)]
5.6.8	At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d), Minn. R. 7017.2015, subp. 2(B)]
5.6.9	Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subp. unless the Administrator: 1. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, 2. Approves the use of an equivalent method, 3. Approves the use of an alternative method the results of which it has been determined to be adequate for indicating whether a specific source is in compliance, 4. Waives the requirement for performance tests because the Permittee has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or 5. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act. [40 CFR 60.8(c), Minn. R. 7017.2015, subp. 2(A)]
5.6.10	The Permittee shall provide the Commissioner at least 7 days prior notice of any performance test, except as specified under other subparts, to afford the Commissioner the opportunity to have an observer present. [40 CFR 60.8(d), Minn. R. 7017.2015, subp. 2(A)]
5.6.11	The Permittee shall provide, or cause to be provided, performance testing facilities as follows: 1. Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be

Requirement number	Requirement and citation
	accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures. 2. Safe sampling platform(s). 3. Safe access to sampling platform(s). 4. Utilities for sampling and testing equipment. [40 CFR 60.8(e), Minn. R. 7017.2015, subp. 2(A)]
5.6.12	Unless otherwise specified, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the control of the Permittee, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs. [40 CFR 60.8(f), Minn. R. 7017.2015, subp. 2(A)]
5.6.13	Records of Startup, Shutdown, or Malfunction: The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; and malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b), Minn. R. 7019.0100, subp. 1]
5.6.14	Recordkeeping: The Permittee shall maintain a file of all measurements, including performance test measurements; and all other information required, recorded in a permanent form suitable for inspection. The file shall be retained for a minimum of two years following the date of such measurements, maintenance, reports and records. [40 CFR 60.7(f), Minn. R. 7019.0100, subp. 1]
5.6.15	Notification of any physical or operational change which may increase emissions, in accordance with 40 CFR Section 60.7(a)(4). The notification shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Commissioner may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4), Minn. R. 7019.0100, subp. 1]
COMG 6	**Aggregate Mining - Units Not Subject to NSPS subp. OOO**
5.7.1	The requirements of this group apply to each crusher, screening operation, belt conveyor, and enclosed truck loading station at the facility which were constructed (manufactured) prior to August 31, 1983, or are not subject to 40 CFR pt. 60, subp. OOO due to the exemption allowed under 40 CFR Section 60.670(d). The construction date and NSPS subp. OOO applicability shall be recorded on the Permittee's Equipment Inventory (see Total Facility requirements). The conveyors directly following the wash plant are not subject to COMG 6. [Minn. R. 7007.0800, subp. 2]
5.7.2	The Permittee shall conduct visible emission checks once each day of operation (during daylight hours) from COMG 6 units. The visible emissions observations shall be completed using EPA Method 22. Visible emissions checks are not required for days when no material is processed by an applicable COMG 6 unit. [Minn. R. 7007.0800, subp. 4]
5.7.3	Recordkeeping: The Permittee shall keep a record of all visible emission checks, the date and time of each visible emission inspection, whether or not any visible emissions were observed, and of any corrective actions taken. [Minn. R. 7007.0800, subp. 5]

Requirement number	Requirement and citation
5.7.4	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
COMG 7	**Stockpiles**
5.8.1	The requirements of this group apply individually to each associated item in this group. [Minn. R. 7007.0800, subp. 2]
5.8.2	Anytime fugitive emissions are observed from stockpile areas, the Permittee shall immediately eliminate fugitive emissions by applying water or a chemical dust suppressant to the stockpiles. [Minn. R. 7011.0150, Minn. R. 7007.0800, subp. 2]
5.8.3	The Permittee shall conduct visible emission checks of each stockpile area once each week of operation (during daylight hours). [Minn. R. 7007.0800, subp. 4]
5.8.4	Material Moisture Content >= 1.5 percent. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1) & Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.8.5	The Permittee shall demonstrate the moisture content is greater than or equal to 1.5 percent each week of operation by testing the moisture content of each source (sampled at an area representative of the source and physically capable of being sampled) as follows; a. Use ASTM method numbers D 2216-92 or D 4643-93 (or equivalent). b. If the temperature is less than 35 degrees F (1.7 degree C), as measured at the facility during daylight operating hours, then moisture testing is not required. Weekly testing should resume when temperatures are above 35 degrees F. c. If the wet plant is operating and adding saturated material to the pile, then moisture testing is not required. Operation of the wet plant continuously adds saturated material to the piles ensuring the moisture content of the piles is above 1.5 percent. d. When testing indicates that the material moisture content is less than 1.5 percent, in situations where it is infeasible to sample and test, or where the Permittee elects not to sample and test, the Permittee shall operate a moisture addition device 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. e. Moisture testing is not required for stockpiles of aggregate which have a minimum size of 1.0 cm in average diameter or greater. f. Water application may be used in place of moisture testing. Water applications must be completed as described in the water application rate requirement below. [Title I Condition: 40 CFR 52.21(b)(1) & Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.8.6	Water Application: The Permittee shall water the piles at the facility to maintain a moisture content greater than or equal to 1.5 percent at all times for exposed storage pile surfaces. Watering shall comply with the following conditions: a. The water application rate shall be at least 0.1 gallon of water for each 1 square foot every 24 hours; b. A rainfall of at least 0.16 inches during the previous 24 hours shall substitute for one water application.

Requirement number	Requirement and citation
	c. If storage piles cannot be watered because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35 degrees F (1.7 degree C), then watering shall be postponed and accomplished as soon as the conditions preventing water application have abated. [Minn. R. 7007.0800, subp. 2]
5.8.7	Moisture Testing Recordkeeping: The Permittee shall keep weekly records of the following: a. Keep records of each moisture content test summarizing the method used, results, date, time, and initials of person performing test. b. If a moisture test was not completed due to the temperature, it must be noted in the record along with the source of measurement (i.e. thermometer). c. If a moisture test was not completed due to the operation of the wet plant, it must be noted in the record along with the time of operation of the wet plant and the piles that saturated material was being applied to. d. If a moisture test was not completed because water application was used in place of moisture testing or a 0.16 inch or greater rainfall occurred, it must be noted in the record. Records needed for water applications and rainfall measurements are described in the water application recordkeeping requirement. e. If a weekly moisture test was not completed due to the stockpile having a minimum aggregate size of 1.0 cm in average diameter or greater, it must be noted in the record along with the piles which meet this exemption. [Minn. R. 7007.0800, subps. 4-5]
5.8.8	Water Application Recordkeeping: The Permittee shall keep records of the water applications, including the following: a. The stock piles watered, the amount of water applied, the time watered, and the method of application. If water was not applied because there was a 0.16 inch or greater rainfall or because of the temperature, it must be noted in the record along with the source of measurement (i.e. on-site rain gauge or thermometer). b. Records of watering equipment breakdowns and repairs, and records of corrective actions taken. [Minn. R. 7007.0800, subps. 4-5]
5.8.9	The Permittee shall keep records indicating instances when feed material was sourced from or is being removed from below the water table or wet processed prior to arriving at the site. Records shall include a description of the source, the corresponding dates, and the initials of the person making the record. [Title I Condition: 40 CFR 52.21(b)(1) & Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.8.10	Recordkeeping: The Permittee shall keep a record of all visible emission checks, the date and time of each visible emission inspection, whether or not any visible emissions were observed, and of any corrective actions taken. [Minn. R. 7007.0800, subp. 5]
COMG 8	**Loading/Unloading**
5.9.1	The requirements of this group apply individually to each associated item in this group. [Minn. R. 7007.0800, subp. 2]
5.9.2	The Permittee shall conduct visible emission checks once each day of operation (during daylight hours) from associated item in COMG 8 while operating. The visible emissions observations shall be completed using EPA Method 22. [Minn. R. 7007.0800, subp. 4]
5.9.3	Recordkeeping: The Permittee shall keep a record of all visible emission checks, the date and time of

Requirement number	Requirement and citation
	each visible emission inspection, whether or not any visible emissions were observed, and of any corrective actions taken. [Minn. R. 7007.0800, subp. 5]
5.9.4	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
EQUI 1	**Aggregate Heater**
5.10.1	Allowed Fuels: Natural gas or propane only. [Minn. R. 7007.0800, subp. 2]
5.10.2	Opacity <= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. [Minn. R. 7011.0610, subp. 1(A)(2)]
5.10.3	Particulate Matter <= 0.30 grains per 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)]
FUGI 1	**Paved Haul Roads**
5.11.1	Daily Inspection and Recordkeeping: On each day of operation, the Permittee shall visually inspect all paved surfaces to minimize or eliminate fugitive emissions. The facility shall maintain records of this inspection that include the date of the inspection, whether fugitive dust was observed, what corrective actions were taken, when the corrective actions were taken, and whether the corrective actions eliminated the fugitive dust. [Minn. R. 7007.0800, subp. 2, Minn. R. 7011.0150]
5.11.2	Anytime fugitive emissions are observed on facility roadways, the Permittee shall immediately eliminate fugitive emissions by sweeping those road segments and/or apply water or a chemical dust suppressant. [Minn. R. 7011.0150, Minn. R. 7007.0800, subp. 2]
FUGI 2	**Unpaved Haul Roads**
5.12.1	Facility-Wide Speed Limit: Vehicle Traffic speeds shall not exceed 15 mph on all facility roads or parking surfaces. The Permittee shall post the speed limit in a highly visible location near the facility entrance. The Permittee shall ensure that all vehicular traffic on unpaved roads shall comply with a speed limit not to exceed 15 miles per hour, unless responding to an emergency. [Minn. R. 7007.0800, subp. 2, Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2) and Minn. R. 7007.3000, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000, To avoid major source under 40 CFR 70.2 & Minn. R. 7007.0200]
5.12.2	Anytime fugitive emissions are observed on facility roadways, the Permittee shall immediately eliminate fugitive emissions by applying water or a chemical dust suppressant. [Minn. R. 7007.0800, subp. 2, Minn. R. 7011.0150]

6. Submittal/action requirements

This section lists most of the submittals required by this permit. Please note that some submittal requirements may appear in the Limits and Other Requirements section, or, if applicable, within a Compliance Schedule section.

Requirement number	Requirement and citation
TFAC 1	**Barton Sand & Gravel - Elk River Pit 718**
6.1.1	The Permittee shall submit an annual report : Due annually following permit issuance The Permittee shall submit an annual report by January 31st of each year that describes the changes made at the facility during the previous calendar year. The report shall include the emission unit, stack/vent, group, and control equipment data for any new or replaced units or control devices, and the dates the units were brought onsite or taken offsite. The report shall document the PM-10 12-month rolling sum calculations for the previous calendar year. The report shall be submitted with the annual

Requirement number	Requirement and citation
	Compliance Certification listed in Section 6 of this permit (Submittal/action requirements). As part of the Annual Report, the Permittee shall verify and certify that the facility has maintained minor source status for Title V and New Source Review. [Minn. R. 7007.0800, subp. 2]
6.1.2	The Permittee shall submit a semiannual deviations report : Due semiannually, by the 30th of January and July. 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. Submit this on form DRF-2 (Deviation Reporting Form). If no deviations have occurred, submit the signed report certifying that there were no deviations. [Minn. R. 7007.0800, subp. 6(A)(2)]
6.1.3	The Permittee shall submit a compliance certification : Due annually, by the 31st of January (for the previous calendar year). Submit this on form CR-04 (Annual Compliance Certification Report). This report covers all deviations experienced during the calendar year. If no deviations have occurred, submit the signed report certifying that there were no deviations. [Minn. R. 7007.0800, subp. 6(C)]
COMG 4	**Aggregate Mining - NSPS subp. OOO Units Constructed/Modified After 4/22/2008**
6.2.1	The Permittee shall conduct initial performance test : Due 180 calendar days after Initial Startup Date, or 60 days after achieving maximum capacity at which the affected crushing, screening, or conveying unit will be operated, and according to 40 CFR Section 60.11 and 40 CFR Section 60.675 to measure opacity from a new replacement unit. EPA Method 9 shall be used to determine the opacity. [40 CFR 60.675(b)(2), Minn. R. 7011.3350]
6.2.2	Performance Test: due before end of each 60 months following Initial Performance Test to measure opacity from a new replacement unit. EPA Method 9 shall be used to determine the opacity. Affected facilities controlled by water or from water carryover from upstream water sprays that are inspected according to the requirements in 40 CFR Sections 60.674(b) and 60.676(b) are exempt from this 5-year repeat testing requirement. [40 CFR 60.675(b)(2), Minn. R. 7011.3350]
COMG 5	**Aggregate Mining - NSPS subp. OOO Units Constructed/Modified Before 4/22/2008**
6.3.1	The Permittee shall conduct initial performance test : Due 180 working days after Initial Startup Date, or 60 days after achieving maximum capacity at which the affected crushing, screening, or conveying unit will be operated, and according to 40 CFR Section 60.11 and 40 CFR Section 60.675 to measure opacity from a new replacement unit. EPA Method 9 shall be used to determine the opacity. [40 CFR 60.675(b)(2), Minn. R. 7011.3350]

7. Appendices

Appendix A. Equipment Inventory

Appendix A is an electronic spreadsheet created for the ongoing tracking of equipment at the facility.
The following table is presented as a short summary of the electronic document. This table also represents the minimum amount of information to be tracked by the Permittee.

ID #	GP ID	Description	Capacity [tons/hr]	Construction Date*	Startup Date	Subject to NSPS subp. OOO? (Y/N)
EQUI 1	None	Aggregate Heater	16 [MMBtu/hr]			N
EQUI 2	COMG 1/COMG 5	Jaw Crusher 1	1100	1/1/2002	6/1/2002	Y
EQUI 3	COMG 1/COMG 4	Cone Crusher 1	230	1/1/2009	9/1/2009	Y
EQUI 4	COMG 1/COMG 5	Screens 1	1100	1/1/2000	2/1/2000	Y
EQUI 5	COMG 1/COMG 5	Screens 2	550	1/1/1998	12/1/1998	Y
EQUI 6	COMG 1/COMG 5	Screens 3	230	1/1/2002	4/1/2002	Y
EQUI 7	COMG 1/COMG 5	Screens 6	550	1/1/1998	12/1/1998	Y
EQUI 8	COMG 1/COMG 5	Conveyor Set 1-1	1100	1/1/1992	5/1/1992	Y
EQUI 9	COMG 1/COMG 5	Conveyor Set 1-2	1100	1/1/1985	6/1/1985	Y
EQUI 10	COMG 1/COMG 5	Conveyor Set 1-3	1100	1/1/1987	4/1/1987	Y
EQUI 11	COMG 1/COMG 5	Conveyor Set 1-4	1100	1/1/1988	4/1/1988	Y
EQUI 12	COMG 1/COMG 5	Conveyor Set 1-5	1100	1/1/2001	4/1/2001	Y
EQUI 13	COMG 1/COMG 5	Conveyor Set 1-6	1100	1/1/2001	4/1/2001	Y
EQUI 14	COMG 1/COMG 5	Conveyor Set 1-7	1100	1/1/1998	4/1/1998	Y
EQUI 15	COMG 1/COMG 5	Conveyor Set 1-8	1100	1/1/2000	4/1/2000	Y
EQUI 16	COMG 1/COMG 5	Conveyor Set 1-9	1100	1/1/1995	6/1/1995	Y
EQUI 17	COMG 1/COMG 5	Conveyor Set 1-10	1100	1/1/1996	10/1/1996	Y
EQUI 18	COMG 1/COMG 6	Conveyor Set 2-1	550	1/1/1969	8/1/1969	N
EQUI 19	COMG 1/COMG 6	Conveyor Set 2-2	550	1/1/1980	3/1/1980	N
EQUI 20	COMG 1/COMG 6	Conveyor Set 2-3	550	1/1/1966	6/1/1966	N
EQUI 21	COMG 1/COMG 6	Conveyor Set 2-4	550	12/1/1982	4/1/1985	N
EQUI 22	COMG 1/COMG 6	Conveyor Set 2-5	550	12/1/1982	4/1/1988	N
EQUI 23	COMG 1/COMG 5	Conveyor Set 2-6	550	1/1/1989	4/1/1989	Y
EQUI 24	COMG 1/COMG 5	Conveyor Set 2-7	550	1/1/1998	12/1/1988	Y
EQUI 25	COMG 1/COMG 5	Conveyor Set 2-8	550	1/1/1990	4/1/1990	Y
EQUI 26	COMG 1/COMG 5	Conveyor Set 2-9	550	1/1/1993	3/1/1993	Y
EQUI 27	COMG 1/COMG 5	Conveyor Set 2-10	550	1/1/1989	4/1/1989	Y
EQUI 28	COMG 1/COMG 5	Conveyor Set 3-1	550	1/1/1993	11/1/1993	Y
EQUI 29	COMG 1/COMG 5	Conveyor Set 3-2	550	1/1/1993	11/1/1993	Y

EQUI 30	COMG 1/COMG 5	Conveyor Set 3-3	550	1/1/1994	7/1/1994	Y
EQUI 31	COMG 1/COMG 5	Conveyor Set 3-4	550	1/1/1994	7/1/1994	Y
EQUI 32	COMG 1/COMG 5	Conveyor Set 3-5	550	1/1/1994	7/1/1994	Y
EQUI 33	COMG 1/COMG 5	Conveyor Set 3-6	550	1/1/1995	6/1/1995	Y
EQUI 34	COMG 1/COMG 5	Conveyor Set 3-7	550	1/1/1996	7/1/1996	Y
EQUI 35	COMG 1/COMG 5	Conveyor Set 3-8	550	1/1/1996	12/1/1996	Y
EQUI 36	COMG 1/COMG 5	Conveyor Set 3-9	550	1/1/1996	12/1/1996	Y
EQUI 37	COMG 1/COMG 5	Conveyor Set 3-10	550	1/1/2000	4/1/2000	Y
EQUI 38	COMG 1/COMG 5	Conveyor Set 3-11	550	1/1/2000	9/1/2000	Y
EQUI 39	COMG 1/COMG 5	Conveyor Set 3-12	550	1/1/2006	9/1/2006	Y
EQUI 40	COMG 1/COMG 5	Conveyor Set 3-13	550	1/1/1985	11/1/1985	Y
EQUI 41	COMG 1/COMG 6	Conveyor Set 3-14	550	1/1/1968	4/1/1968	N
EQUI 42	COMG 1/COMG 5	Conveyor Set 3-15	550	1/1/1989	4/1/1989	Y
EQUI 43	COMG 1/COMG 5	Conveyor Set 3-16	550	1/1/1989	4/1/1989	Y
EQUI 44	COMG 1/COMG 5	Conveyor Set 4-1	800	1/1/2001	7/1/2001	Y
EQUI 45	COMG 1/COMG 5	Conveyor Set 4-2	800	1/1/2003	4/1/2003	Y
EQUI 46	COMG 1/COMG 5	Conveyor Set 4-3	800	1/1/2004	4/1/2004	Y
EQUI 47	COMG 1/COMG 4	Conveyor Set 4-4	800	1/1/2015	7/1/2015	Y
EQUI 48	COMG 1/COMG 4	Conveyor Set 4-5	800	1/1/2015	8/1/2015	Y
EQUI 49	COMG 1/COMG 4	Conveyor Set 4-6	800	1/1/2015	8/1/2015	Y
EQUI 50	COMG 1/COMG 5	Conveyor Set 4-7	800	1/1/2000	4/1/2000	Y
EQUI 51	COMG 1/COMG 5	Conveyor Set 4-8	800	1/1/2000	4/1/2000	Y
EQUI 52	COMG 8	Grizzly Feeder	800	1/1/2006	5/1/2006	N

* For NSPS subp. OOO applicability, the construction date is the date of manufacture or the most recent date of modification or reconstruction.

Appendix B. Insignificant activities and general applicable requirements

The table below lists the insignificant activities that are currently at the Facility and their associated general applicable requirements.

Minn. R.	Rule description of the activity	General applicable requirement
Minn. R. 7007.1300, subp. 3(B)(2)	Indirect heating equipment with a capacity less than 420,000 Btu/hour, etc. - Space heaters: For these units, based on the fuels used and EPA published emissions factors, it is highly unlikely that it could violate the applicable requirement. In addition, these types of units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.	PM <= 0.6 or 0.4, depending on year constructed Opacity <= 20% with exceptions (Minn. R. 7011.0510/0515)
Minn. R. 7007.1300, subp. 3(E)	Brazing, soldering or welding equipment - For these units, based on EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, these units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.	PM, variable depending on airflow Opacity <= 20% (Minn. R. 7011.0710/0715)
Minn. R. 7007.1300, subp. 3(F)	Individual units with potential emissions less than 2000 lb/year of certain pollutants - Propane fired belt heaters: For the propane heaters, it is highly unlikely that they could violate the applicable requirement due to the type of fuel. - Conveyors from wash plant directly to storage piles: The wash plant fully saturates the aggregate so minimal PM emissions are expected. - Large boulder piles: The large boulder area is not expected to generate significant emissions	PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 0715 and Minn. R. 7011.0610)
Minn. R. 7007.1300, subp. 3(G)	Fugitive dust emissions from unpaved roads and parking lots - Entrance and parking lots: The dust emissions from the unpaved entrance roads and parking lots qualify as insignificant. The permit contains a general requirement that this standard must be met.	Requirement to take reasonable measures to prevent PM from becoming airborne (Minn. R. 7011.0150)

Technical Support Document
For
Air Emission Permit No. 14100072-002

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 determination to issue the permit.

1. General information

1.1 Applicant and stationary source location:

Table 1. Applicant and source address

Applicant/Address	**Stationary source/Address** (SIC Code: 1442 - Construction Sand and Gravel)
Paul Schultz 7200 Hemlock Ln N Ste 200 Maple Grove, Minnesota 55311-6480	Barton Sand & Gravel - Elk River Pit 718 12450 Ranch Rd NW Elk River, MN 55330
Contact: Paul Schultz Phone: 763-425-4191	

1.2 Facility description

Barton Sand & Gravel Co. operates Elk River Pit 718, a construction sand and gravel processing operation (henceforth referred to as the 'Facility'). The processes include crushing, screening, conveying, and storage of material that is mined on-site and at other locations. Additionally, the facility processes recycled concrete and asphalt. An aggregate heater will also be added to produce an aggregate appropriate for ready-mix concrete products.

The air emissions from the Facility are particulates (PM, PM_{10} and $PM_{2.5}$) from processing and storing sand and gravel, as well as truck loadout stations. The Facility also emits NOx, CO, and other combustion products from the natural gas and propane fueled aggregate heater. Water sprays on various processes control particulate emissions and the occurrence of fugitive dust. The Facility is not engaging in silica sand mining operations.

1.3 Description of the activities allowed by this permit action

This permit action is Permit Reopening.

Permit action 1410072-002 is a MPCA-initiated administrative amendment under Minn. R. 7007.1600, subp. 1 (C) - mandatory reopenings that are needed to correct a material mistake or inaccurate statements made in establishing emissions standards, limitations, or other terms or conditions of the permit. MPCA has authority to issue this as an Administrative Amendment under Minn. R. 7007.1400, subp. 1(J).

The amendment corrects two citations in the current permit. A Reopening Initiation Notification letter from MPCA was sent on March 31, 2017 to Barton Sand & Gravel - Elk River Pit 718 to inform the facility of this reopening. Additionally, Insignificant Activity requirement citations have been updated to reflect changes to Minn. R. 7007.1300, effective as of January 14, 2019. Finally, there were small changes in the formatting for

several requirements that contained extraneous spaces. We removed the spaces, but the text remains unchanged. All changes meet the requirements of Minn. R. 7007.1600, subp. 1 or 2 or are in response to permit applications or notifications submitted by the Permittee.

Table 2. Regulatory Overview of Changes

Subject Item*	Changes	Basis
COMG 4 (5.5.1)	Old Citation: Minn. R. 7007.0800, subp. 11, Minn. R. 7011.3350 New Citation: Minn. R. 7007.0800, subp. 11, Minn. R. 7011.3350, **40 CFR § 60.670(a)**	3/31/2017 Reopening Initiation Notification. Minn. R. 7007.1400, subp. 1(J)
FUGI 2 (5.12.1)	Old Citation: Title I Condition: Avoid major modification under 40 CFR § 52.21(b)(2) and Minn. R. 7007.3000, Minn. R. 7007.0800, subp. 2, New Citation: Title I Condition: Avoid major modification under 40 CFR § 52.21(b)(2) and Minn. R. 7007.3000, **Title I Condition: Avoid major source under 40 CFR § 52.21 (b)(1)(i) and Minn. R. 7007.3000**, Minn. R. 7007.0800, subp. 2, **To avoid major source under 40 CFR § 70.2 & Minn. R. 7007.0200**	3/31/2017 Reopening Initiation Notification. Minn. R. 7007.1400, subp. 1(J)
Insignificant Activity (Appendix B)	Brazing, soldering, welding equipment: Old Citation: Minn. R. 7007.1300, subp. 3(H)(3) New Citation: Minn. R. 7007.1300, subp. 3(E)	Amendments to Minnesota Rules chapter 7007 effective January 14, 2019.
Insignificant Activity (Appendix B)	Individual units with potential emissions less than 2000 lb/year of certain pollutants: Old Citation: Minn. R. 7007.1300, subp. 3(I) New Citation: Minn. R. 7007.1300, subp. 3(F)	Amendments to Minnesota Rules chapter 7007 effective January 14, 2019.
Insignificant Activity (Appendix B)	Fugitive dust emissions from unpaved roads and parking lots: Old Citation: Minn. R. 7007.1300, subp. 3(J) New Citation: Minn. R. 7007.1300, subp. 3(G)	Amendments to Minnesota Rules chapter 7007 effective January 14, 2019.
Insignificant Activity (Appendix B)	Infrequent use of spray paint equipment for routine upkeep: Removed from permit.	Amendments to Minnesota Rules chapter 7007 effective January 14, 2019. This insignificant activity was removed from Minn. R. 7007.1300, subp. 3 and is no longer required to be listed in the permit.

*Location of the requirement in the permit

1.4 Facility emissions:

There are no changes to facility emissions associated with this permit action.

Table 3. Facility Classification

Classification	Major	Synthetic minor/area	Minor/area
PSD		X	
Part 70 Permit Program		X	
Part 63 NESHAP			X

2. Technical Information

2.1 Insignificant activities

Barton Sand & Gravel - Elk River Pit 718 has several operations which are classified as insignificant activities under the MPCA's permitting rules. These are listed in Appendix B to the permit. Citations in Appendix B were changed as described in Table 2.

Table 4. Insignificant Activities

Insignificant activity	General applicable emission limit	Discussion
Fuel use: space heaters fueled by natural gas, less than 420,000 Btu/hr (Minn. R. 7007.1300, subp. 3(B)(2))	PM ≤ 0.6 or 0.4 lb/MMBtu, depending on year constructed Opacity ≤ 20% with exceptions (Minn. R. 7011.0510/0515)	For this unit, based on the fuels used and EPA published emissions factors, it is highly unlikely that it could violate the applicable requirement. In addition, these types of units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.
Welding equipment (Minn. R. 7007.1300, subp. 3(E)	PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 7011.0710/0715)	For these units, based on EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, these units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.
Individual units with potential emissions less than 2000 lb/year of certain pollutants (7007.1300, subp. 3(F))	PM, variable depending on airflow Opacity ≤ 20% (with exceptions) (Minn. R. 7011.0715 and Minn. R. 7011.0610) SO_2 ≤ 0.5 lb/MMBtu Opacity ≤ 20% (Minn. R. 7011.2300)	These are propane-fired belt heaters; the wash plant (including conveyors from wash plant directly to storage piles); and the large boulder piles. For the propane heaters, it is highly unlikely that they could violate the applicable requirement due to the type of fuel. The wash plant fully saturates the aggregate so minimal PM emissions are expected. The large boulder area is also not expected to generate significant emissions.
Fugitive emissions from unpaved roads and parking lots (7007.1300, subp. 3(G))	Requirement to take reasonable measures to prevent PM from becoming airborne (Minn. R. 7011.0150)	The dust emissions from the unpaved entrance roads and parking lots qualify as insignificant. The permit contains a general requirement that this standard must be met.

3. Permit fee assessment

There are no fees associated with this permit action.

4. Conclusion

Based on the information provided by Barton Sand & Gravel - Elk River Pit 718 the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No.

14100072-002 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff members on permit team: Michaela Leach (permit writer)
Kirsten Baker (peer reviewer)
Laurie O'Brien (administrative support)

Attachments: 1. Reopening Initiation Notification Letter

Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

March 31, 2017

Mr. Paul E. Schultz
Regulatory/Environ Coordinator
Tiller Corp
PO Box 1480
Maple Grove, MN 55311-1480

RE: Changes to Barton Sand & Gravel – Elk River Pit 718 Operating Permit, Air Emission Permit No. 14100072-001

Dear Mr. Schultz:

The purpose of this letter is to inform you that the Minnesota Pollution Control Agency (MPCA) intends to reopen and amend the existing permit for Barton Sand & Gravel – Elk River Pit 718, to correct two requirements' citations. The permit was issued on December 10, 2015.

Under Minn. R. 7007.1600, subp. 1(C), the MPCA shall reopen and amend a permit when the agency or administrator determines that "the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards, limitations, or other terms or conditions of the permit."

When the permit was issued, requirement 5.5.1 of COMG 4 was missing a citation for 40 CFR Part 60 and requirement 5.12.1 of FUGI 2 was missing part of the Title 1 citation. The permit will be reopened to make the following changes:

Subject Item ID	Sec.SI.Reqt	Original Citation	Corrected Citation
COMG 4	5.5.1	Minn. R. 7007.0800, subp. 11, Minn. R. 7011.3350,	Minn. R. 7007.0800, subp. 11, Minn. R. 7011.3350, **40 CFR § 60.670(a)**
FUGI 2	5.12.1	Title I Condition: Avoid major modification under 40 CFR § 52.21(b)(2) and Minn. R. 7007.3000, Minn. R. 7007.0800, subp. 2,	Title I Condition: Avoid major modification under 40 CFR § 52.21(b)(2) and Minn. R. 7007.3000, **Title I Condition: Avoid major source under 40 CFR § 52.21 (b)(1)(i) and Minn. R. 7007.3000**, Minn. R. 7007.0800, subp. 2, **To avoid major source under 40 CFR § 70.2 & Minn. R. 7007.0200**

The above changes will be implemented during the next permit action.

It is not necessary for a permit application to be submitted to make these changes. Under Minn. R. 7007.1600, subp. 3, the MPCA may make these changes after providing written notice to the Permittee of our intent to make these changes. Public notice of the amended permit cannot begin until 30 days after providing that written notice. This letter serves as the 30-day notification of our intent to reopen the permit, as required in Minn. R. 7007.1600, subp. 3.

If there are other changes you would like made to the permit, which are not covered under any of the above provisions, you should submit a permit application for those changes. You will be provided the opportunity to review the amended permit prior to the public notice period.

If you have any questions or about this process, please do not hesitate to contact me at 651-757-2802. Thank you for your assistance.

Sincerely,

Toni Volkmeier

This document has been electronically signed.

Toni Volkmeier, P.E.
Supervisor Air Quality Permits Unit 3
Air Quality Permits Section
Industrial Division

TV:lao