

Missouri Department of dnr.mo.gov

NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

SEP 10 2018

Mr. James Gosche, Jr.
Plant Manager
The Quikrete Companies, Inc.
701 Marshall Rd.
Valley Park, MO 63088

RE: Intermediate Operating Permit Significant Modification - Permit Number: OP2018-043A
Project Number: 2018-06-009; Installation Number: 189-0069

Dear Mr. Gosche, Jr.:

Intermediate Operating Permit OP2018-043 is being modified in response to your May 30, 2018 request to correct emission unit names, process descriptions, and modify emission factors found in Attachment A. The emission factors were requested to be modified from uncontrolled to controlled PM₁₀ emission factors. All emission units with emission factors being modified are equipped with control devices, but there were not practically enforceable requirements to operate the control devices. This Modification adds a permit condition to operate, maintain, and monitor the control devices which will allow the use of controlled PM₁₀ emission factors.

The permit is revised by adding the Permit Condition found in this Modification to Section III of Intermediate Operating Permit OP2018-043. In order to ensure that the installation is complying with the correct version of the attachments, remove Attachment A from the current operating permit and attach Attachment A (Modified) to Section VI of the operating permit. To correct the process description in the Installation Description of the Statement of Basis, remove page SB – 1 in OP2018-043 and attach page SB – 1 found in this modification.

This permit modification may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.



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Mr. James Gosche, Jr.


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You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions regarding this modification, please do not hesitate to contact Justin Spasovski, at the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

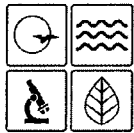


Kendall B. Hale
Permits Section Chief

KBH:jsj

Enclosures

c: St. Louis Regional Office
PAMS File: 2018-06-009



MISSOURI
 DEPARTMENT OF
 NATURAL RESOURCES
 Air Pollution Control Program

INTERMEDIATE PERMIT TO OPERATE

Operating Permit Number: OP2018-043A
Installation Name: The Quikrete Companies, Inc.
Installation ID: 189-0069
Project Number: 2018-06-009

Description of Intermediate Modification:

The Quikrete Companies, Inc. submitted a request dated May 30, 2018 to amend emission factors found in Attachment A. This Modification adds Permit Conditions Control Device Group – 001 which includes practically enforceable requirements to operate a baghouse to allow the use of controlled emission factors on certain emission units. The following Permit Condition shall be added to Section III of Intermediate Operating Permit OP2018-043:

Control Device Group	
Emission Unit	Description
EU002	Cement Line with Fabric Filter
EU003	Sand Line with Fabric Filter
EU004	Fly Ash Silo (Main) with Fabric Filter
EU005	Cement Line (Main Line) with Fabric Filter
EU007	Sand/Gravel Line (Main Line) with Fabric Filter
EU008	Sand/Gravel Packer with Fabric Filter

Permit Condition Control Device Group - 001

10 CSR 10-6.020 and 10 CSR 10-6.065 Voluntary Limitation(s)

Control Device Requirement-Baghouse/Fabric Filter

- 1) The permittee shall capture and control particulate emissions from the emission units listed above using fabric filters and baghouses.
- 2) The fabric filters and baghouses shall be operated and maintained in accordance with the manufacturer's specifications.
- 3) The fabric filters and baghouses shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. The gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them. The pressure drop shall be measured and recorded at least once every 24 hours while operations are occurring. The pressure drop shall be maintained within the design conditions specified by the filter manufacturer's performance specifications.

Monitoring/Recordkeeping:

- 1) The permittee shall maintain a copy of the filter manufacturer's specification onsite.
- 2) The permittee shall maintain an operating and maintenance log (using Attachment E or equivalent) for the fabric filters and baghouses which shall include the following:
 - a) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - b) Maintenance activities with inspection schedule, repair, actions, and replacements, etc.
- 3) The permittee shall maintain all records required by this permit for not less than five years and shall make them available to Missouri Department of Natural Resources' personnel upon request.

Reporting:

- 1) The permittee shall report to the SLDCH Air Pollution Control Program (or designated agency), 6121 N. Hanley Rd. Berkeley MO 63134 (or current address) and the Missouri Department of Natural Resources Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, no later than ten days after the end of the month during which any record required by this permit condition shows an exceedance of a limitation imposed by this permit condition.
- 2) Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted annually in the annual compliance certification and monitoring report, as required by Section V of this permit.

Attachment A (Modified) - Plant-Wide PM10 Emissions Tracking Record

This is an example of a form that may be used to record data required by Permit Conditions PW001.

This worksheet covers the month of _____ in the Year _____

Column 1 (a)	Column 2 (a)	Column 3 (b)	Column 4	Column 5	Column 6 (c)
Emission Unit #	Emission Unit Description	Monthly Throughput (tons)	Emission Factor (lbs PM ₁₀ /ton)	Emission Factor Source	Monthly PM ₁₀ Emissions (tons/month)
EU001	Rotary Sand Dryer with Two Baghouses		0.0115	AP-42, Table 11.19.1	
EU002	Cement Line with Fabric Filter		0.004	Engineering Calculation	
EU003	Sand Line with Fabric Filter		0.0059	Engineering Calculation	
EU004	Fly Ash Silo (Main) with Fabric Filter		0.0049	AP-42, §11.12-2	
EU005	Cement Silo (Main Line) with Fabric Filter		0.00034	AP-42, §11.12-2	
EU006	Masonry Silo with Fabric Filter		0.47	AP-42, §11.12-2	
EU007	Sand/Gravel Line (Main Line) with Fabric Filter		0.00944	Engineering Calculation	
EU008	Sand/Gravel Packer with Fabric Filter		0.00944	Engineering Calculation	
EU009	Cement Silo (Related Line) with Fabric Filter		0.47	AP-42, §11.12-2	
EU010	Cement Silos B1, A1 & A2 with Fabric Filter		0.47	AP-42, §11.12-2	
EU011	Silo for Blended Materials B2 with Fabric Filter		0.47	AP-42, §11.12-2	
EU013	Sand/Gravel Transfer, Bins to Dryer		0.0064	WebFire: SCC30502503	
EU014	Sand/Gravel Transfer, Dryer to Bagging Bins with Two Baghouses		0.0013	WebFire: SCC30502760	
EU015	Lime Silo (lime silo A1 and blended material lime silo)		0.0049	AP-42, §11.12-2	
EU016	Cement Blender with Baghouse		0.0028	AP-42, §11.12-2	
(d) Startup, Shutdown, and Malfunction (SSM) PM ₁₀ Emissions (tons):					
(e) Total PM ₁₀ Emissions Calculated for this Month in tons:					
(f) 12-Month PM ₁₀ Emissions Total from Previous Month Attachment A, in tons:					
(g) Monthly PM ₁₀ Emissions Total (d) from Previous Year's Attachment A, in tons					
(h) Current 12-Month PM ₁₀ Emissions in tons: {(d) + (e) - (f)}					

Note:

- (a) Emission units listed in Section I. Installation Equipment Listing (both with and without limitations).
- (b) Enter total amount of material (Column C) used in month.
- (c) Monthly PM₁₀ Emissions in tons, Column 6 = [Column 3] x [Column 4] x [0.0005]
- (d) As reported to the Air Pollution Control Program's Compliance and Enforcement section for compliance with 10 CSR 10-6.050.
- (e) Summation of [Column 6] and SSM emissions (d) in tons.
- (f) 12-Month PM₁₀ emissions total (i) from last month's worksheet, Attachment A, in tons.
- (g) Monthly PM₁₀ Emissions Total (f) from Previous Year's Attachment A, in tons.
- (h) Calculate the new 12-month PM₁₀ emissions total. A 12-Month PM₁₀ emissions total (i) of less than 100 tons indicates compliance

STATEMENT OF BASIS

Voluntary Limitations

In order to qualify for this Intermediate State Operating Permit, the permittee has accepted voluntary, federally enforceable emission limitations. Per 10 CSR 10-6.065(5)(C)1.A.(VI), if these limitations are exceeded, the installation immediately becomes subject to 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit. It is the permittee's responsibility to monitor emission levels and apply for a part 70 operating permit far enough in advance to avoid this situation. This may mean applying more than eighteen months in advance of the exceedance, since it can take that long or longer to obtain a part 70 operating permit.

INSTALLATION DESCRIPTION

The Quikrete Companies, Inc. operates a dry mineral products mixing and packaging plant located on Marshall Road in Saint Louis County. Products include quick-set concrete mix, mortar cement, sand, and other related products.

Bulk materials are brought into the facility and stored in various silos or bins. Wet sand and gravel are dried in the rotary dryer, sized through a series of screens, and placed in bins; emissions from both processes are sent to two baghouses. The dried materials are sent via conveyors to the different mixing rooms and packaging lines. Various combinations of raw materials are mixed together and packaged into paper sacks for distribution. There are five packing lines and seven storage silos at the plant.

Updated Potential to Emit for the Installation and Reported Air Pollutant Emissions, in tons per year

Pollutants	Potential Emissions ¹	Reported Emissions				
		2017	2016	2015	2014	2013
Particulate Matter ≤ Ten Microns (PM ₁₀)	<100	5.94	18.34	14.67	9.50	11.60
Particulate Matter ≤ 2.5 Microns (PM _{2.5})	<100	1.73	5.35	14.28	9.50	1.39
Sulfur Oxides (SO _x)	0.23	0.00	0.01	0.00	0.01	0.01
Nitrogen Oxides (NO _x)	38.63	1.60	1.89	1.56	1.52	11.61
Volatile Organic Compounds (VOC)	2.12	0.08	0.10	0.08	0.08	0.07
Carbon Monoxide (CO)	32.45	1.35	1.59	1.31	1.28	1.17
Hazardous Air Pollutants (HAPs)	0.73	0.00	0.00	0.00	0.00	0.00

¹Each emission unit was evaluated at 8,760 hours of uncontrolled annual operation unless otherwise noted.

- PM₁₀ and PM_{2.5} PTE - Represents the potential emissions based on federally enforceable emission limitations of PM₁₀ of Permit Condition PW001.