

DRAFT

AIR EMISSION PERMIT NO. 07100019-005
Total Facility Operating Permit

IS ISSUED TO

SPECIALTY MINERALS, INC.
400 2nd Street
International Falls, Koochiching County, Minnesota 56649

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

This permit supersedes Air Emission Permit No. 07100019-004 and authorizes the Permittee to operate and modify the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

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 as are enforceable by U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

Permit Type: Federal; Part 70/Major for NSR/NSR Authorization

Operating Permit Issue Date: <issue date>

Expiration Date: <five years after issuance date> – Title I Conditions do not expire.

DRAFT

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

for John Linc Stine
Commissioner
Minnesota Pollution Control Agency

Permit Applications Table

Permit Type	Application Date	Permit Action
Combined PSD Construction and Total Facility Operating Permit	August 20, 2012 updated March 11, 2013	005

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NOTICE TO THE PERMITTEE:

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

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

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

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

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

Specialty Minerals, Inc. International Falls (Permittee) is located within the boundaries of the Boise White Paper (BWP) facility. The Permittee produces precipitated calcium carbonate (PCC) by combining water, lime (calcium oxide), and carbon dioxide under controlled conditions. Water and lime are combined to form calcium hydroxide slurry. CO₂-laden stack gas is added to the calcium hydroxide in reactors known as 'carbonators'. In the carbonators the reaction produces PCC in discrete batches that is then transferred to tanks.

Stack gas used in the process is from the BWP lime kiln (EU 340) and Boiler No. 2 (EU 430). The lime kiln can not fully meet the carbonators' gas demand so when the lime kiln is used as a gas source, additional gas from Boiler 2 is used (Scenario 1). Boiler 2 is capable of furnishing 100% of the carbonators gas demand (Scenario 2).

Currently, emissions sources are the three carbonators that produce PCC and a bin vent fabric filter dust collector on a lime storage silo.

This permit authorizes installation of a fourth carbonator to meet increased demand for PCC by BWP. The Permittee has also requested to relax limits previously taken to avoid Prevention of Significant Deterioration (PSD) permitting requirements. As a result, the requirements of 40 CFR § 52.21(r)(4) apply which require permitting of the facility as though the facility has not been constructed.

The facility is a chemical process plant, which is one of the listed source categories at § 52.21(b)(1)(i)(a)), and therefore is subject to the 100 ton per year (tpy) major source threshold. NO_x, CO, and VOC are subject to PSD permitting requirements because NO_x and CO emissions will exceed 100 tpy, and VOC emissions will exceed 40 tpy.

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-1 03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

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

Subject Item: Total Facility

What to do	Why to do it
SOURCE-SPECIFIC REQUIREMENTS	hdr
EU 006 Construction Authorization: The Permittee is authorized to add carbonator 4 (EU 006). This authorization to commence construction (as defined at 40 CFR Section 52.21(b)(9)) expires 18 months after the date of issuance of air emissions permit No. 07100019-005.	40 CFR Section 52.21(r)(2) and Minn. R. 7007.3000
Permit Appendices: This permit contains appendices as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in Appendix A. Modeling parameters in Appendix B are included for reference only as described elsewhere in Table A.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.0800, subp. 2
The parameters used in CO modeling for permit number 07100019-005 are listed in Appendix B of this permit. The parameters describe the operation of the facility at maximum permitted capacity. The purpose of listing the parameters in the appendix is to provide a benchmark for future changes.	Title I Condition: 40 CFR Section 52.21(k) and Minn. R. 7007.3000
The parameters used in NO ₂ modeling for permit number 07100019-005 are listed in Appendix B of this permit. The parameters describe the operation of the facility at maximum permitted capacity. For any changes that affect any modeled NO _x parameter or emission rate documented in Appendix B, or are an addition to information documented in Appendix B, a Remodeling Submittal requirement is triggered. This includes changes that do not require a permit amendment as well as changes that require any type of permit amendment.	Title I Condition: 40 CFR Section 52.21(k) and Minn. R. 7007.3000
Remodeling Submittal - NO _x : The Permittee must submit to the Commissioner for approval any revisions of the Appendix B parameters and must wait for written approval before making such changes. For changes that don't require a moderate or major amendment, written approval of the modeling may be given before permit issuance; however, the approval applies only to the modeling and not to any other changes. The information submitted must include the following: 1. For stack/vent sources - source emission rate, location, height, diameter, exit velocity, exit temperature, discharge direction, use of rain caps or rain hats, and, if applicable, locations and dimensions of nearby buildings; 2. For non-stack/vent sources - source emission rate, location, size and shape, release height, and, if applicable, any emission rate scalars, the initial lateral and vertical dimensions, and adjacent building heights. (cont.)	Title I Condition: 40 CFR Section 52.21(k) and Minn. R. 7007.3000
Remodeling Submittal - NO _x (cont.): The plume dispersion characteristics due to the revisions of Appendix B parameters must be equivalent to or better than the dispersion characteristics submitted September 4, 2012 and January 4, 2013, and approved by MPCA staff on November 8, 2012, and January 14, 2013, respectively. The Permittee shall demonstrate this equivalency in the proposal. If the information does not demonstrate equivalent or better dispersion characteristics, or if a conclusion cannot readily be made about the dispersion, the Permittee must submit full remodeling.	Title I Condition: 40 CFR Section 52.21(k) and Minn. R. 7007.3000
DETERMINING IF A PROJECT/MODIFICATION IS SUBJECT TO NSR The following four requirements under this header based on 40 CFR Section 52.21(r)(6) do not apply to the Carbonator 4 project authorized by permit No. 07100019-005.	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-2** 03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

<p>These requirements apply if a reasonable possibility (RP) as defined in 40 CFR Section 52.21(r)(6)(vi) exists that a proposed project, analyzed using the actual-to-projected-actual (ATPA) test (either by itself or as part of the hybrid test at Section 52.21(a)(2)(iv)(f)) and found to not be part of a major modification, may result in a significant emissions increase (SEI). If the ATPA test is not used for the project, or if there is no RP that the proposed project could result in a SEI, these requirements do not apply to that project. The Permittee is only subject to the Preconstruction Documentation requirement for a project where a RP occurs only within the meaning of Section 52.21(r)(6)(vi)(b).</p> <p>Even though a particular modification is not subject to New Source Review (NSR), or where there isn't a RP that a proposed project could result in a SEI, a permit amendment, recordkeeping, or notification may still be required by Minn. R. 7007.1150 - 7007.1500.</p>	<p>Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2</p>
<p>Preconstruction Documentation -- Before beginning actual construction on a project, the Permittee shall document the following:</p> <ol style="list-style-type: none"> 1. Project description 2. Identification of any emission unit (EU) whose emissions of an NSR pollutant could be affected 3. Pre-change potential emissions of any affected existing EU, and the projected post-change potential emissions of any affected existing or new EU. 4. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded due to increases not associated with the modification and that the EU could have accommodated during the baseline period, an explanation of why the amounts were excluded, and any creditable contemporaneous increases and decreases that were considered in the determination. <p>The Permittee shall maintain records of this documentation.</p>	<p>Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.1200, subp. 4; Minn. R. 7007.0800, subps. 4 & 5</p>
<p>The Permittee shall monitor the actual emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using the ATPA test, and the potential emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using potential emissions in the hybrid test. The Permittee shall calculate and maintain a record of the sum of the actual and potential (if the hybrid test was used in the analysis) emissions of the regulated pollutant, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit of any unit associated with the project.</p>	<p>Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 & 5</p>
<p>The Permittee must submit a report to the Agency if the annual summed (actual, plus potential if used in hybrid test) emissions differ from the preconstruction projection and exceed the baseline actual emissions by a significant amount as listed at 40 CFR Section 52.21(b)(23). Such report shall be submitted to the Agency within 60 days after the end of the year in which the exceedances occur. The report shall contain:</p> <ol style="list-style-type: none"> a. The name and ID number of the facility, and the name and telephone number of the facility contact person b. The annual emissions (actual, plus potential if any part of the project was analyzed using the hybrid test) for each pollutant for which the preconstruction projection and significant emissions increase are exceeded. c. Any other information, such as an explanation as to why the summed emissions differ from the preconstruction projection. 	<p>Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 & 5</p>
OPERATIONAL REQUIREMENTS	hdr
<p>The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080. Compliance shall be demonstrated upon written request by the MPCA.</p>	<p>40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subp. 7(A), 7(L), & 7(M); Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080</p>
<p>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.</p>	<p>Minn. R. 7011.0020</p>
<p>Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.</p>	<p>Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-3**

03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

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 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, subps. 14 and 16(J)
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
PERFORMANCE TESTING	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Performance Test Notifications and Submittals: Performance Tests are due as outlined in Table A of the permit. See Table B for additional testing requirements. Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test The Notification, Test Plan, and Test Report may be submitted in an alternative format as allowed by Minn. R. 7017.2018.	Minn. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2
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
MONITORING REQUIREMENTS	hdr
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, 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)
RECORDKEEPING	hdr
Recordkeeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-4** 03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

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)
When 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 expiring permits, these records shall be kept for a period of five years from the date the change was made or until permit reissuance, whichever is longer. For nonexpiring 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 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
REPORTING/SUBMITTALS	hdr
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
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
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
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
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance. The Permittee shall submit the report on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3100
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-5** 03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

Subject Item: GP 001 Carbonators**Associated Items:** EU 001 Carbonator 1

EU 002 Carbonator 2

EU 003 Carbonator 3

EU 006 Carbonator 4

SV 001 Carbonators Stack

What to do	Why to do it
COMPLIANCE DEMONSTRATION	hdr
<p>NOx Compliance Demonstration:</p> <p>Except as specified elsewhere under these GP 001 NOx compliance demonstration requirements, the Permittee shall demonstrate compliance with the EU 001, EU 002, EU 003, EU 006, and SV 001 NOx limits by verifying the Boise White Paper (BWP; Facility ID 07100002) EU 340 Lime Kiln and EU 430 Boiler 2 NOx emissions comply with the applicable limits in the most current BWP permit. The applicable BWP NOx limits in the most current permit (No. 07100002-012) are as follows:</p> <p>1. BWP EU 340 Lime Kiln: 34.9 lb/hr (3-hour average). Compliance with this limit is determined through periodic stack testing of BWP EU 340/SV 340 as required by permit No. 07100002-012. The Permittee shall obtain and maintain a copy of the most current EU 340 NOx stack test MPCA Notice of Compliance (NOC) from BWP no later than 30 days after issuance of the NOC by the MPCA.</p> <p>(cont.)</p>	<p>Title I Condition: 40 CFR Section 52.21(j) BACT limit and 40 CFR Section 52.21(k) modeling-based limit; Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5</p>
<p>NOx Compliance Demonstration (cont.):</p> <p>2. BWP EU 430 Boiler 2: 100.2 lb/hr (30-day rolling average). Compliance with this limit is determined by MR 430 NOx continuous emissions monitoring system (CEMS) that measures EU 430/SV 431 NOx emissions, as required by permit No. 07100002-012. If BWP replaces MR 430 with another certified NOx CEMS, the Permittee shall use the certified replacement CEMS for compliance determination.</p> <p>No later than 30 days after the end of each calendar quarter, the Permittee shall obtain the 30-day rolling average lb/hr NOx emissions data for each day in the calendar quarter, from BWP measured by MR 430 (or certified replacement NOx CEMS).</p> <p>The Permittee shall maintain copies of each NOx NOC letter and all NOx CEMS data for a period of not less than 5 years from the date of each letter or CEMS measurement, respectively.</p> <p>(cont.)</p>	<p>Title I Condition: 40 CFR Section 52.21(j) BACT limit and 40 CFR Section 52.21(k) modeling-based limit; Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5</p>
<p>NOx Compliance Demonstration (cont.):</p> <p>EU 001, EU 002, EU 003, EU 006, and SV 001 NOx emissions are in compliance with the NOx emission limits that apply to these subject items, if BWP EU 340 and EU 430 NOx emissions are in compliance with BWP EU 340 and EU 430 NOx permit limits, respectively.</p> <p>The previously described compliance demonstration method does not affect the commissioner's authority to require the Permittee to conduct EPA reference method testing of SV 001 NOx emissions for determining compliance with EU 001, EU 002, EU 003, EU 006, and SV 001 NOx emission limits. If such testing is required, it shall be the method of compliance demonstration.</p> <p>If SV 001 NOx emissions are tested, such emissions are in compliance with the EU 001, EU 002, EU 003, EU 006, and SV 001 NOx limits if the SV 001 test result is less than or equal to 45.74 lb/hr when the gas source is BWP EU 340 and BWP EU 430, and less than or equal to 28.27 lb/hr when the gas source is only BWP EU 430.</p>	<p>Title I Condition: 40 CFR Section 52.21(j) BACT limit and 40 CFR Section 52.21(k) modeling-based limit; Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-6** 03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

<p>CO Compliance Demonstration:</p> <p>Except as specified elsewhere under these GP 001 CO compliance demonstration requirements, the Permittee shall demonstrate compliance with the EU 001, EU 002, EU 003, EU 006, and SV 001 CO limits by verifying the Boise White Paper (BWP; Facility ID 07100002) EU 340 Lime Kiln and EU 430 Boiler 2 CO emissions comply with the applicable limits in the most current BWP permit. The applicable BWP CO limits in the most current permit (No. 07100002-012) are as follows:</p> <p>1. BWP EU 340 Lime Kiln: 23.7 lb/hr (3-hour average). Compliance with this limit is determined through periodic stack testing of BWP EU 340/SV 340 as required by permit No. 07100002-012. The Permittee shall obtain and maintain a copy of the most current EU 340 CO stack test MPCA Notice of Compliance (NOC) from BWP no later than 30 days after issuance of the NOC by the MPCA.</p> <p>(cont.)</p>	<p>Title I Condition: 40 CFR Section 52.21(j) BACT limit and 40 CFR Section 52.21(k) modeling-based limit; Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5</p>
<p>CO Compliance Demonstration (cont.):</p> <p>2. BWP EU 430 Boiler 2: 800 lb/hr (one-hour average). Compliance with this limit is determined by MR 904 CO CEMS that measures EU 430/SV 431 CO emissions, as required by permit No. 07100002-012. If BWP replaces MR 904 with another certified CO CEMS, the Permittee shall use the certified replacement CEMS for compliance determination.</p> <p>3. BWP EU 430 Boiler 2: 200 lb/hr (12-month rolling average). Compliance with this limit is determined by the MR 904 CO CEMS that measures EU 430/SV 431 CO emissions, as required by permit No. 07100002-012. If BWP replaces MR 904 with another certified CO CEMS, the Permittee shall use the certified replacement CEMS for compliance determination.</p>	<p>Title I Condition: 40 CFR Section 52.21(j) BACT limit and 40 CFR Section 52.21(k) modeling-based limit; Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5</p>
<p>CO Compliance Demonstration (cont.):</p> <p>No later than 30 days after the end of each calendar quarter, the Permittee shall obtain the hourly one-hour average and 12-month rolling average CO emissions data for each hour and 12-month period, respectively, in the calendar quarter, from BWP measured by MR 904 (or certified replacement CO CEMS).</p> <p>The Permittee shall maintain copies of each NOC letter and all CEMS data for a period of not less than 5 years from the date of each letter or CEMS measurement, respectively.</p> <p>EU 001, EU 002, EU 003, EU 006, and SV 001 CO emissions are in compliance with the CO emission limits that apply to these subject items, if BWP EU 340 and EU 430 CO emissions are in compliance with BWP EU 340 and EU 430 CO permit limits, respectively.</p> <p>(cont.)</p>	<p>Title I Condition: 40 CFR Section 52.21(j) BACT limit and 40 CFR Section 52.21(k) modeling-based limit; Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5</p>
<p>CO Compliance Demonstration (cont.):</p> <p>The previously described CO compliance demonstration method does not affect the commissioner's authority to require the Permittee to conduct EPA reference method testing of SV 001 CO emissions for determining compliance with EU 001, EU 002, EU 003, EU 006, and SV 001 CO emission limits. If such testing is required, it shall be the method of compliance demonstration.</p> <p>If SV 001 CO emissions are tested, such emissions are in compliance with the EU 001, EU 002, EU 003, EU 006, and SV 001 CO limits if the SV 001 test result is less than or equal to 121.42 lb/hr when the gas source is BWP EU 340 and BWP EU 430, and less than or equal to 225.73 lb/hr when the gas source is only BWP EU 430.</p>	<p>Title I Condition: 40 CFR Section 52.21(j) BACT limit and 40 CFR Section 52.21(k) modeling-based limit; Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-7** 03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

<p>VOC Compliance Demonstration:</p> <p>Except as specified elsewhere under these GP 001 VOC compliance demonstration requirements, the Permittee shall demonstrate compliance with the EU 001, EU 002, EU 003, and EU 006 VOC limits by verifying the Boise White Paper (BWP; Facility ID 07100002) EU 340 Lime Kiln and EU 430 Boiler 2 VOC emissions comply with the applicable limits in the most current BWP permit. The applicable BWP VOC limits in the most current permit (No. 07100002-012) are as follows:</p> <p>1. BWP EU 340 Lime Kiln: 11.4 lb/hr (3-hour average), measured as carbon excluding methane. Compliance with this limit is determined through periodic stack testing of BWP EU 340/SV 340 as required by permit No. 07100002-012. The Permittee shall obtain and maintain a copy of the most current EU 340 VOC stack test MPCA Notice of Compliance (NOC) from BWP no later than 30 days after issuance of the NOC by the MPCA.</p> <p>(cont.)</p>	<p>Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5</p>
<p>VOC Compliance Demonstration (cont.):</p> <p>2. BWP EU 430 Boiler 2: 40.2 lb/hr (3-hour average) measured as carbon excluding methane. Compliance with this limit is determined through periodic stack testing of BWP EU 430/SV 431 as required by permit No. 07100002-012. The Permittee shall obtain and maintain a copy of the most current EU 430 VOC stack test MPCA Notice of Compliance (NOC) from BWP no later than 30 days after issuance of the NOC by the MPCA.</p> <p>The Permittee shall maintain copies of each NOC letter for a period of not less than 5 years from the date of each letter.</p> <p>(cont.)</p>	<p>Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5</p>
<p>VOC Compliance Demonstration (cont.):</p> <p>EU 001, EU 002, EU 003, and EU 006 VOC emissions are in compliance with the VOC emission limits that apply to these subject items, if BWP EU 340 and EU 430 VOC emissions are in compliance with BWP EU 340 and EU 430 VOC permit limits, respectively.</p> <p>The previously described VOC compliance demonstration method does not affect the commissioner's authority to require the Permittee to conduct EPA reference method testing of SV 001 VOC emissions for determining compliance with EU 001, EU 002, EU 003, and EU 006 VOC emission limits. If such testing is required, it shall be the method of compliance demonstration.</p> <p>If SV 001 VOC emissions are tested, such emissions are in compliance with the EU 001, EU 002, EU 003, and EU 006 VOC limits if the SV 001 test result is less than or equal to 15.86 lb/hr when the gas source is BWP EU 340 and BWP EU 430, and less than or equal to 11.34 lb/hr when the gas source is only BWP EU 430.</p>	<p>Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-8**

03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

Subject Item: SV 001 Carbonators Stack**Associated Items:** EU 001 Carbonator 1

EU 002 Carbonator 2

EU 003 Carbonator 3

EU 006 Carbonator 4

GP 001 Carbonators

What to do	Why to do it
EMISSION LIMITS	hdr
Carbon Monoxide: less than or equal to 225.73 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k) modeling-based limit; Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 45.74 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k) modeling-based limit; Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Refer to GP 001 for NOx and CO compliance demonstration requirements.	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-9** 03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

Subject Item: EU 001 Carbonator 1**Associated Items:** GP 001 Carbonators

SV 001 Carbonators Stack

What to do	Why to do it
Carbon Monoxide: less than or equal to 30.35 lbs/hour using 1-Hour Average when source gas is from Boise White Paper (BWP) EU 340 Lime Kiln and BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 56.43 lbs/hour using 1-Hour Average when all source gas is from BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 11.84 lbs/hour using 12-month Rolling Average when source gas is from BWP EU 340 Lime Kiln and BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 14.11 lbs/hour using 12-month Rolling Average when all source gas is from BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 11.44 lbs/hour using 3-hour Average when source gas is from BWP EU 340 Lime Kiln and BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 7.07 lbs/hour using 30-day Rolling Average when all source gas is from BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Volatile Organic Compounds: less than or equal to 3.97 lbs/hour using 3-hour Average when source gas is from BWP EU 340 Lime Kiln and BWP EU 430 Boiler 2, measured as carbon excluding methane.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Volatile Organic Compounds: less than or equal to 2.84 lbs/hour using 3-hour Average when all source gas is from BWP EU 430 Boiler 2, measured as carbon excluding methane.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1(A)
Refer to GP 001 for NOx, CO, and VOC compliance demonstration requirements.	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-10** 03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

Subject Item: EU 002 Carbonator 2**Associated Items:** GP 001 Carbonators

SV 001 Carbonators Stack

What to do	Why to do it
Carbon Monoxide: less than or equal to 30.35 lbs/hour using 1-Hour Average when source gas is from Boise White Paper (BWP) EU 340 Lime Kiln and BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 56.43 lbs/hour using 1-Hour Average when all source gas is from BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 11.84 lbs/hour using 12-month Rolling Average when source gas is from BWP EU 340 Lime Kiln and BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 14.11 lbs/hour using 12-month Rolling Average when all source gas is from BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 11.44 lbs/hour using 3-hour Average when source gas is from BWP EU 340 Lime Kiln and BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 7.07 lbs/hour using 30-day Rolling Average when all source gas is from BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Volatile Organic Compounds: less than or equal to 3.97 lbs/hour using 3-hour Average when source gas is from BWP EU 340 Lime Kiln and BWP EU 430 Boiler 2, measured as carbon excluding methane.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Volatile Organic Compounds: less than or equal to 2.84 lbs/hour using 3-hour Average when all source gas is from BWP EU 430 Boiler 2, measured as carbon excluding methane.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1(A)
Refer to GP 001 for NOx, CO, and VOC compliance demonstration requirements.	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-11** 03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

Subject Item: EU 003 Carbonator 3**Associated Items:** GP 001 Carbonators

SV 001 Carbonators Stack

What to do	Why to do it
Carbon Monoxide: less than or equal to 30.35 lbs/hour using 1-Hour Average when source gas is from Boise White Paper (BWP) EU 340 Lime Kiln and BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 56.43 lbs/hour using 1-Hour Average when all source gas is from BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 11.84 lbs/hour using 12-month Rolling Average when source gas is from BWP EU 340 Lime Kiln and BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 14.11 lbs/hour using 12-month Rolling Average when all source gas is from BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 11.44 lbs/hour using 3-hour Average when source gas is from BWP EU 340 Lime Kiln and BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 7.07 lbs/hour using 30-day Rolling Average when all source gas is from BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Volatile Organic Compounds: less than or equal to 3.97 lbs/hour using 3-hour Average when source gas is from BWP EU 340 Lime Kiln and BWP EU 430 Boiler 2, measured as carbon excluding methane.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Volatile Organic Compounds: less than or equal to 2.84 lbs/hour using 3-hour Average when all source gas is from BWP EU 430 Boiler 2, measured as carbon excluding methane.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1(A)
Refer to GP 001 for NOx, CO, and VOC compliance demonstration requirements.	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-12**

03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

Subject Item: EU 004 Lime Silo (400 tons; SV 002)**Associated Items:** CE 004 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 002 Lime Silo Dust Collector

What to do	Why to do it
Process Throughput: less than or equal to 78000 tons/year using 12-month Rolling Sum	Title I Condition: To avoid the PM, PM10, and PM2.5 significant emissions thresholds under 40 CFR Section 52.21(b)(23)(i); Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Recordkeeping - EU 004 Lime Silo Receiving: 1. Once each day of EU 004 operation the Permittee shall calculate and record the tons of lime received by EU 004; 2. By the last day of each month, the Permittee shall calculate and record the tons of lime received by EU 004 during the previous month, and during the previous 12-month period.	Title I Condition: To avoid the PM, PM10, and PM2.5 significant emissions thresholds under 40 CFR Section 52.21(b)(23)(i); Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5
Refer to subject item CE 004 for pollution control equipment requirements.	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-13** 03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

Subject Item: EU 006 Carbonator 4**Associated Items:** GP 001 Carbonators

SV 001 Carbonators Stack

What to do	Why to do it
Carbon Monoxide: less than or equal to 30.35 lbs/hour using 1-Hour Average when source gas is from Boise White Paper (BWP) EU 340 Lime Kiln and BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 56.43 lbs/hour using 1-Hour Average when all source gas is from BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 11.84 lbs/hour using 12-month Rolling Average when source gas is from BWP EU 340 Lime Kiln and BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 14.11 lbs/hour using 12-month Rolling Average when all source gas is from BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 11.44 lbs/hour using 3-hour Average when source gas is from BWP EU 340 Lime Kiln and BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 7.07 lbs/hour using 30-day Rolling Average when all source gas is from BWP EU 430 Boiler 2.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Volatile Organic Compounds: less than or equal to 3.97 lbs/hour using 3-hour Average when source gas is from BWP EU 340 Lime Kiln and BWP EU 430 Boiler 2, measured as carbon excluding methane.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Volatile Organic Compounds: less than or equal to 2.84 lbs/hour using 3-hour Average when all source gas is from BWP EU 430 Boiler 2, measured as carbon excluding methane.	Title I Condition: 40 CFR Section 52.21(j) BACT limit; Minn. R. 7007.3000
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1(A)
Refer to GP 001 for NOx, CO, and VOC compliance demonstration requirements.	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-14** 03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

Subject Item: CE 004 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 004 Lime Silo (400 tons; SV 002)

What to do	Why to do it
The Permittee shall operate and maintain CE 004 so it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 99.0 percent control efficiency	Title I Condition: To avoid the PM significant emissions threshold under 40 CFR Section 52.21(b)(23)(i) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2 and 14
The Permittee shall operate and maintain CE 004 so it achieves an overall control efficiency for PM < 10 micron: greater than or equal to 99.0 percent control efficiency	Title I Condition: To avoid the PM10 significant emissions threshold under 40 CFR Section 52.21(b)(23)(i) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2 and 14
The Permittee shall operate and maintain CE 004 so it achieves an overall control efficiency for PM < 2.5 micron: greater than or equal to 99.0 percent control efficiency	Title I Condition: To avoid the PM2.5 significant emissions threshold under 40 CFR Section 52.21(b)(23)(i) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2 and 14
The Permittee shall operate and maintain CE 004 at all times that EU 004 is in operation. The Permittee shall document periods of non-operation of CE 004.	Title I Condition: To avoid the PM, PM10, and PM2.5 significant emissions thresholds under 40 CFR Section 52.21(b)(23)(i) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2 and 14
Visible Emissions: The Permittee shall check the CE 004 stack (SV 002) for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the CE 004 pressure drop, once each day of operation.	Title I Condition: To avoid the PM, PM10, and PM2.5 significant emissions thresholds under 40 CFR Section 52.21(b)(23)(i) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 and 5
Pressure Drop: greater than or equal to 0.5 inches of water column and less than or equal to 6.0 inches of water column unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. The Permittee shall record the pressure drop at least once each day when in operation when a daily visible emissions evaluation is not conducted during the day of operation.	Title I Condition: To avoid the PM, PM10, and PM2.5 significant emissions thresholds under 40 CFR Section 52.21(b)(23)(i) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 and 5
Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading. The Permittee shall record the pressure drop in inches of water column, or whether or not any visible emissions were observed.	Title I Condition: To avoid the PM, PM10, and PM2.5 significant emissions thresholds under 40 CFR Section 52.21(b)(23)(i) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 and 5
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - the pressure drop is outside the prescribed range; or, - visible emissions are observed; or, - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall eliminate visible emissions, return the pressure drop to the permitted range, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for the filter.	Minn. R. 7007.0800, subp. 4, 5, and 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.	Minn. R. 7007.0800, subp. 4
Periodic Inspections: At least once per calendar year, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5, and 14
The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14

TABLE B: SUBMITTALS

B-1 03/12/13

Facility Name: Specialty Minerals Inc
Permit Number: 07100019 - 005

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

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

Send submittals that are required to be submitted to the U.S. 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 parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

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

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
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

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

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS**B-2** 03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup of EU 006. The notification shall specify the date of EU 006 initial startup.	EU006
Notification of the Date Construction Began	due 30 days after Start Of Construction of EU 006. The notification shall specify the date that EU 006 construction commenced.	EU006

TABLE B: RECURRENT SUBMITTALS**B-3** 03/12/13

Facility Name: Specialty Minerals Inc

Permit Number: 07100019 - 005

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 12/22/2008. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 31 days after end of each calendar year starting 12/22/2008 (for the previous calendar year). The Permittee shall submit this on a form approved by the Commissioner, both to the Commissioner and to the US EPA Region V office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

APPENDICES

Facility Name: Specialty Minerals, Inc.
Permit Number: 07100019-005

Appendix A: Insignificant Activities Required To Be Listed

Minn. R. 7007.1300	Rule Description of the Activity	Applicable Requirement
Subp. 3(H)	Brazing, soldering or welding equipment	Minn. R. 7011.0715
Subp. 3(K)	Infrequent use of spray paint equipment for routine housekeeping or plant upkeep activities not associated with primary production processes at the stationary source	Minn. R. 7011.0715
Subp. 3(G)	Emissions from a laboratory	Minn. R. 7011.0715
Subp. 3(I)	Railcar lime receiving	Minn. R. 7011.0715

APPENDICES

Facility Name: Specialty Minerals, Inc.
 Permit Number: 07100019-005

Appendix B: Modeled Parameters

Stack/ Vent	CO* (g/sec)	CO* (lb/hr)	CO* (g/sec)	CO* (lb/hr)	NO ₂ ** (g/sec)	NO ₂ ** (lb/hr)	X (meters)	Y (meters)	Base Elevation (meters)	model height (m)	model height (ft)	model temp (°K)	model temp (°F)	model stack velocity (m/sec)	model stack flow rate (acfm)	model stack diameter (m)	model stack diameter (ft)
SMISV001	100.8	800.0	100.8	800.0	6.07	48.19	470157.1	5383647.7	342.50	30.48	100.0	336.5	146.0	18.58	25848	0.914	3.0

* The 1-hour and 8-hour CO modeling were modeled at 800 lb/hr instead of 225.73 lb/hr; However worst case SMISV001 1-hour and 8-hour emission rate (Operating Scenario #2 All Boiler Flow) is 225.73 lb/hr (800 lb/hr is the BWP EU 430 1-hour CO limit)

** Worst case emission rate (Operating Scenario #1 Maximum BWP EU 340 Kiln Flow With Balance from EU 430 Boiler 2 Flow)