



S.C. Department of Health and  
Environmental Control

## **Bureau of Air Quality**

# **General Conditional Major Operating Permit**

## **Nonmetallic Mineral Processing Plants**

Pursuant to the provisions of the *Pollution Control Act*, Sections 48-1-50(5) 48-1-100(A) and 48-1-110(a), the *1976 Code of Laws of South Carolina*, as amended, and *South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards*, the Bureau of Air Quality authorizes the operation of these sources in accordance with the valid construction permits, and the plans, specifications and other information submitted in an Operating Permit Application. All official correspondence, plans, permit applications and written statements are an integral part of the permit. Any false information or misrepresentation in the application for a construction or operating permit may be grounds for permit revocation.

The operation of these sources are subject to and conditioned upon the terms, limitations, standards, and schedules contained herein or as specified by this permit and its accompanying attachments.

**Issue Date:**  
**Renewal Due Date:** June 30, 2027

**September 19, 2017**  
**Expiration Date:** September 30, 2027

A handwritten signature in blue ink that reads "Steve McCaslin".

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**Steve McCaslin, P.E., Director**  
**Air Permitting Division**  
**Bureau of Air Quality**

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<b>RECORD OF REVISIONS</b>	
<b>Date</b>	<b>Description of Changes</b>

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**A. APPLICABILITY**

Condition Number	Condition
A.1	<p>A facility may operate under the conditions contained herein if it meets the following criteria, as applicable:</p> <ol style="list-style-type: none"> <li>1. The facility shall be a nonmetallic mineral processing plant. For the purpose of this permit:               <ol style="list-style-type: none"> <li>a. A nonmetallic mineral processing plant means any combination of equipment that is used to crush or grind any nonmetallic mineral.</li> <li>b. A Nonmetallic mineral means any of the following minerals or any mixture of which the majority is any of the following minerals: Crushed and Broken Stone, Sand and Gravel, Clay, Gypsum Sodium Compounds, Pumice, Gilsonite, Talc and Pyrophyllite, Boron, Barite, Fluorospars, Feldspar, Diatomite, Perlite, Vermiculite, Mica, and Kyanite.</li> <li>c. It may or may not consist of any of the following: crushing, screening, conveying, transfer operations, internal combustion engines, generators, storage piles, and roads</li> </ol> </li> <li>2. The facility does not use dryers, grinding mills, air conveying systems, air classifiers, or calciners.</li> <li>3. The only method used to control emissions from the process equipment is wet suppression or water carryover.</li> <li>4. The stationary internal combustion engines are electric or fired on low sulfur (500 ppm or less) fuel.</li> </ol>
A.2	Facilities covered under this permit shall have federally enforceable limits for the avoidance of Prevention of Significant Deterioration (PSD) and Title V.

**B. FACILITY WIDE**

Condition Number	Conditions
B.1	(S.C. Regulation 61-62.1, Section II.J.1.g) A copy of the Department issued construction and/or operating permit must be kept readily available at the facility at all times. The owner or operator shall maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze emissions or discharges in accordance with prescribed methods at locations, intervals, and procedures as the Department shall prescribe; and provide such other information as the Department reasonably may require. All records required to demonstrate compliance with the limits established under this permit shall be retained for a period of at least 5 years from the date the record was generated. Records generated in the last 24 calendar months must be maintained on site and shall be made available to a Department representative upon request. Older records may be stored off site but shall be made available within five business days of Department request.

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**B. FACILITY WIDE**

Condition Number	Conditions
B.2	<p><b>Source Testing</b></p> <p>For any source test required under an applicable standard or permit condition, the owner, operator, or representative shall comply with S.C. Regulation 61-62.1, Section IV - Source Tests.</p> <p>Unless approved otherwise by the Department, the owner, operator, or representative shall ensure that source tests are conducted while the source is operating at the maximum expected production rate or other production rate or operating parameter which would result in the highest emissions for the pollutants being tested. Some sources may have to spike fuels or raw materials to avoid being subjected to a more restrictive feed or process rate. Any source test performed at a production rate less than the rated capacity may result in permit limits on emission rates, including limits on production if necessary.</p> <p>The owner or operator shall comply with any limits that result from conducting a source test at less than rated capacity. A copy of the most recent Department issued source test summary letter, whether it imposes a limit or not, shall be maintained with the operating permit, for each source that is required to conduct a source test.</p> <p>Site-specific test plans and amendments, notifications, and source test reports shall be submitted to the Manager of the Source Evaluation Section, Bureau of Air Quality.</p>
B.3	<p><b>Opacity</b></p> <p>(S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began on or before December 31, 1985, emissions from these sources (including fugitive emissions) shall not exhibit an opacity greater than 40%.</p> <p>(S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began after December 31, 1985, emissions from these sources (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p>
B.4	<p><b>Aggregate Processing</b></p> <p>(S.C. Regulation 61-62.5, Standard No. 4, Section VIII) Particulate matter emissions shall be limited to the rate specified by use of the following equations:</p> <p style="padding-left: 40px;">For process weight rates less than or equal to 30 tons per hour  <math display="block">E = (F) 4.10P^{0.67} \text{ and}</math> For process weight rates greater than 30 tons per hour  <math display="block">E = (F) 55.0P^{0.11} - 40</math> Where E = the allowable emission rate in pounds per hour  P = process weight rate in tons per hour  F = effect factor from Table B in S.C. Regulation 61-62.5, Standard No. 4</p>

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**B. FACILITY WIDE**

Condition Number	Conditions
B.5	<p><b>Non-Enclosed Operations and Fugitive Dust</b></p> <p>(S.C. Regulation 61-62.5, Standard No. 4, Section X) All non-enclosed operations shall be conducted in such a manner that a minimum of particulate matter becomes airborne. In no case shall established ambient air quality standards be exceeded at or beyond the property line. The owner/operator of all such operations shall maintain dust control of the premises and any roadway owned or controlled by the owner/operator by paving or other suitable measures. Oil treatment is prohibited.</p> <p>(S.C. Regulation 61-62.6) Fugitive particulate matter (PM) emissions from material handling, process equipment, control equipment, or storage piles will be minimized to the maximum extent possible. This will include proper maintenance of the control system such as scheduled inspections, replacement of damaged or worn parts, etc. Fugitive emissions from dust buildup will be controlled by proper housekeeping and/or wet suppression.</p> <p>Compliance with non-enclosed operations and fugitive dust requirements shall be demonstrated by developing a facility-wide fugitive dust control plan for controlling fugitive emissions from process operations, truck traffic, storage piles, and any other areas within the permitted facility where fugitive dust emissions can be generated. The plan shall be developed and submitted to the Director of Engineering Services for approval within 180 days from the coverage date of this permit. The owner/operator shall implement the plan within 30 days of approval and create a schedule for its periodic review and update as necessary. The plan shall be kept and maintained on-site with a record of revisions. The plan shall address and/or contain at a minimum the following:</p> <ol style="list-style-type: none"> <li>1. Water Trucks <ol style="list-style-type: none"> <li>a. Weekly operation and maintenance checks of water trucks</li> <li>b. Operating scenarios for water truck failures or inadequacies</li> <li>c. Dates the water trucks did not operate and the alternative(s) dust control method used</li> </ol> </li> <li>2. Truck Traffic <ol style="list-style-type: none"> <li>a. Road speed limits</li> <li>b. Vehicle loading, off-loading, transportation or dumping of material procedures</li> <li>c. Spillage and residual materials clean-up procedures</li> <li>d. Weekly operation and maintenance checks of sprinklers</li> <li>e. Signage with respect to SC Code of Laws Sections 56-5-4100 and 56-5-4110 (which requires haul trucks transporting aggregate from all quarries to prevent the escape of materials loaded onto the vehicles)</li> </ol> </li> <li>3. Storage Piles <ol style="list-style-type: none"> <li>a. Material stock piling procedures</li> </ol> </li> <li>4. Process Equipment <ol style="list-style-type: none"> <li>a. Weekly operation and maintenance checks of all plant equipment and enclosures</li> </ol> </li> </ol>

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**B. FACILITY WIDE**

Condition Number	Conditions
	<p style="text-align: center;">b. Spillage and residual materials clean-up procedures c. Written guidelines on how to handle opacity problems</p> <p>The owner/operator shall develop logs or use other approved methods to comply with the requirements of the plan.</p>
B.6	<p><b>Wet Suppression Systems</b></p> <p>The owner/operator shall operate its wet suppression system except as necessary for elevated material moisture content (i.e. rainfall).</p> <p>In case the wet suppression system is not operating properly, then a portable water spray system is acceptable for use until the permanent water spray system is back in proper operation. If a portable water system is not available, then the process shall be shut down until the permanent water spray system is back in proper operation.</p> <p>The owner/operator shall perform weekly inspections of all wet suppression related equipment including a check that water is flowing to discharge spray nozzles in the wet suppression system. The owner/operator must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the owner/operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner/operator must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken in the logbook. The weekly inspections required in this condition meets the requirements of monthly inspections in 40 CFR 60.674(b).</p>
B.7	<p><b>Title V and PSD Avoidance</b></p> <p>(S.C. Regulation 61-62.1, Section II.G and Section II.E) This facility is a potential major source for PM, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions. The facility has agreed to federally enforceable operating limitations to limit its potential to emit to less than 250 tons per year for PM and PM<sub>10</sub> emissions to avoid PSD and less than 100 tons per year for PM<sub>10</sub>, and PM<sub>2.5</sub> emissions to avoid Title V.</p> <p>The owner/operator shall show compliance with these limits by operating its control devices in accordance with the conditions of this permit. The logs required in this permit and any corrective actions taken shall be maintained on site. However, in the event of enforcement actions or complaints, the Department may require that these the logs be reported annually.</p>

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**C. SOURCES SUBJECT TO 40 CFR 60 SUBPART 000**

Condition Number	Condition										
C.1	<p><b>General</b></p> <p>This facility is subject to the provisions of 40 CFR Part 60, New Source Performance Standards General Provisions, Subparts A and Standards of Performance for Nonmetallic Mineral Processing Plants, Subpart 000. Existing affected sources shall comply with the applicable provisions by the compliance date specified in Subparts 000. Any new affected sources shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted.</p>										
C.2	<p><b>Applicability</b></p> <p>40 CFR 60.670(a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station.</p> <p>40 CFR 60.670(e) An affected facility under paragraph (a) of this section that commences construction, modification, or reconstruction after August 31, 1983, is subject to the requirements of this part.</p>										
C.3	<p><b>Standards for PM</b></p> <p>(40 CFR 60.672(b)) Affected facilities must meet the fugitive emission limits and compliance requirements in Table 3 of this subpart within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under 40 CFR 60.11. The requirements in Table 3 of this subpart apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.</p> <p>(40 CFR 60.672(d)) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="padding: 5px;">The owner or operator must meet the following fugitive emissions limit and must demonstrate compliance with these limits by conducting performance tests as listed below for:</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility.</td> </tr> <tr> <td style="text-align: center; padding: 5px;"><b>Affected facilities that commenced construction, modification, or reconstruction after</b></td> <td style="text-align: center; padding: 5px;"><b>Affected facilities that commence construction, modification, or reconstruct on or after</b></td> </tr> <tr> <td style="text-align: center; padding: 5px;"><b>August 31, 1983 but before April 22, 2008</b></td> <td style="text-align: center; padding: 5px;"><b>April 22, 2008</b></td> </tr> <tr> <td style="text-align: center; padding: 5px;">10 percent opacity</td> <td style="text-align: center; padding: 5px;">7 percent opacity</td> </tr> </table>	The owner or operator must meet the following fugitive emissions limit and must demonstrate compliance with these limits by conducting performance tests as listed below for:		Screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility.		<b>Affected facilities that commenced construction, modification, or reconstruction after</b>	<b>Affected facilities that commence construction, modification, or reconstruct on or after</b>	<b>August 31, 1983 but before April 22, 2008</b>	<b>April 22, 2008</b>	10 percent opacity	7 percent opacity
The owner or operator must meet the following fugitive emissions limit and must demonstrate compliance with these limits by conducting performance tests as listed below for:											
Screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility.											
<b>Affected facilities that commenced construction, modification, or reconstruction after</b>	<b>Affected facilities that commence construction, modification, or reconstruct on or after</b>										
<b>August 31, 1983 but before April 22, 2008</b>	<b>April 22, 2008</b>										
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**C. SOURCES SUBJECT TO 40 CFR 60 SUBPART 000**

Condition Number	Condition	
	<p>An initial performance test according to 40 CFR 60.11 of this part and 40 CFR 60.675 of this subpart</p>	<p>An initial performance test according to 40 CFR 60.11 and 40 CFR 60.675; and Periodic inspections of water sprays according to 40CFR 60.674(b) and 60.676(b);</p> <p>A repeat performance test according to 40 CFR 60.11 of this part and 40 CFR 60.675 within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays. Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in 40 CFR 60.674(b) and 60.676(b) are exempt from this 5-year repeat testing requirement.</p>
<p>The owner or operator must meet the following fugitive emissions limit and must demonstrate compliance with these limits by conducting performance tests as listed below for:</p> <p>Crushers at which a capture system is not used.</p>		
	<p><b>Affected facilities that commenced construction, modification, or reconstruction after</b></p> <p><b>August 31, 1983 but before April 22, 2008</b></p>	<p><b>Affected facilities that commence construction, modification, or reconstruct on or after</b></p> <p><b>April 22, 2008</b></p>
	<p>15 percent opacity</p>	<p>12 percent opacity</p>
	<p>An initial performance test according to 40 CFR 60.11 of this part and 40 CFR 60.675 of this subpart</p>	<p>An initial performance test according to 40 CFR 60.11 and 40 CFR 60.675; and Periodic inspections of water sprays according to 40CFR 60.674(b) and 60.676(b);</p> <p>A repeat performance test according to 40 CFR 60.11 of this part and 40 CFR 60.675 within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays. Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in 40 CFR 60.674(b) and 60.676(b) are exempt from this 5-year repeat testing requirement.</p>



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**C. SOURCES SUBJECT TO 40 CFR 60 SUBPART 000**

Condition Number	Condition
C.4	<p><b>Testing</b></p> <p>(40 CFR 60.675(c)(1)) In determining compliance with the particulate matter standards in 40 CFR 60.672(b), the owner or operator shall use Method 9 of Appendix A-4 of this part and the procedures in 40CFR 60.11, with the following additions:</p> <ul style="list-style-type: none"> <li>(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).</li> <li>(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9 of Appendix A-4 of this part, Section 2.1) must be followed.</li> <li>(iii) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.</li> </ul> <p>(40 CFR 60.675(c)(3)) When determining compliance with the fugitive emissions standard for any affected facility described under 40 CFR 60.672(b), the duration of the Method 9 (40 CFR part 60, Appendix A-4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of this subpart must be based on the average of the five 6-minute averages.</p>
C.5	<p><b>Monitoring</b></p> <p>(40 CFR 60.674(b)) The owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses wet suppression to control emissions from the affected facility must perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The owner or operator must initiate corrective action within 24 hours and complete corrective action as expeditiously as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner or operator must 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 60.676(b).</p> <p>(1) If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in Table 3 of this subpart provided that the affected facility meets the criteria in paragraphs (b)(1)(i) and (ii) of this section:</p>

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**C. SOURCES SUBJECT TO 40 CFR 60 SUBPART 000**

Condition Number	Condition
	<p>(i) The owner or operator of the affected facility conducts periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility. These inspections are conducted according to paragraph (b) of this section and 40 CFR 60.676(b)</p> <p>(ii) The owner or operator of the affected facility designates which upstream water spray(s) will be periodically inspected at the time of the initial performance test required under 40 CFR 60.11 of this part and 40 CFR 60.675 of this subpart.</p> <p>(2) If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required under 40 CFR 60.676(b) must specify the control mechanism being used instead of the water sprays.</p> <p>(40 CFR 60.676(b)(1)) Owners or operators of affected facilities for which construction, modification, or reconstruction commenced on or after April 22, 2008, must record each periodic inspection required under 40 CFR 60.674(b), including dates and any corrective actions taken, in a logbook (in written or electronic format). The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Department upon request.</p>
C.6	<p><b>Like Replacement</b></p> <p>(40 CFR 60.670(d))</p> <p>(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in 40 CFR 60.671, having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of 40 CFR 60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.</p> <p>(2) An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in 40 CFR 60.676(a).</p> <p>(3) An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of 40 CFR 60.672, 60.674 and 60.675.</p> <p>(40 CFR 60.676(a)) Each owner or operator seeking to comply with 40 CFR 60.670(d) shall submit to the Department the following information about the existing facility being replaced and the replacement piece of equipment.</p> <p>(1) For a crusher, bucket elevator, bagging operation, or enclosed truck or railcar loading station:</p> <p>(i) The rated capacity in megagrams or tons per hour of the existing facility being replaced.</p>

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**C. SOURCES SUBJECT TO 40 CFR 60 SUBPART 000**

Condition Number	Condition
	<p>(ii) The rated capacity in tons per hour of the replacement equipment.</p> <p>(2) For a screening operation:</p> <p>(i) The total surface area of the top screen of the existing screening operation being replaced</p> <p>(ii) The total surface area of the top screen of the replacement screening operation.</p> <p>(3) For a conveyor belt:</p> <p>(i) The width of the existing belt being replaced</p> <p>(ii) The width of the replacement conveyor belt.</p> <p>(4) For a storage bin:</p> <p>(i) The rated capacity in megagrams or tons of the existing storage bin being replaced</p> <p>(ii) The rated capacity in megagrams or tons of replacement storage bins.</p>
C.7	<p><b>Reporting</b></p> <p>(40 CFR 60.676(f)) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in 40 CFR 60.672 of this subpart, including reports of opacity observations made using Method 9 (40 CFR part 60, Appendix A-4) to demonstrate compliance with 40 CFR 60.672(b).</p> <p>(40CFR60.676(g)) The owner/operator of any wet material processing operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. At the time of such change, this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limit in 40CFR60.672(b) and the emission test requirements of 40CFR60.11 if it meets the 40CFR60 Subpart 000 applicability requirements.</p> <p>(40 CFR 60.676(h)) The subpart A requirement under 40 CFR 60.7(a)(1) for notification of the date construction or reconstruction commenced is waived for affected facilities under this subpart.</p> <p>(40 CFR 60.676((i)) A notification of the actual date of initial startup of each affected facility shall be submitted to the Department</p> <p>(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Department. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.</p> <p>(2) For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.</p>

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**D. STATIONARY INTERNAL COMBUSTION ENGINES**

Condition Number	Condition				
D.1	<p>(S. C. Regulation 61-62.5, Standard No. 5.2) Any stationary internal combustion engines constructed after June 25, 2004 or any existing source that is removed from its presently permitted facility and moved to another permitted facility after June 25, 2004, except process equipment and commercial or industrial boilers that are transferred between facilities within the State under common ownership, is subject to the following emission limitations:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Source Type</th> <th style="text-align: center;">Control Technology and/or Emission Limit</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Internal Combustion Engines with a mechanical power output of 200 bHP or greater – Compression Ignition</td> <td style="text-align: center;">Timing Retard <math>\leq 4^\circ</math> + Turbocharger with Intercooler or equivalent shall achieve 490 ppmv @ 15% O<sub>2</sub> (7.64 gm/bhp-hr)</td> </tr> </tbody> </table> <p>Unless otherwise noted, all emission limits are based on monthly averages.</p> <p>(S.C. Regulation 61-62.5, Standard No. 5.2, Section VI) The owner/operator of a subject combustion source shall conduct maintenance in accordance with the manufacturer's specifications.</p>	Source Type	Control Technology and/or Emission Limit	Internal Combustion Engines with a mechanical power output of 200 bHP or greater – Compression Ignition	Timing Retard $\leq 4^\circ$ + Turbocharger with Intercooler or equivalent shall achieve 490 ppmv @ 15% O <sub>2</sub> (7.64 gm/bhp-hr)
Source Type	Control Technology and/or Emission Limit				
Internal Combustion Engines with a mechanical power output of 200 bHP or greater – Compression Ignition	Timing Retard $\leq 4^\circ$ + Turbocharger with Intercooler or equivalent shall achieve 490 ppmv @ 15% O <sub>2</sub> (7.64 gm/bhp-hr)				
D.2	Fuel oil sulfur content shall be less than or equal to 0.05 percent by weight. Fuel oil supplier certification shall be obtained for each batch of oil received and stored on site. Reports of the recorded sulfur content shall be maintained onsite.				
D.3	Stationary internal combustion engines subject to the provisions of 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subparts A and NESHAP for Stationary Reciprocating Internal Combustion Engines. Existing affected sources shall comply with the applicable provisions by the compliance date specified in Subpart ZZZZ. Any new affected sources shall comply with the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII for compression ignition engines or 40 CFR 60, Subpart JJJJ for spark ignition engines upon initial start-up unless otherwise noted.				
D.4	All NESHAP notifications and reports shall be sent to the Manager of the Air Toxics Section, South Carolina Department of Health and Environmental Control - Bureau of Air Quality.				
D.5	<p>All NESHAP notifications and the cover letter for periodic reports shall be sent to the United States Environmental Protection Agency (US EPA) at the following address:</p> <p style="text-align: center;"><b>US EPA, Region 4 Air, Pesticides and Toxics Management Division 61 Forsyth Street SW Atlanta, GA 30303</b></p>				

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**D. STATIONARY INTERNAL COMBUSTION ENGINES**

Condition Number	Condition
D.6	<p>Emergency power generators less than or equal to 150 kilowatt (kW) rated capacity or greater than 150 kW rated capacity designated for emergency use only and operated a total of 500 hours per year or less for testing and maintenance with a method to record the actual hours of use such as an hour meter have been determined to be exempt from construction permitting requirements in accordance with South Carolina Regulation 61-62.1. These sources shall still comply with the requirements of all applicable regulations including but not limited to the following:</p> <p>New Source Performance Standards (NSPS) 40 CFR 60 Subpart A (General Provisions);            NSPS 40 CFR 60 Subpart IIII (Stationary Compression Ignition Internal Combustion Engines);            NSPS 40 CFR 60 Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines);            National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart A (General Provisions); and            NESHAP 40 CFR 63 Subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines).</p> <p>Facilities with emergency generators are not required to submit reports. Only facilities with existing non-emergency engines greater than 300 hp are required to submit semiannual reports. Facilities with emergency engines shall comply with the operations limits specified in 40 CFR 63.6640(f).</p>

**E. PORTABLE CONCRETE AND RECYCLED ASPHALT CRUSHING OPERATIONS**

Condition Number	Condition
E.1	<p>The owner/operator may operate a portable concrete and/or recycled asphalt crushing plant in conjunction with the nonmetallic mineral processing plant under the conditions herein if it meets the following criteria:</p> <ol style="list-style-type: none"> <li>1. The equipment processes non-waste clean construction or demolition concrete only.</li> <li>2. Wet suppression is used to control emissions.</li> <li>3. The diesel engines are certified by the manufacturer to meet EPA's non-road diesel engine emission standards/tiers (40 CFR 89 and 1039).</li> </ol>
E.2	<p>The owner/operator shall evaluate emissions from the portable and/or recycled asphalt crushing operation and maintain the record onsite. The emissions from this operation shall be included in the facility wide potential to emit.</p>
E.3	<p>The portable concrete and/or recycled asphalt crushing operation is limited to operating a maximum of 500 hours per year at any one site. The owner or operator must record the actual operating hours and maintain records onsite. A site is one or more contiguous or adjacent properties that are under common control.</p>
E.4	<p>The portable/temporary plant equipment is subject to all of the applicable conditions and requirements of this permit and the owner/operator shall operate in accordance with the fugitive dust control plan</p>

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**F. RELOCATION REQUIREMENTS**

Condition Number	Condition
F.1	The owner/operator must submit an application in accordance with the Relocation of Nonmetallic Mineral Processing Plants guidance document and gain approval from this Department prior to relocating an existing permitted facility to any other site in South Carolina.
F.2	The owner/operator may move a plant out of South Carolina without gaining prior approval. Notification that the plant was moved out of South Carolina shall be made within 30 days of such a move. Department approval must be gained prior to bringing the plant back into South Carolina.

**G. PERMIT FLEXIBILITY**

Condition Number	Conditions
G.1	<p>The facility may undertake minor alterations or additions without a construction permit, or without revising or reopening the operating permit unless otherwise specified by any State or Federal requirement. These alterations or additions must meet the criteria and procedures as prescribed in this condition. The owner or operator may be subject to possible enforcement if the activity is found to be inconsistent with the permit flexibility conditions.</p> <p>(I) Permit Flexibility Criteria</p> <ol style="list-style-type: none"> <li>1. The activity does not increase the maximum permitted facility wide production rate.</li> <li>2. The activity is directly part of or supports the permitted non-metallic mineral process.</li> <li>3. The activity will not result in facility wide net increase in controlled PM<sub>10</sub> emissions greater than or equal to 5 tons per year.</li> <li>4. The activity is not divided into smaller projects to circumvent facility wide net increase in controlled PM<sub>10</sub> emissions greater than or equal to 5 tons per year.</li> <li>5. The activity does not trigger a regulation or regulatory requirement not already covered in this operating permit. See exceptions under (I)7 of this section.</li> <li>6. The activity does not result in emissions that would potentially subject the facility to the Title V operating permit program.</li> <li>7. The activity does not trigger S.C. Regulation 61-62.5, Standards No. 7 and No. 7.1 or synthetic minor permitting requirements.</li> <li>8. Any new affected sources subject to 40 CFR Part 60 Subparts A, OOO, IIII, JJJJ or 40 CFR Part 63 Subparts A and ZZZZ shall comply with the applicable requirements of these Subparts upon initial start-up unless otherwise noted in the permit. Existing affected sources shall comply with the applicable provisions by the compliance date specified in the applicable Subpart.</li> <li>9. Compliance with S.C. Regulations 61-62.5 Standards No. 2 (Ambient Air Quality Standards) and No. 8 (Toxic Air Pollutants) is not affected.</li> <li>10. Any activity exempted in S.C. Regulation 61-62.1 Section II.B.2 or the BAQ published exempt source list. Case by case exemptions described in Section II will require prior written approval.</li> </ol>

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**G. PERMIT FLEXIBILITY**

Condition Number	Conditions
	<p>(II) Ambient Air Standards Demonstration Flexibility Changes that impact an ambient air standards demonstration (such as air dispersion modeling), but are otherwise allowed under the permit flexibility condition, shall be allowed provided:</p> <ol style="list-style-type: none"> <li>1. The facility operations including the proposed activity is within the parameters of the Ambient Air Standards General Model or current Department Approved facility wide modeling.</li> <li>2. That if the facility operations including the proposed activity is not within the parameters of the Ambient Air Standards Requirements General Model or the current facility wide modeling, an updated air dispersion modeling or other information demonstration is conducted prior to the source operating under the new operating scenario. A copy of these results for the new operating scenario are kept on site and available for inspection. The air dispersion model used must be BAQ approved.</li> <li>3. The facility submits a written request to modify the demonstration within 15 business days of operating under the new operating scenario. The demonstration shall include a description of the scenario, emission rates, modeling results, modeling files and a completed modeling information form and any other pertinent information relevant to the demonstration. This request shall be submitted to the Director of Engineering Services.</li> </ol> <p>(III) Record Keeping As part of this permit flexibility procedure, the facility shall keep an on-site implementation log (OSIL) (written or electronic), to document all changes made under the procedure. The OSIL will be kept with the facility's air permit and made available for inspection. The OSIL shall provide detailed information supporting the changes made under this procedure. At a minimum all of the following items shall be included in the OSIL:</p> <ol style="list-style-type: none"> <li>1. A brief description of the activity and how it meets the criteria listed in this condition. Include impacted equipment identification numbers, operating permit identification unit, and stack identification.</li> <li>2. The date the activity occurred.</li> <li>3. Revised equipment list to include: <ol style="list-style-type: none"> <li>i. A unique ID number</li> <li>ii. Manufacture date</li> <li>iii. Capacity, dimensions, and/or configuration</li> </ol> </li> <li>4. Revised plant or flow diagram</li> <li>5. 40 CFR 60 Subpart OOO applicability</li> <li>6. A demonstration that the activity did not trigger any new regulations, standards or requirements not already covered in this permit.</li> <li>7. Emissions calculations for all regulated air pollutants resulting from the activity and demonstration that when added to the existing emissions all permit limits will be met. This should include the increase and the facility-wide emissions totals from the activity.</li> <li>8. A list of exempt sources will be kept with the OSIL and only the information required by the regulation for the exemption shall be included with the OSIL.</li> </ol>

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**G. PERMIT FLEXIBILITY**

Condition Number	Conditions
	<p>(IV) Reporting            Reports of activities conducted under this permit flexibility condition shall be submitted at the end of every calendar year but no later than January 31, unless no changes were made, and every year thereafter, to the Director of the Engineering Services. The owner/operator shall meet all the reporting requirements of 40 CFR 60 Subpart OOO for applicable sources. See ambient air standards demonstration flexibility section of this condition for modeling or other information demonstration reporting requirements.</p>

**H. AMBIENT AIR STANDARDS REQUIREMENTS**

Condition Number	Conditions
H.1	<p>Air dispersion modeling (or other method) has demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air standard. Any changes in the parameters used in this demonstration may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment - Emission Rates for Ambient Air Standards of this permit. Higher emission rates may be administratively incorporated into Attachment - Emission Rates for Ambient Air Standards of this permit provided a demonstration using these higher emission rates shows the attainment and maintenance of any state or federal ambient air quality standard or with any other applicable requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are exceeded.</p> <p>The owner/operator shall maintain this facility at or below the emission rates as listed in Attachment - Emission Rates for Ambient Air Standards, not to exceed the pollutant limitations of this permit. Should the facility wish to increase the emission rates listed in Attachment - Emission Rates for Ambient Air Standards, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified above. This is a State Only enforceable requirement.</p>



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**I. REPORTING CONDITIONS**

Condition Number	Conditions
I.1	Reporting required in this permit, shall be submitted in a timely manner. Annual reports are due at the end of every calendar year but no later than January 31.
I.2	All reports and notifications required under this permit shall be submitted to the person indicated in the specific condition at the following address: <b>2600 Bull Street Columbia, SC 29201</b> The contact information for the local EQC Regional office can be found at: <b><a href="http://www.scdhec.gov">http://www.scdhec.gov</a></b>
I.3	Unless elsewhere specified within this permit, all reports required under this permit shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality.
I.4	(S.C. Regulation 61-62.1, Section II.J) For sources not required to have continuous emissions monitors, any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the Department's local Environmental Quality Control Regional office within 24 hours after the beginning of the occurrence.  The owner/operator shall also submit a written report within 30 days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality and shall include, at a minimum, the following: <ol style="list-style-type: none"> <li>1. The identity of the stack and/or emission point where the excess emissions occurred;</li> <li>2. The magnitude of excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the excess emissions;</li> <li>3. The time and duration of excess emissions;</li> <li>4. The identity of the equipment causing the excess emissions;</li> <li>5. The nature and cause of such excess emissions;</li> <li>6. The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction;</li> <li>7. The steps taken to limit the excess emissions; and,</li> <li>8. Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions.</li> </ol>

**J. GENERAL CONDITIONS**

Condition Number	Conditions
J.1	The owner or operator shall comply with S.C. Regulation 61-62.2 "Prohibition of Open Burning."
J.2	The owner or operator shall comply with S.C. Regulation 61-62.3 "Air Pollution Episodes."

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**J. GENERAL CONDITIONS**

Condition Number	Conditions
J.3	The owner or operator shall comply with S.C. Regulation 61-62.4 "Hazardous Air Pollution Conditions."
J.4	This permit only covers emission units and control equipment while physically present at the indicated facility. Unless the permit specifically provides for the equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted facility, notwithstanding the expiration date specified on the permit.
J.5	The permittee shall pay permit fees to the Department in accordance with the requirements of S.C. Regulation 61-30, Environmental Protection Fees.
J.6	<p>In the event of an emergency, as defined in S.C. Regulation 61-62.1, Section II.L, the owner or operator may document an emergency situation through properly signed, contemporaneous operating logs, and other relevant evidence that verify:</p> <ol style="list-style-type: none"> <li>1. An emergency occurred, and the owner or operator can identify the cause(s) of the emergency;</li> <li>2. The permitted source was at the time the emergency occurred being properly operated;</li> <li>3. During the period of the emergency, the owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and</li> <li>4. The owner or operator gave a verbal notification of the emergency to the Department within 24 hours of the time when emission limitations were exceeded, followed by a written report within 30 days. The written report shall include, at a minimum, the information required by S.C. Regulation 61-62.1, Section II.J.1.c.i through viii. The written report shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.</li> </ol> <p>This provision is in addition to any emergency or upset provision contained in any applicable requirement.</p>
J.7	<p>(S.C. Regulation 61-62.1, Section II.O) Upon presentation of credentials and other documents as may be required by law, the owner or operator shall allow the Department or an authorized representative to perform the following:</p> <ol style="list-style-type: none"> <li>1. Enter the facility where emissions-related activity is conducted, or where records must be kept under the conditions of the permit.</li> <li>2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.</li> <li>3. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.</li> <li>4. As authorized by the Federal Clean Air Act and/or the S.C. Pollution Control Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.</li> </ol>

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**K. PERMIT RENEWAL, MODIFICATION, EXPIRATION AND TRANSFER OF OWNERSHIP**

Condition Number	Conditions
K.1	(S.C. Regulation 61-62.1, Section II.H) The owner/operator shall submit an operating permit renewal request to the Department within 90 days prior to the operating permit expiration date. The operating permit renewal requests shall include a description of any changes at the facility that have occurred since issuance of the last operating permit that may affect the operating permit or operating permit review. In general, the description shall include any addition, alteration or removal of sources, including sources exempt from construction permit requirements; addition, alteration or removal of emission limitations; any changes to monitoring, recordkeeping, or reporting requirements; and any changes or additions to special permit conditions.
K.2	Submission of a request for renewal meeting the requirements in S.C. Regulation 61-62.1, Section II.H, shall allow the owner/operator to continue operating pursuant to the most recent general conditional major operating permit, until such time as the Department has taken final action on the request for renewal.
K.3	This permit may be reopened by the Department for cause or to include any new standard or regulation which becomes applicable to a source during the life of the permit.
K.4	This permit may be modified by the Department for cause, to include any applicable requirement or to add or alter a permit's expiration date.
K.5	(S.C. Regulation 61-62.1, Section II.M) Within 30 days of the transfer of ownership/operation of a facility, the current permit holder and prospective new owner/operator shall submit to the Director of Engineering Services a written request for transfer of the source operating or construction permits. The written request for transfer of the source operating or construction permit shall include any changes pertaining to the facility name and mailing address; the name, mailing address, and telephone number of the owner/operator for the facility; and any proposed changes to the permitted activities of the source. Transfer of the operating or construction permits will be effective upon written approval by the Department.

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Condition Number	Conditions														
GM.1	<p><b>Facilities that demonstrate Compliance with the Ambient Air Standards Using the Quarry Operations General Model</b></p> <p>In lieu of site specific modeling, the owner operator may demonstrate compliance with the ambient air standards using the Department developed quarry operations general model (general model). The owner/operator may choose to use the general model for activities at the facility that require a new or updated ambient air standards compliance demonstration. The parameters for use of the general model are listed in the conditions below.</p>														
GM.2	<p><b>Process Equipment (Crushers, Screens, Conveyors)</b></p> <p>The owner/operator shall not exceed the maximum allowable production rates at the boundary distance to process equipment provided in the table below.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2" style="text-align: center;">Boundary Distance to Process Equipment (feet)</th> <th colspan="2" style="text-align: center;">Maximum Allowable Production Rates</th> </tr> <tr> <th style="text-align: center;">Daily (tons/calendar day)</th> <th style="text-align: center;">Annual (tons/ 12-months)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><math>150 \leq D &lt; 300</math></td> <td style="text-align: center;">5,700</td> <td style="text-align: center;">1,300,000</td> </tr> <tr> <td style="text-align: center;"><math>300 \leq D &lt; 450</math></td> <td style="text-align: center;">7,000</td> <td style="text-align: center;">1,450,000</td> </tr> <tr> <td style="text-align: center;"><math>D \geq 450</math></td> <td style="text-align: center;">9,000</td> <td style="text-align: center;">2,500,000</td> </tr> </tbody> </table> <p>Boundary Distance to Process Equipment is the shortest distance between any process emission (excluding the wash process) source (not to include roads, storage piles, etc.) and the property boundary at the facility.</p> <p>The owner/operator shall:</p> <ol style="list-style-type: none"> <li>a. Record the total quantity of crushed stone produced (in tons) during each calendar day and a twelve month rolling sum shall be calculated for total production (in tons). The required production records shall be maintained in logbook (written or electronic) on-site.</li> <li>b. Maintain on-site a plant plot plan, equipment list, and plant or flow diagram of all air polluting emission sources. <ol style="list-style-type: none"> <li>i. The plot plan shall be sufficient to identify and measure the boundary distance.</li> <li>ii. The equipment list shall include: <ol style="list-style-type: none"> <li>iii. Equipment description <ol style="list-style-type: none"> <li>1. A unique ID number</li> <li>2. Manufacture date</li> <li>3. Capacity, dimensions, and/or configuration</li> <li>4. 40 CFR 60 Subpart OOO applicability</li> </ol> </li> </ol> </li> </ol> </li> </ol> <p>The plot plan, equipment list, and plant diagram shall have the date when the current document was revised.</p>	Boundary Distance to Process Equipment (feet)	Maximum Allowable Production Rates		Daily (tons/calendar day)	Annual (tons/ 12-months)	$150 \leq D < 300$	5,700	1,300,000	$300 \leq D < 450$	7,000	1,450,000	$D \geq 450$	9,000	2,500,000
Boundary Distance to Process Equipment (feet)	Maximum Allowable Production Rates														
	Daily (tons/calendar day)	Annual (tons/ 12-months)													
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Condition Number	Conditions								
GM.3	<p><b>Stationary Internal Combustion Engine</b></p> <p>The source(s) shall be EPA / Tier 3 or Tier 4 compliant and the maximum power output for each stationary internal combustion engine shall be:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">EPA Tier / Standard Compliant Engine</th> <th style="text-align: center;">Power Output for each Stationary Internal Combustion Engine (HP)*</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Tier 3</td> <td style="text-align: center;">173</td> </tr> <tr> <td style="text-align: center;">Interim Tier 4</td> <td style="text-align: center;">345</td> </tr> <tr> <td style="text-align: center;">Final Tier 4</td> <td style="text-align: center;">395</td> </tr> </tbody> </table> <p style="text-align: center; font-size: small;">*The Power out per engine may be greater than those listed based on the manufacturer's data.</p> <p>The owner/operator shall maintain on-site identification of each diesel engine operated at the facility, including the identification number, manufacturer's engine certification, and the maximum power output capacity. The owner/operator shall also obtain supplier certification of the sulfur content of the fuel for each batch of fuel received and stored on site.</p>	EPA Tier / Standard Compliant Engine	Power Output for each Stationary Internal Combustion Engine (HP)*	Tier 3	173	Interim Tier 4	345	Final Tier 4	395
EPA Tier / Standard Compliant Engine	Power Output for each Stationary Internal Combustion Engine (HP)*								
Tier 3	173								
Interim Tier 4	345								
Final Tier 4	395								