



# SC DEPARTMENT *of* **ENVIRONMENTAL SERVICES**

## **Bureau of Air Quality State Operating Permit**

**Carolina Shavings Inc  
143 Shady Grove Church Road  
Clinton, South Carolina 29325  
Laurens County**

In accordance with 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 this facility and the equipment specified herein in accordance with valid construction permits, and the plans, specifications, and other information submitted in the operating permit request received on June 02, 2021, as amended. 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 this facility is subject to and conditioned upon the terms, limitations, standards, and schedules contained herein or as specified by this permit and its accompanying attachments.

**Permit Number: OP-1520-0107 v2.0**

**Agency Air Number: 1520-0107**

**Issue Date: February 12, 2025**

**Effective Date: March 1, 2025**

**Expiration Date: February 28, 2035**



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

RECORD OF REVISIONS	
Date	Description of Changes

A. EMISSION UNIT(S), EQUIPMENT, AND CONTROL DEVICE(S)	
Emission Unit ID	Emission Unit Description
01	Wood Shaving and Drying Process

A.1 EQUIPMENT FOR EMISSION UNIT 01 -WOOD SHAVING AND DRYING PROCESS				
Equipment ID	Equipment Description	Installation Date	Control Device ID	Emission Point ID
SHAV 1-4	Four (4) Green Wood Shavers	May 9, 2011	None	Fugitive
SCRN 1	Green Wood Over Shaker Screen System	May 9, 2011	None	Fugitive
RDRY 1	Triple Pass Rotary Drum Dryer with a 20 million BTU/hr Wood Waste Burner	May 9, 2011	None	Stack 1
CYC 1	Cyclone, separating wood matter from the Dryer air stream.	May 9, 2011	None	Stack 1
TRUCK 1	Pneumatic Transfer to Tractor Trailers	May 9, 2011	None	Fugitive
SCRN 2	Dry Shaker Screen System	May 9, 2011	None	Fugitive

B. LIMITATIONS, MONITORING, AND REPORTING	
Condition Number	Conditions
B.1	<p><b>Emission Unit ID:</b> All  <b>Equipment ID:</b> All</p> <p>(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 maintained on site for a period of at least 5 years from the date the record was generated and shall be made available to a Department representative upon request.</p>
B.2	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> SHAV 1-4, SCRN 1, RDRY 1, CYC 1, TRUCK 1, SCRN 1</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="text-align: center;">For process weight rates less than or equal to 30 tons per hour  <math>E = (F) 4.10P^{0.67}</math></p> <p style="text-align: center;">For process weight rates greater than 30 tons per hour</p>

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	$E = (F) (55.0P^{0.11} - 40)$ <p>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> <p>For the purposes of compliance with this condition, the process boundaries are defined as follows:</p> <ul style="list-style-type: none"> <li>Emission Unit 01: SHAV 1-4, SCRN 1, RDRY 1, CYC 1, TRUCK 1, SCRN 1- Max Process Weight Rate 24.695 ton/hr</li> </ul>
B.3	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> SHAV 1-4, SCRN 1, RDRY 1, CYC 1, TRUCK 1, SCRN 1</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%, each.</p>
B.4	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> TRUCK 1</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 or operator of all such operations shall maintain dust control on the premises and any roadway owned or controlled by the owner or operator by paving or other suitable measures. Oil treatment is prohibited.</p> <p>Pneumatic transfer systems shall use proper measures to avoid blow back and blow out of material during pneumatic transfer, such as but not limited to limiting velocity, adding additional surrounds, or screens.</p>
B.5	<p><b>Emission Unit ID:</b> 01  <b>Equipment ID:</b> RDRY 1</p> <p>(S.C. Regulation 61-62.5, Standard No. 5.2, Section III)The allowable discharge of NO<sub>x</sub> resulting from this source is 0.406 pounds per Oven Dried Tons.</p> <p>(S.C. Regulation 61-62.5, Standard No. 5.2, Section IV) The owner or operator shall perform tune-ups every twenty-four (24) months in accordance with manufacturer’s specifications or with good engineering practices. The first tune-up shall be conducted no more than twenty-four (24) months from start-up of operation for affected new sources. Each subsequent tune-up shall be conducted no more than twenty-four (24) months after the previous tune-up.</p> <p>All tune-up records are required to be maintained on site and available for inspection by the Department for a period of five (5) years from the date generated.</p>

<b>B. LIMITATIONS, MONITORING, AND REPORTING</b>	
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	<p>The owner or operator shall develop and retain a tune-up plan on file.</p> <p>(S.C. Regulation 61-62.5, Standard No. 5.2, Section IV) The owner or operator shall record monthly the amounts and types of each fuel combusted by the affected sources and maintain these records on site.</p> <p>The owner or operator shall maintain records of the occurrence and duration of any malfunction in the operation of an affected source; any malfunction of the air pollution control equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.</p>
B.6	<p><b>Emission Unit ID:</b> 01 <b>Equipment ID:</b> RDRY 1</p> <p>(S.C. Regulation, 61-62.1, Section II(J)(2)) This source is permitted to burn only Wood Waste as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Department.</p>
B.7	<p><b>Emission Unit ID:</b> 01 <b>Equipment ID:</b> CYC 1</p> <p>(S.C. Regulation 61-62.1, Section II(J)(2)) The owner or operator shall complete the following cyclone operation and maintenance checks, these checks will be made on at least a weekly basis for all cyclones:</p> <ul style="list-style-type: none"> <li>• Check the cyclone and ductwork system for damaged or worn sheet metal or other interferences with proper operation.</li> <li>• Check dust collection hoppers and conveying systems for proper operation.</li> </ul> <p>The results from the operation and maintenance checks shall be maintained in logs (written or electronic), along with any corrective action taken.</p>
B.8	<p><b>Emission Unit ID:</b> Facility Wide <b>Equipment Unit ID:</b> Facility Wide</p> <p>The owner/operator has developed a written fire control plan. The facility shall maintain the established written fire control plan on site. The fire control plan may be updated following submittal to the Department, following the same procedure the facility used to develop the fire control plan.</p> <p>The facility must submit any revised fire control plan to the Department within 30 days of the date of the revision.</p>
B.9	<p><b>Emission Unit ID:</b> Facility-Wide</p> <p>(S.C. Regulation 61-62.6) Fugitive particulate matter (PM) emissions from material handling, process equipment, or storage piles will be minimized to the extent practicable in a manner with good air pollution control practices. Fugitive emissions from dust buildup will be controlled by proper</p>

<b>B. LIMITATIONS, MONITORING, AND REPORTING</b>	
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	<p>housekeeping and/or wet suppression.</p> <p>All by-products and residue shall be properly watered, promptly removed, and/or covered with tarps as necessary to minimize fugitive particulate matter. Disposal by burning is prohibited unless it is conducted in the wood burner in accordance with this permit.</p>
B.10	<p><b>Emission Unit ID:</b> Facility Wide <b>Equipment Unit ID:</b> Facility Wide</p> <p>(S.C. Regulation 61-62.1, Section II(J)(2)) The owner/operator shall not allow the release of excessive fugitive emissions into the atmosphere that are generated from any emission source. Fugitive emissions shall be determined using US Environmental Protection Agency (EPA) Method 22 visual determination. If the fugitive emissions leave the property for a period exceeding three minutes in any fifteen-minute period, operations shall cease until the problem is corrected.</p> <p>During periods of operation, the owner or operator shall conduct daily inspections of all emission sources and determine if any fugitive emissions exceedance occurs. The owner or operator shall maintain records of the daily inspections, any fugitive emissions occurrences that exceeded three minutes, including the results of the Method 22, the cause and duration of the exceedance and the measures used to correct any excessive emission occurrence.</p> <p>The release of excess fugitive emissions may, in addition to any other action the Department may take, result in a permit modification to require a compliance schedule to control fugitive emissions.</p> <p>The owner/operator shall report the excess emissions and the steps taken to correct the problem to the district office within 24 hours of the occurrence should excess emissions, including fugitive emissions, occur. The owner/operator shall compile a detailed annual report of all occurrences of excess fugitive emissions during the reporting period, shall be submitted on an annual basis.</p>
B.11	<p><b>Emission Unit ID:</b> All <b>Equipment ID:</b> All</p> <p>Compliance with non-enclosed operations and fugitive dust requirements shall be demonstrated by developing and adhering to a facility-wide fugitive dust control plan, at all times during source operation for controlling fugitive emissions from process operations, truck traffic and roads, storage transfer systems, and any other areas within the permitted facility where fugitive dust emissions can be generated.</p> <p>The plan shall be developed and submitted to the Director of Air Permitting for approval within 180 days of the permit issue date. The owner or operator shall implement the initial plan upon submittal. The plan shall be modified as necessary to control fugitive dust emissions. Additional procedures needed to address fugitive dust issues should be implemented immediately; with the subsequent revised plan submitted to the Department for approval. The plan shall be periodically reviewed and updated. This review shall occur no less than once every 12 months. Any revisions shall be submitted</p>

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	<p>to the department; if no revisions are necessary, a letter stating such shall be submitted. Procedures not otherwise causing fugitive dust issues shall require Department approval before removal. 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. Dust Control Methods for Process Operations:               <ol style="list-style-type: none"> <li>a. Weekly maintenance and operation checks of all plant equipment, enclosures, and transfer points. These maintenance and operational procedures shall be based on the manufacturer’s recommendations when available.</li> <li>b. Visual monitoring of the facility’s Wood Waste Burner system, Equipment ID: RDRY 1, during source operation.</li> <li>c. Written guidelines on how to handle any potential fugitive emissions from all process operations.</li> </ol> </li> <li>2. Dust Control Methods for Truck Traffic and Roads:               <ol style="list-style-type: none"> <li>a. Maintenance requirements for paved roads</li> <li>b. Limit speeds on facility-maintained roads to 15 miles per hour.</li> <li>c. Written procedures for cleanup of material spills on roadways.</li> </ol> </li> <li>3. Dust Control Methods for Storage and Transfer Points:               <ol style="list-style-type: none"> <li>a. Written guidelines on how to handle any potential fugitive emissions from all transfer points and storage locations.</li> <li>b. Procedures for cleanup of residual materials and spills from any transfer equipment or storage equipment failures.</li> </ol> </li> </ol> <p>The owner or operator shall develop logs or use other approved methods to demonstrate compliance with the requirements of the plan.</p>

<b>C. NESHAP (40 CFR 61 AND 40 CFR 63)</b>	
<b>Condition Number</b>	<b>Conditions</b>
C.1	(40 CFR §61.04(b); 40 CFR §63.9(a)(4)(ii) and §63.10(a)(4)(ii)) All NESHAP notifications and reports shall be sent to the Department. Electronic submission of notifications or reports to the United States Environmental Protection Agency (US EPA) via CEDRI (Compliance and Emissions Data Reporting Interface) shall serve as the submission to the Department. CEDRI can be accessed through the EPA’s Central Data Exchange (CDX).
C.2	(40 CFR §61.04(b); 40 CFR §63.9(a)(4)(ii) and §63.10(a)(4)(ii)) All NESHAP notifications and reports

<b>C. NESHAP (40 CFR 61 AND 40 CFR 63)</b>	
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	requiring electronic submission to US EPA shall be submitted to EPA via CEDRI. Notifications and reports for specific NESHAP subparts not yet requiring electronic submission may also be submitted via CEDRI. Notifications and the accompanying cover letter for periodic reports not submitted via CEDRI shall be sent to the US EPA Region 4 Air and Radiation Division as required by the applicable subpart.
C.3	<p>Emergency engines less than or equal to 150 kilowatt (kW) rated capacity, emergency engines 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 and have a method to record the actual hours of use, such as an hour meter, and diesel engine driven emergency fire pumps that are operated a total of 500 hours per year or less for testing and maintenance and have 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 S.C. Regulation 61-62.1.</p> <p>(40 CFR 60; 40 CFR 63) If present, 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>

<b>D. PERMIT FLEXIBILITY</b>	
<b>Condition Number</b>	<b>Conditions</b>
D.1	The facility may install exempt sources as allowed in S.C. Regulation 61-62.1, Section II(B), without revising or reopening the operating permit. A list of exempt sources must be maintained on site, along with any necessary documentation to support the determination that the source is exempt, and shall be made available to a Department representative upon request. The list and necessary documentation shall be submitted with the next renewal application. Emissions from these sources shall be reflected in the facility-wide emissions tabulation in any subsequent construction permit application and reports.

<b>E. GENERAL FACILITY WIDE</b>	
<b>Condition Number</b>	<b>Conditions</b>
E.1	The owner or operator shall comply with S.C. Regulation 61-62.2, Prohibition of Open Burning.
E.2	The owner or operator shall comply with S.C. Regulation 61-62.3, Air Pollution Episodes.
E.3	The owner or operator shall comply with S.C. Regulation 61-62.4, Hazardous Air Pollution Conditions.
E.4	The owner or operator shall comply with S.C. Regulation 61-62.6, Control of Fugitive Particulate Matter, Section III Control of Fugitive Particulate Matter Statewide.
E.5	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.
E.6	The permittee shall pay permit fees to the Department in accordance with the requirements of S.C. Regulation 61-30, Environmental Protection Fees.
E.7	<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 twenty-four (24) hours of the time when emission limitations were exceeded, followed by a written report within thirty (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 (J)(1)(c)(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>
E.8	<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</li> </ol>

<b>E. GENERAL FACILITY WIDE</b>	
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	compliance with the permit or applicable requirements.
E.9	(S.C. Regulation 61-62.1, Section II(J)(1)(a)) No applicable law, regulation, or standard will be contravened.
E.10	(S.C. Regulation 61-62.1, Section II(J)(1)(e)) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this regulation or with the terms of any approval to construct, or who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to enforcement action.
E.11	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.
E.12	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.
E.13	(S.C. Regulation 61-62.1, Section II(H)) The owner or operator shall submit an operating permit renewal request to the Department within ninety (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. Items listed in S.C. Regulation 61-62.1, Section II(H)(5)(a)-(l), should be addressed as part of the operating permit renewal request.
E.14	Submission of a request for renewal meeting the requirements in S.C. Regulation 61-62.1, Section II(H)(2)-(5), shall allow the owner or operator to continue operating pursuant to the most recent operating permit, until such time as the Department has taken final action on the request for renewal.

<b>F. GENERAL RECORD KEEPING AND REPORTING</b>	
<b>Condition Number</b>	<b>Conditions</b>
F.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 maintained on site for a period of at least five (5) years from the date the record was generated and shall be made available to a Department representative upon request.
F.2	The owner or operator shall submit reports required in this permit in a timely manner and according

<b>F. GENERAL RECORD KEEPING AND REPORTING</b>	
<b>Condition Number</b>	<b>Conditions</b>
	to the reporting schedule that has previously been established through the Department's approved electronic permitting system.
F.3	All reports and notifications required under this permit shall be submitted to the Department.
F.4	<p>(S.C. Regulation 61-62.1, Section II(J)(1)(c)) For sources not required to have continuous emission 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 (1) hour or more and which are greater than those discharges described for normal operation in the permit application, shall be reported to the Department within twenty-four (24) hours after the beginning of the occurrence and a written report shall be submitted to the Department within thirty (30) days. The written report shall include, at a minimum, the following:</p> <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> <p>The initial twenty-four (24) hour notification should be made to the Department's local Regional Office.</p> <p>The written report should be sent to the Department.</p>
F.5	<p>(S.C. Regulation 61-62.1, Section II(M)) Within thirty (30) days of the transfer of ownership/operation of a facility, the current permit holder and prospective new owner or operator shall submit to the Department 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 or 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.</p>

<b>G. AMBIENT AIR STANDARDS</b>	
<b>Condition Number</b>	<b>Conditions</b>
G.1	<p>Air dispersion modeling (or other method) has previously 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. 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 or operator shall maintain this facility at or below the emission rates used in the most recent air dispersion modeling (or other method) demonstration submitted to and approved by the Department, not to exceed the pollutant limitations of this permit. Should the facility wish to increase the emission rates used in the demonstration, not to exceed the pollutant limitations in the body of this permit, it may do so by submitting a new demonstration for approval. This condition along with the referenced modeling demonstration will also serve to meet the intent of S.C. Regulation 61-62.5, Standard No. 8, Section II(D). This is a State Only enforceable requirement.</p>