

Bureau of Air Quality State Construction Permit

Effingham Pellets, LLC 4905 Ingram Bypass Effingham, South Carolina 29541 Florence 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 construction of this facility and the equipment specified herein in accordance with the plans, specifications, and other information submitted in the construction permit application received on December 10, 2020, 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 permit may be grounds for permit revocation.

The construction and subsequent 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: 1040-0165-CA Issue Date: August 18, 2021

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

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RECORD OF REVISIONS		
Date	Date Description of Changes	

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A. PROJECT DESCRIPTION

Permission is hereby granted to install and operate a new wood pellet manufacturing operation to process dried wood shavings into wood pellets with a production capacity of 45,625 oven-dried tons (ODT) per year. The facility will include the following sources:

- Raw Material Receiving and Storage
- PelletBOX No. 1 Dry Hammermill
- PelletBOX No. 1 Pellet Mill and Pellet Cooler
- Pellet Storage Silo
- Pellet Storage and Loadout

B.1 EQUIPMENT

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
DSHS	Dry Shavings Handling and Storage with Enclosed Conveyor System	None	DSHS
DHM1	PelletBOX No. 1 – Dry Hammermill	BF01	DHM1
PB1	PelletBOX No. 1 – Pellet Mill and Pellet Cooler	CYC1	PB1
PHS	Pellet Handling and Truck Loading with Enclosed Conveyor System	None	PHS
SILO1	Pellet Storage Silo	None SILO1	

B.2 CONTROL DEVICES

Control Device ID	Control Device Description	Pollutant(s) Controlled
BF01	(Inherent) Product Capture Fabric Filter	PM, PM ₁₀ , PM _{2.5}
CYC1	(Inherent) Product Capture Cyclone Separator	PM, PM ₁₀ , PM _{2.5}

Condition Number	Conditions		
	Equipment ID: All		
	Control Device ID: All		
C.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		

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Condition Number	Conditions		
at least five (5) years from the date the record was generated and shall be made available to the date the record was generated and shall be made available.			
	Equipment ID: DHM1, PB1 Control Device ID: BF01, CYC1		
C.2	The owner/operator shall inspect, calibrate, adjust, and maintain continuous monitoring systems, monitoring devices, and gauges in accordance with manufacturer's specifications or good engineering practices. The owner/operator shall maintain on file all measurements including continuous monitoring system or monitoring device performance measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required in a permanent form suitable for inspection by Department personnel.		
	(S.C. Regulation 61-62.1, Section II(J)(1)(d)) Sources required to have continuous emission monitors shall submit reports as specified in applicable parts of the permit, law, regulations, or standards.		
C.3	Equipment ID: DHM1, PB1 Control Device ID: BF01, CYC1 All gauges shall be readily accessible and easily read by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). Monitoring parameter readings (i.e. pressure drop readings, etc.) and inspection checks shall be maintained in logs (written or electronical along with any corrective action taken when deviations occur. Operational ranges shall be determined for triggering corrective actions and assuring proper operation. The ranges and documentation on how they were developed shall be kept on site and made available for review Each incidence of operation outside the operational ranges, including date and time, cause, and corrective action taken, shall be recorded and kept on site. Exceedance of operational range shall not be considered a violation of an emission limit of this permit, unless the exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place.		
C.4	Equipment ID: All Control Device ID: All All emissions points, duct work and other locations that are required to be tested, shall be designed and constructed in a manner to facilitate testing in accordance with applicable EPA approved source testing methods; including, but not be limited to, methods specifying test port location and sizing criteria. 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.		
	Unless approved otherwise by the Department, the owner, operator, or representative shall ensure		

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Condition	Conditions			
Number	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.			
	 When conducting source tests subject to this section, the owner, operator, or representative shall provide the following: Department access to the facility to observe source tests; Sampling ports adequate for test methods; Safe sampling site(s); Safe access to sampling site(s); Utilities for sampling and testing equipment; and Equipment and supplies necessary for safe testing of a source. 			
	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. 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. Equipment ID: DSHS, DHM1, PB1, PHS, SILO1 Control Device ID: BF01, CYC1 (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: For process weight rates less than or equal to 30 tons per hour $E = (F) 4.10P^{0.67} \text{ and}$ For process weight rates greater than 30 tons per hour			
C.5	E = (F) 55.0P ^{0.11} – 40 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 For the purposes of compliance with this condition, the process boundaries are defined as follows: Process/Equipment IDs Max Process Weight Rate (ODT/hr)			
	Pelletizing Operations (DSHS, DHM1, PB1, PHS, SILO1) 5.21			

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Condition Number	Conditions		
C.6	Equipment ID: DSHS, DHM1, PB1, PHS Control Device ID: BF01, CYC1 (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 a specific greater than 20%, each		
C.7	opacity greater than 20%, each. Equipment ID: Facility Wide Control Device ID: Facility Wide (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.		
C.8	 Equipment ID: DSHS, DHM1, PB1, PHS Control Device ID: BF01, CYC1 (S.C. Regulation 61-62.5, Standard No. 4, Section X; S.C. Regulation 61-62.6) The owner/operator shall implement the approved Best Management Practices Plan for dust control at the site in accordance with the plan's terms. The plan shall include the following: 1. Dust control methods for roadways and truck operations. 2. Designated dust control methods for each specific material handled. Frequency of control should be included where appropriate. 3. A maintenance schedule for all dust control equipment as well as a minimum inventory of spare parts. 4. Written procedures for all dust control equipment and systems. These procedures shall be based on the manufacturer's recommendations when available, at a minimum. 5. Training plans for dust control methods, equipment, and systems. 6. Modifications and/or contingency plans required for changing weather conditions, failure of equipment, electrical power failure, and any other factors that may influence the effectiveness of control methods. 7. Steps to mitigate fugitive particulate matter to go beyond property boundaries. 8. Method to document plan requirement execution. 9. Schedule for the periodic review and update of the plan. The facility shall update the Best Management Practices Plan if the Department or the facility determines additional control measures are needed or current dust control measures need modification. Any revisions to the plan shall be reviewed and re-assessed periodically or any time the Department requests. The re-assessed plan and log of any updates shall be submitted semiannually to the Director of the Air Permitting Division for review and approval. The log shall 		

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Conditions		
include the basis for each update to the plan. If no changes to the plan occurred during the reporting period, then a letter shall be submitted indicating such. The plan, logs demonstrating execution of the plan, and any updates made to the plan shall be recorded in a suitable permanent form maintained on-site, and made available for inspection by Department personnel upon request.		
Equipment ID: DHM1		
Control Device ID: BF01		
The owner/operator shall install, operate and maintain pressure drop gauge(s) on the baghouse. Pressure drop readings shall be recorded daily during source operation. Facilities with automated data collection may collect monitoring data on a more frequent basis and calculate the daily average. Readings collected when the source is shutdown or not operating may not be used in the calculation. The owner/operator must get approval from the Technical Management Section for an increased frequency/averaging plan prior to using averaging for parametric monitoring. The owner/operator shall continue to record daily, the calculated monitoring averages using the approved increased frequency/averaging plan unless prior approval is obtained from the Technical Management Section for changing the plan.		
Operation and maintenance checks shall be made on at least a weekly basis for baghouse cleaning systems, dust collection hoppers, and conveying systems for proper operation. The checks and any corrective actions shall be documented and kept on-site. The baghouse shall be in place and operational whenever processes controlled by it are running, except during periods of baghouse malfunction or mechanical failure.		
Operational ranges for the monitored parameters shall be established to ensure proper operation of the pollution control equipment. These operational ranges for the monitored parameters shall be derived from stack test data, vendor certification, and/or operational history and visual inspections, which demonstrate the proper operation of the equipment. Operating ranges may be updated following submittal to the Department. These ranges and supporting documentation (certification from manufacturer, stack test results, 30 days of normal readings, opacity readings, etc.) shall be submitted to the Director of the Air Permitting Division within 180 days of startup.		
Equipment ID: PB1 Control Device ID: CYC1		
 The cyclone shall be in place and operational whenever processes controlled by the cyclone is running, except during periods of cyclone malfunction or mechanical failure. The following operation and maintenance checks will be made on at least a weekly basis for all cyclones: Check the cyclone and ductwork system for damaged or worn sheet metal or other interferences with proper operation. Check dust collection hoppers and conveying systems for proper operation. 		
The checks and any corrective actions shall be documented and kept on-site.		

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C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions			
	_	nipment ID: DHM1, PB1 ntrol Device ID: BF01, CYC1		
	phe sha ann sou	enol, and propionaldehyde emis ll be conducted within 180 da rually and be completed no lat	ssion factors of the Dry Hamme ays after startup. Subsequen ter than twelve (12) months a	acrolein, formaldehyde, methano ermill and the Pellet Mill and Coole t source tests shall be conducted after the previous source test. The equipment, emission points, and
		Source(s)	Emission Point ID	Pollutants
		PelletBOX No. 1 – Dry Hammermill	DHM1	PM, PM ₁₀ , PM _{2.5} , VOC, Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, and Propionaldehyde
C.11		PelletBOX No.1 – Pellet Mill and Cooler	PB1	PM, PM ₁₀ , PM _{2.5} , VOC, Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, and Propionaldehyde

The facility may test emissions of VOC as a surrogate to determine the total potential HAP emissions by applying HAP ratios used in the initial application.

If the results from the initial or subsequent source tests is 85% of the emission factors originally provided subsequent source tests shall be conducted every three (3) years for those pollutants and be completed no later than thirty-six (36) months after the previous source test. If the results from the initial or subsequent source tests is 50% of the emission factors originally provided subsequent source tests shall be conducted every five (5) years for those pollutants and be completed no later than sixty (60) months after the previous source test. If at any time a source test indicates emission factors greater than 85% or 50% of initial factors, the facility will return to the next more frequent testing as follows: Five (5) year to three (3) year, three (3) year to annually.

The owner shall include as a source test monitoring parameter a record of the material throughput in ODT/hr of process equipment. For the Fabric Filter (BF1), the facility shall also monitor and record the pressure drop across the control device to establish or re-establish pressure drop ranges.

The owner/operator shall use the initial emission factors identified in the statement of basis, until new emission factors that are developed from subsequent source testing have been approved for

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Condition Number	Conditions		
	use.		
	The owner/operator may request approval to re-establish emission factors based on stack test results. However, if any source testing subsequent to this approval results in a higher emission factor than the approved emission factor, the owner/operator shall recalculate facility wide emissions dating back to change in the emission factor. Recalculated emissions shall be submitted to the Department within 30 days after receipt of test results.		
	Equipment ID: DHM1, PB1 Control Device ID: BF01, CYC1		
C.12	An Operation and Maintenance (O & M) plan shall be implemented and submitted to the Director of the Air Permitting Division for review and approval within 180 days of issuance of this permit. A log of any updates made to the O & M procedures as well as the updated procedures shall be submitted semi-annually to the Director of the Air Permitting Division for approval. The log shall include the basis for each update made to the procedure. If no changes to the procedure occurred during the reporting period, then a letter shall indicate such. The procedures, logs demonstrating execution of the procedures, and any updates made to the procedure shall be recorded in a suitable permanent form, maintained on-site, and made available for inspection by Department personnel upon request. At a minimum the (O & M) plan shall include the following:		
	 i. A schedule for the proper maintenance, operation, calibration of monitoring, recording, computer controllers, and associated devices to ensure proper process rate/process throughput, proper process control, and proper reporting. ii. Logs containing scheduled repairs and maintenance preformed to ensure proper operation. iii. Methods to ensure proper operating speed, production rate, air flow, etc. to ensure emissions 		
	 are minimized. iv. Methods to ensure the equipment is operating in accordance with manufacturer specifications. v. Methods for minimizing fugitive emissions through proper maintenance procedures. vi. Methods for minimizing emissions during startup, shutdown, and malfunctions. vii. Inspection checks of collection hoppers and conveying systems for damaged or worn parts or other interferences with proper operation. 		
	Equipment ID: Facility Wide		
C.13	The owner/operator shall maintain records necessary to determine PM, PM ₁₀ , PM _{2.5} , CO, VOC, and HAP emissions. PM, PM ₁₀ , PM _{2.5} , CO, VOC, and HAP emissions shall be calculated on a monthly basis, and a twelve-month rolling sum shall be calculated for total PM, PM ₁₀ , PM _{2.5} , CO, VOC, individual HAP, and total HAP emissions using the algorithms in Attachment – Algorithms. Facility-wide emission totals must include emissions from insignificant activities. Emissions from malfunctions are required to be quantified and included in the calculations. Reports of the calculated values and the twelve-		

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C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions		
	month rolling sum, calculated for each month in the reporting period, operating parameters, and algorithms in Attachment – Algorithms, shall be kept onsite.		
	Equipment ID: Facility Wide Control Device ID: Facility Wide		
C.14	The facility is limited to a maximum production rate of 45,625 ODT/year. The owner/operator must record the actual dried wood pellet throughput on a monthly basis and a twelve-month rolling sum shall be calculated for total dried wood pellet throughput. The twelve-month rolling sum calculated shall not exceed 45,625 ODT/year. Reports of the monthly throughput and the twelve month rolling sum calculated for each month in the reporting period shall be submitted semiannually.		

D. NESHAP PERIODIC REPORTING SCHEDULE SUMMARY - RESERVED

E. NESHAP - CONDITIONS - RESERVED

F. AMBIENT AIR STANDARDS REQUIREMENTS

Condition Number	Conditions		
F.1	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. 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.		

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F. AMBIENT AIR STANDARDS REQUIREMENTS

Condition Number	Conditions
	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.

G. PERIODIC REPORTING SCHEDULE

Compliance Monitoring Report Submittal Frequency	Reporting Period (Begins on the startup date of the source)	Report Due Date	
	January-March	April 30	
Quarterly	April-June	July 30	
Quarterly	July-September	October 30	
	October-December	January 30	
	January-June	July 30	
Semiannual	April-September	October 30	
Semiamuai	July-December	January 30	
	October-March	April 30	
	January-December	January 30	
Appual	April-March	April 30	
Annual	July-June	July 30	
	October-September	October 30	

Note: This reporting schedule does not supersede any federal reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. All federal reports must meet the reporting time frames specified in the federal standard unless the Department or EPA approves a change.

H. REPORTING CONDITIONS

Condition Number	Conditions
H.1	Reporting required in this permit, shall be submitted in a timely manner as directed in the Periodic Reporting Schedule of this permit.
H.2	All reports and notifications required under this permit shall be submitted to the person indicated in the specific condition at the following address: 2600 Bull Street Columbia, SC 29201 The contact information for the local Environmental Affairs Regional office can be found at: http://www.scdhec.gov
H.3	(S.C. Regulation 61-62.1, Section II(A)(3)) The owner/operator shall submit written notification to the Director of Air Permitting of the date construction is commenced, postmarked within thirty (30) days

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H. REPORTING CONDITIONS

Condition Number	Conditions					
	after such date.					
H.4	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.					
	(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:					
H.5	 The identity of the stack and/or emission point where the excess emissions occurred; 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; The time and duration of excess emissions; The identity of the equipment causing the excess emissions; The nature and cause of such excess emissions; The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction; The steps taken to limit the excess emissions; and, 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. 					
	Affairs Regional office.					
	The written report should be sent to the Manager of the Technical Management Section, Bureau of Air Quality and the local Environmental Affairs Regional office.					

I. PERMIT EXPIRATION AND EXTENSION

Condition Number	Conditions
1.1	(S.C. Regulation 61-62.1, Section II(A)(4) and (5) and S.C. Regulation 61-62.1, Section II(J)(1)(f)) Approval to construct shall become invalid if construction: a. is not commenced within 18 months after receipt of such approval; b. is discontinued for a period of 18 months or more; or c. is not completed within a reasonable time as deemed by the Department.

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I. PERMIT EXPIRATION AND EXTENSION

Condition Number	Conditions
	The Department may extend the construction permit for an additional 18-month period upon a satisfactory showing that an extension is justified. This request must be made prior to the permit expiration.
	This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within eighteen (18) months of the projected and approved commencement date.

J. PERMIT TO OPERATE

Condition Number	Conditions				
J.1	(S.C. Regulation 61-62.1 Section II(F)(3)) When a Department issued construction permit includes engineering and/or construction specifications, the owner/operator or professional engineer in charge of the project shall certify that, to the best of his/her knowledge and belief and as a result of periodic observation during construction, the construction under application has been completed in accordance with the specifications agreed upon in the construction permit issued by the Department. If construction is certified as provided above, the owner or operator may operate the source in compliance with the terms and conditions of the construction permit until the operating permit is issued by the Department. If construction is not built as specified in the permit application and associated construction permit(s), the owner/operator must submit to the Department a complete description of modifications that are at variance with the documentation of the construction permitting determination prior to commencing operation. Construction variances that would trigger additional requirements that have not been addressed prior to start of operation shall be considered construction without a permit.				
J.2	(S.C. Regulation 61-62.1, Section II(F)(1)) The owner or operator shall submit written notification to the Department of the actual date of initial startup of each new or altered source, postmarked within fifteen (15) days after such date. Any source that is required to obtain an air quality construction permit issued by the Department must obtain an operating permit when the new or altered source is placed into operation and shall comply with the requirements of this section.				
J. 3	(S.C. Regulation 61-62.1, Section II(F)(4)(b)) The owner or operator shall submit a written request to the Director of Air Permitting for a new or revised operating permit to cover any new or altered source postmarked within fifteen (15) days after the actual date of initial startup of each new or altered source.				
J.4	(S.C. Regulation 61-62.1, Section II(F)(4)(c)) The written request for a new or revised operating permit must include, at a minimum, the following information: i. A list of sources that were placed into operation; and ii. The actual date of initial startup of each new or altered source.				

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K. GENERAL CONDITIONS

Condition Number	Conditions			
K.1	The permittee shall pay permit fees to the Department in accordance with the requirements of S.C. Regulation 61-30, Environmental Protection Fees.			
K.2	 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: An emergency occurred, and the owner or operator can identify the cause(s) of the emergency; The permitted source was at the time the emergency occurred being properly operated; 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 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 (J)(1)(c)(viii). The written report shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This provision is in addition to any emergency or upset provision contained in any applicable requirement. 			
K.3	 (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: Enter the facility where emissions-related activity is conducted, or where records must be kept under the conditions of the permit. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit. 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. 			
K.4	(S.C. Regulation 61-62.1, Section II(J)(1)(a)) No applicable law, regulation, or standard will be contravened.			
K.5	(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.			

L. EMISSIONS INVENTORY REPORTS - RESERVED

ATTACHMENT - Algorithms

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The emission rates listed herein are not considered enforceable limitations but are used to evaluate ambient air quality impact. Until the Department makes a determination that a facility is causing or contributing to an exceedance of a state or federal ambient air quality standard, increases to these emission rates are not in themselves considered violations of these ambient air quality standards (see Ambient Air Standards Requirements).

AM	AMBIENT AIR QUALITY STANDARDS – STANDARD NO. 2					
Emission Point ID	Emission Rates (lbs/hr)					
Emission Point ID	PM ₁₀	PM _{2.5}	SO ₂	NOx	СО	Lead
DHM1	0.157	0.157				
DSHS	0.006	0.001				
PB1	0.282	0.079				
PHS	0.006	0.001				
ROAD	0.040	0.006				

TOXIC AIR POLLUTANTS – STANDARD NO. 8					
	Emission Rates (lbs/hr)				
Emission Point ID	Acetaldehyde	Acrolein	Formaldehyde	Methanol	
	75-07-0	107-02-8	50-00-0	67-56-1	
BLDG1		1	4.40E-03		
DHM1	0.0375	1		0.306	
DSHS		1		0.0106	
PB1	0.1750	0.260	6.77E-02	0.0311	
PHS		-		0.0106	
SILO1			4.40E-03		

TOXIC AIR POLLUTANTS – STANDARD NO. 8		
	Emission Rates (lbs/hr)	
Emission Point ID	Propionaldehyde	
	123-38-6	
DHM1	0.0646	
PB1	0.0760	

ATTACHMENT - Algorithms

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The algorithms listed herein are representative of the process equipment as specified in the permit application. The owner/operator shall use the initial emission factors listed in the application until new emission factors developed from source testing have been approved in writing by the Department.

Dry Shavings Handling and Storage

The owner/operator shall calculate monthly PM, PM₁₀, PM_{2.5}, VOC, Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, and Propionaldehyde emissions using the following algorithm:

Emissions (E) = Pollutant Emission Factor (EF) (lb/ODT) × Shavings Processed (ODT/month) / 2,000 lb/ton

PelletBOX No. 1 - Dry Hammermill

The owner/operator shall calculate monthly PM, PM_{10} , and $PM_{2.5}$ emissions using the following algorithm:

Emissions (E) = Flow Rate (dscf/hr) × Outlet Grain Loading (gr/dscf) / 7,000 gr/lb × Operating Time (hr/month) / 2,000 lb/ton

*Hammermill emissions are vented through a baghouse for product capture. Baghouse flow rate (dscf/hr) and outlet grain loading (gr/dscf) are based on equipment vendor specifications.

The owner/operator shall calculate monthly VOC, Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, and Propionaldehyde emissions using the following algorithm:

Emissions (E) = Pollutant Emission Factor (EF) (lb/ODT) × Shavings Processed (ODT/month) / 2000 lb/ton

PelletBOX No. 1 - Pellet Mill/Cooler

The owner/operator shall calculate monthly PM and PM₁₀ emissions using the following algorithm:

Emissions (E) = Flow Rate (dscf/hr) \times Outlet Grain Loading (gr/dscf) / 7,000 gr/lb \times Operating Time (hr/month) / 2,000 lb/ton

*Pelletizer and Cooler emissions are vented through a cyclone for product capture. Cyclone flow rate (dscf/hr) and outlet grain loading (gr/dscf) are based on equipment vendor specifications.

**(PM₁₀ speciation) PM₁₀ as a percentage of PM = 26%

The owner/operator shall calculate monthly PM_{2.5}, VOC, Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, and Propionaldehyde emissions using the following algorithm:

Emissions (E) = Pollutant Emission Factor (EF) (lb/ODT) × Shavings Processed (ODT/month) / 2000 lb/ton

ATTACHMENT - Algorithms

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Pellet Handling and Storage

The owner shall calculate monthly PM, PM_{10} , $PM_{2.5}$, VOC, Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, and Propionaldehyde emissions using the following algorithm:

Emissions (E) = Pollutant Emission Factor (EF) (lb/ODT) × Shavings Processed (ODT/month) / 2000 lb/ton

The owner shall calculate monthly CO emissions using the following algorithm:

Emissions (E) = Pollutant Emission Factor (EF) (lb/hr) × Operating Hours (hr/month) / 2000 lb/ton