



Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

May 6, 2014

Certified Mail

91 7108 2133 3938 7548 6882

Ben Easterlin
Piedmont Wood Pellet Johnston, LLC
5256 Peachtree Road, Suite 130
Atlanta, Georgia 30341

Re: Construction Permit No. 0980-0047-CA

Dear Mr. Easterlin:

Enclosed is Construction Permit No. 0980-0047-CA. This construction permit is being issued in accordance with the plans, specifications and other information submitted in the construction permit application, as amended.

In addition to this permit to construct, a permit to operate is required in accordance with *South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards*. The regulations require a written request for a new or revised operating permit to cover any new or altered source, postmarked no later than fifteen (15) days after the actual date of initial startup of each new or altered source unless a more stringent time frame is required.

Please note the emissions limitations and operational requirements contained within this permit. It is important for you and/or an authorized representative responsible for the overall operation of this facility to read this issued permit carefully and to understand all requirements. If any errors or omissions are discovered, please notify Michael G. Daugherty of my staff, via e-mail at daughemg@dhec.sc.gov, or call (803) 898-4315 immediately.

Pursuant to the South Carolina Administrative Procedures Act, any Department decision involving the issuance, denial, suspension, or revocation of a permit or certification may be appealed by the applicant, permittee, licensee, or affected person. Please see the enclosed "Guide to Board Review" for guidelines on filing an appeal.

Sincerely,

Elizabeth J. Basil
Director, Engineering Services Division, Bureau of Air Quality

EJB:mgd:kal
Enclosure

cc: Permit File: 0980-0047
ec: Mark Harvley, BEHS
Mike Rutledge, mrutledge@fageneng.com
Michael Shroup, Source Evaluation



Office of Environmental Quality Control

Bureau of Air Quality

Synthetic Minor Construction Permit

Piedmont Wood Pellet Johnston, LLC
Across The Street From SC Highway 121
Johnston, South Carolina 29832
Edgefield County

Pursuant to the provisions of the *Pollution Control Act*, Sections 48-1-50(5) 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 January 17, 2014, 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: 0980-0047-CA
Issue Date: May 6, 2014


Director, Engineering Services Division
Bureau of Air Quality

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A. PROJECT DESCRIPTION

Permission is hereby granted to construct a wood pellet plant capable of producing 545,644 tons of pellets a year
The following equipment is to be installed:

1. One (1) Debarking Drum
2. One (1) Log Chipper
3. Three (3) Wet Wood Hammer mills
4. Two (2) Direct Fired Dryer including wood fired burners and Product Recovery Cyclones
5. Six (6) Dry Grind Hammer mills
6. Two (2) 494 Ton Dry Fiber Silos
7. Eighteen (18) Pellet Mills
8. Four (4) Pellet Coolers
9. Four (4) 5,000 Ton Product Silos
10. Two (2) 300 tph Load Out Systems
11. One (1) Emergency Fire Pump (Exempt Source)
12. One (1) Natural Gas Emergency Fired Generator (Exempt Source)

This synthetic minor construction permit will establish Federally Enforceable limits to limit Volatile Organic Compounds (VOCs) to less than 250 tons per year, Particulate Matter (PM) shall be less than 250 tons per year, Particulate Matter with aerodynamic diameter less than or equal to a nominal 10 micrometers (PM₁₀) shall be less than 250 tons per year, Particulate Matter with aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM_{2.5}) shall be less than 250 tons per year, Nitrogen Oxides (NO_x) shall be less than 250 tons per year, Carbon Monoxide (CO) shall be less than 250 tons per year, any single Hazardous Air Pollutant (HAP) shall be less than 10 tons per year and, total combined HAPs shall be less than 25 tons per year. As such, this facility will be a synthetic minor facility for Prevention of Significant Deterioration (PSD) applicability and, as an Area Source for Maximum Achievable Control Technology (MACT) applicability.

B. EQUIPMENT

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
P01	Debarking Drum (1,000,000 tpy)	N/A	N/A
P02	Log Chipper (990,000 tpy)	N/A	N/A
P03	Wet Wood Hammer mill #1 (330,000 tpy)	CYC-01	EP01
P04	Wet Wood Hammer mill #2 (330,000 tpy)	CYC-02	EP02
P05	Wet Wood Hammer mill #3 (330,000 tpy)	CYC-03	EP03
P06	Direct Fired Rotary Dryer #1 (84.3x10 ⁶ Btu/hr Green fire suspension burner and Product Recovery Cyclones)	WESP-01 RTO-01	EP04
P07	Direct Fired Rotary Dryer #2 (84.3x10 ⁶ Btu/hr Green fire suspension burner and Product Recovery Cyclones)	WESP-01 RTO-01	EP04
P10	Dry Grind Hammer mill #1 (14.3 tph)	DC-01 RTO-02	EP-05
P11	Dry Grind Hammer mill #2 (14.3 tph)	DC-02 RTO-02	EP-05
P12	Dry Grind Hammer mill #3 (14.3 tph)	DC-03 RTO-02	EP-05
P13	Dry Grind Hammer mill #4 (14.3 tph)	DC-04 RTO-02	EP-05

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B. EQUIPMENT

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
P14	Dry Grind Hammer mill #5 (14.3 tph)	DC-05 RTO-02	EP-05
P15	Dry Grind Hammer mill #6 (14.3 tph)	DC-06 RTO-02	EP-05
P16	494 Ton Dry Fiber Silos	BV-01 RTO-02	EP-05
P17	494 Ton Dry Fiber Silos	BV-02 RTO-02	EP-05
P18-P35	Eighteen Pellet Mills (4.41 tph each)	WESP-01 RTO-01	EP04
P36-P39	Four Pellet Coolers (30 tph each)	DC-07 RTO-02	EP-05
P40-P43	Four 5,000 Ton Product Silos	N/A	N/A
P44-P45	Two 300 tph Load Out Systems	N/A	N/A

C. CONTROL DEVICES

Control Device ID	Control Device Description	Pollutant(s) Controlled
CYC-01	Cyclone	PM/PM ₁₀ /PM _{2.5}
CYC-02	Cyclone	PM/PM ₁₀ /PM _{2.5}
CYC-03	Cyclone	PM/PM ₁₀ /PM _{2.5}
DC-01	Baghouse	PM/PM ₁₀ /PM _{2.5}
DC-02	Baghouse	PM/PM ₁₀ /PM _{2.5}
DC-03	Baghouse	PM/PM ₁₀ /PM _{2.5}
DC-04	Baghouse	PM/PM ₁₀ /PM _{2.5}
DC-05	Baghouse	PM/PM ₁₀ /PM _{2.5}
DC-06	Baghouse	PM/PM ₁₀ /PM _{2.5}
DC-07	Baghouse	PM/PM ₁₀ /PM _{2.5}
WESP-01	Wet Electrostatic Precipitator	PM/PM ₁₀ /PM _{2.5}
RTO-01	Regenerative Thermal Oxidizer	VOC/HAPs
RTO-02	Regenerative Thermal Oxidizer	VOC/HAPs
BV-01	Bin Vent Filter	PM/PM ₁₀ /PM _{2.5}
BV-02	Bin Vent Filter	PM/PM ₁₀ /PM _{2.5}

D. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
D.1	<p>Equipment/Control Device ID: All</p> <p>(S.C. Regulation 61-62.1, Section II.J) A copy of the Department issued construction and/or operating permit must be kept readily available at the facility at all times. An owner/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 and shall be made available to a Department representative upon request.</p>

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D. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
D.2	<p>Equipment/Control Device ID: DC-01 – DC-07, WESP-01, and RTO1 – RTO-02</p> <p>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.</p>
D.3	<p>Equipment/Control Device ID: CYC-01 – CYC-03, DC-01 – DC-07, WESP-01, RTO1 – RTO-02, and BV-01 – BV-02</p> <p>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 electronic), along with any corrective action taken when deviations occur. 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. Reports of these incidences shall be submitted semiannually. If no incidences occurred during the reporting period then a letter shall indicate such.</p> <p>Any alternative method for monitoring control device performance must be preapproved by the Department and shall be incorporated into the permit as set forth in S.C. Regulation 61-62.70.7.</p>
D.4	<p>Equipment/Control Device ID: CYC-01 – CYC-03, DC-01 – DC-07, WESP-01, RTO1 – RTO-02</p> <p>For any source test required under an applicable standard or permit condition, the owner/operator shall comply with S.C. Regulation 61-62.1, Section IV - Source Tests.</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>
D.5	<p>Equipment/Control Device ID: All</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> <p>The owner/operator shall perform a visual inspection on a weekly basis. Visual Inspection means a qualitative observation of opacity during daylight hours where the inspector records results in a log, noting color, duration, density (heavy or light), cause and corrective action taken for any abnormal emissions. The observer does not need to be certified to conduct valid visual inspections. However, at a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, and observer position relative to lighting, wind, and the presence of uncombined water. Logs shall be kept to record all visual inspections, including cause and corrective action taken for any abnormal emissions and visual inspections from date of recording. The owner/operator shall submit semi-annual reports of these logs. If there are no incidences, a letter should be submitted semi-annually stating such.</p>
D.6	<p>Equipment/Control Device ID: P01, P02, P03, P04, P05, P06, P07, P10 – P15, P18 – P35, P36 – P39, P44, P45, CYC-01 – CYC-03, DC-01 – DC-07, WESP-01, RTO1 – RTO-02, and BV-01 – BV-02</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>

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D. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions																										
<p>For process weight rates less than or equal to 30 tons per hour $E = (F) 4.10P^{0.67}$ and For process weight rates greater than 30 tons per hour $E = (F) 55.0P^{0.11} - 40$ 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</p> <p>For the purposes of compliance with this condition, the process boundaries are defined as follows:</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #e0e0e0;"> <th>Process/Equipment IDs</th> <th>Max Process Weight Rate (ton/hr)</th> </tr> </thead> <tbody> <tr><td>P01</td><td>1,256</td></tr> <tr><td>P02</td><td>113.0</td></tr> <tr><td>P03</td><td>37.61</td></tr> <tr><td>P04</td><td>37.61</td></tr> <tr><td>P05</td><td>37.61</td></tr> <tr><td>P06</td><td>36</td></tr> <tr><td>P07</td><td>36</td></tr> <tr><td>P10 – P15</td><td>85.8 (Total)</td></tr> <tr><td>P18 – P35</td><td>79.38 (Total)</td></tr> <tr><td>P36 – P39</td><td>120 (Total)</td></tr> <tr><td>P44</td><td>300</td></tr> <tr><td>P45</td><td>300</td></tr> </tbody> </table> <p>CYC-01 – CYC-03 Each cyclone shall be in place and operational whenever processes controlled by the cyclones are 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:</p> <ul style="list-style-type: none"> • Check each 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. <p>The results from the operation and maintenance checks shall be maintained in logs (written or electronic), along with any corrective action taken.</p> <p>DC-01 – DC-07 The owner/operator shall install, operate and maintain pressure drop gauges on each baghouse. Pressure drop readings for each baghouses shall be recorded daily during source operation. Operation and maintenance checks shall be made on at least a weekly basis for each baghouse cleaning systems, dust collection hoppers and conveying systems for proper operation. Each baghouse shall be in place and operational whenever processes controlled by it are running, except during periods of baghouse malfunction or mechanical failure.</p> <p>WESP-01 The owner/operator shall install, operate and maintain primary and secondary voltage meters, primary and secondary current meters, spark rate meters for each field of the WESP. The monitored parameters for the WESP shall be recorded each shift during source operation. The WESP shall be in place and operational whenever processes controlled by it are running, except during periods of WESP malfunction or mechanical failure.</p>	Process/Equipment IDs	Max Process Weight Rate (ton/hr)	P01	1,256	P02	113.0	P03	37.61	P04	37.61	P05	37.61	P06	36	P07	36	P10 – P15	85.8 (Total)	P18 – P35	79.38 (Total)	P36 – P39	120 (Total)	P44	300	P45	300	
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D. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	<p>BV-01 – BV-02 Bin Vent Filters shall be operational and in place at all times when equipment or processes controlled by the filters are operating, except during periods of malfunction or mechanical failure. A schedule shall be implemented for the weekly inspection and regular cleaning or replacement of the filter media. Records of these events shall be maintained in logs (written or electronic) and maintained on site.</p> <p>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. Prior to the first source test, the facility shall use manufacturer’s recommendations for operational ranges. The manufacturer’s recommendations must be maintained on site. 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 Engineering Services within 180 days of startup. Operating ranges may be updated following submittal to the Department.</p>
D.7	<p>Equipment/Control Device ID: RTO-01 & RTO-02</p> <p>SC Regulation 61-62.5, Standard No. 3 – Waste Combustion and Reduction, Section III In accordance with SC Regulation 61-62.5, Standard No. 3 – Waste Combustion and Reduction, Section III, I – Industrial Incinerators, the allowable opacity resulting from this operation shall not exceed 20% (each stack).</p> <p>In accordance with SC Regulation 61-62.5, Standard No. 3 – Waste Combustion and Reduction, Section III, I – Industrial Incinerators, the allowable discharge of particulate matter resulting from this operation is 0.5 lbs/10⁶ BTU total heat input. The total heat input value from waste and virgin fuel used for production shall not exceed the BTU used to affect the combustion of the waste and shall not include any BTU input from auxiliary burners located outside of the primary combustion chamber such as those found in secondary combustion chambers, tertiary combustion chambers or after burners unless those auxiliary burners are fires with waste. In the case where waste is fired in the auxiliary burners located outside of the primary combustion chamber, only the BTU value of the fuel for the auxiliary burner which is from waste shall be added to the total heat input value.</p> <p>The owner/operator shall perform a visual inspection on a weekly basis. Visual Inspection means a qualitative observation of opacity during daylight hours where the inspector records results in a log, noting color, duration, density (heavy or light), cause and corrective action taken for any abnormal emissions. The observer does not need to be certified to conduct valid visual inspections. However, at a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, and observer position relative to lighting, wind, and the presence of uncombined water. Logs shall be kept to record all visual inspections, including cause and corrective action taken for any abnormal emissions and visual inspections from date of recording. The owner/operator shall submit semi-annual reports of these logs. If there are no incidences, a letter should be submitted semi-annually stating such.</p>
D.8	<p>Equipment/Control Device ID: P06, P07, P10 - P15, P16, P17, P18 – P35, P36 – P39, RTO-01, & RTO-02</p> <p>SC Regulation 61-62.5, Standard No. 5.1 (State Only) The two (2) Dryers, six (6) Dry Grind Hammer mills, two (2) Dry Fiber Storage Silos, eighteen (18) Pellet Mills, and four (4) Pellet Coolers are subject SC Regulation 61-62.5, Standard No. 5.1, Best Available Control Technology (BACT)/Lowest Achievable Emission Rate (“LAER”). BACT for the equipment is determined to be a Regenerative Thermal Oxidizer (RTO). Each RTO’s minimum required destruction removal efficiency (DRE) of Volatile Organic Compounds (VOCs) shall be 95%.</p>

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D. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	<p>An initial source test for VOCs shall be performed on RTO-01 and RTO-02 with in 180 days of start up and every four years there after.</p> <p>Operational temperature ranges for each RTO shall be established initially as recommended by the control device manufacturer to provide a reasonable assurance of compliance. Future operational temperature ranges shall be derived from stack test data, which demonstrates the proper operation of the equipment in compliance. These operational temperature ranges, with supporting documentation and quality assurance procedures, shall be submitted to the Bureau for approval within 180 days of start up. The operating ranges may be updated using this procedure, following Bureau approval.</p> <p>The owner/operator shall install operate and maintain combustion zone temperature indicators on each RTO. The owner/operator shall maintain the combustion chamber temperature above the minimum temperature established during the performance test. Temperature readings shall be recorded at least every fifteen (15) minutes and maintained on site. The RTO shall be in place and operational whenever processes controlled by the RTO are running, except during periods of RTO malfunction or mechanical failure.</p>
D.9	<p>Equipment/Control Device ID: P06 & P07</p> <p>S.C. Regulation 61-62.5, Standard No. 5.2, Section III The allowable discharge of NO_x resulting from these sources is 30 percent reduction from uncontrolled levels.</p> <p>Prior to start of construction the facility must provide documentation that the burner will be in compliance with a limit of 0.139 lb/10⁶ Btu per dryer which is 30 percent reduction from uncontrolled levels.</p> <p>S.C. Regulation 61-62.5, Standard No. 5.2, Section VI The owner/operator of the subject combustion sources shall develop a tune-up plan and perform tune-ups every two years in accordance with manufacturer’s specifications or with good engineering practices from start-up of operation. All tune-up records are required to be maintained on site.</p>
D.10	<p>Equipment/Control Device ID: CYC-01 – CYC-03, DC-01 – DC-07, WESP-01, and RTO1 – RTO-02</p> <p>Testing</p> <p>RTO-01 & RTO-02 An initial source test shall be performed on RTO-01 and RTO-02 with in 180 days of start up to establish emissions factors (VOCs, PM, PM₁₀, PM_{2.5}, NO_x, CO, Acetaldehyde, Formaldehyde, HCL, Methanol, Cumene, Phenol, and Acrolein), operational ranges, DRE of VOCs, and every four years there after for VOCs as required by SC Regulation 61-62.5, Standard No. 5.1.</p> <p>RTO-01 shall have two performance tests conducted with both dryer systems in operation to establish operating ranges, establish emission factors, and to show compliance with the 95 % DRE for VOCs. The first test shall be conducted at lower loading rates and lowest possible moisture content to establish the minimum operating temperature. The second test shall be conducted at maximum production rate and lowest possible moisture content for the purpose of establishing site specific uncontrolled and controlled emissions factors based on pounds per oven dried ton and lb/hr.</p> <p>RTO-02 shall have two performance tests conducted with both dryer systems in operation to establish operating ranges, establish emission factors, and to show compliance with the 95 % DRE for VOCs.. The first test shall be conducted at lower loading rates and lowest possible moisture content to establish the minimum operating temperature. The second test shall be conducted at maximum production rate and lowest possible moisture content for the purpose of establishing site</p>

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D. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

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	<p>specific uncontrolled and controlled emissions factors based on pounds per oven dried ton and lb/hr.</p> <p>WESP-01 An initial source test shall be performed on Wet Electrostatic Precipitator (WESP-01) for PM, PM10, PM_{2.5}, and NO_x with in 180 days of start up to establish operating ranges, control efficiency, NO_x compliance limit of 0.139 lb/10⁶ Btu for Standard 5.2, and site specific uncontrolled and controlled emission factors based on pounds per oven dried ton and lb/hr. The test shall be performed with all equipment at their maximum production rate.</p> <p>CYC-01 – CYC-03 An initial source test shall be performed on each cyclone for PM, PM10, and PM_{2.5} with in 180 days of start up to establish control efficiency and site specific uncontrolled and controlled emission factors based on pounds per oven dried ton and lb/hr. The test shall be performed with all equipment controlled by the cyclone at their maximum production rate.</p> <p>DC-01 – DC-07 An initial source test shall be performed on each dry grind hammer mill’s baghouse (DC-01 – DC-06) and for the four pellet coolers baghouse (DC-07) for PM, PM10, and PM_{2.5} with in 180 days of start up to establish operating ranges, control efficiency, and site specific uncontrolled and controlled emission factors based on pounds per oven dried ton and lb/hr. The test shall be performed with all equipment controlled by the cyclone at their maximum production rate.</p> <p>These emission factors are to be used in demonstrating compliance with synthetic minor limits, record keeping, and reporting requirements.</p>
D.11	<p>Equipment/Control Device ID: Facility Wide</p> <p>S.C. Regulation 61-62.1, Section II.E; This facility is a potential major source for PM, PM₁₀, PM_{2.5}, NO_x, CO, and VOC 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, PM₁₀, PM_{2.5}, NO_x, CO, and VOC to avoid PSD.</p> <p>The owner/operator shall maintain operational records and any other records necessary to determine facility wide PM, PM₁₀, PM_{2.5}, NO_x, CO, and VOC emissions. PM, PM₁₀, PM_{2.5}, NO_x, CO, and VOC emissions shall be calculated on a monthly basis, and a twelve month rolling sum shall be calculated for total PM, PM₁₀, PM_{2.5}, NO_x, CO, and VOC emissions. Emissions from malfunctions are required to be quantified and included in the calculations. The twelve month rolling sum shall be less than 250 tons for each pollutant. Reports of the calculated values and the twelve-month rolling sum, calculated for each month in the reporting period, shall be submitted semiannually.</p> <p>An algorithm, including example calculations and emission factors, explaining the method used to determine emission rates shall only be included in the initial report. Subsequent submittals of the algorithm are required within 30 days of the change if the algorithm or basis for emissions is modified or the Department requests additional information.</p> <p>S.C. Regulation 61-62.1, Section II.E This facility is a potential major source for hazardous air pollutants (HAP) emissions. The facility has agreed to federally enforceable operating limitations to limit its potential to emit to less than 10 tons per year for any single HAP emission and 25 tons per year for any combination of HAP emissions to avoid MACT.</p> <p>The owner/operator shall maintain operational records and any other records necessary to determine facility wide hazardous air pollutants (HAP) emissions. Hazardous air pollutants (HAP) emissions shall be calculated on a monthly basis, and a twelve month rolling sum shall be calculated for single and total HAP emissions. Emissions from malfunctions are required to be quantified and included in the calculations. The twelve month rolling sum shall be less than 10 tons single HAP and 25 tons total HAPs. Reports of the calculated values and the twelve-month rolling sum, calculated for each</p>

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D. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

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	<p>month in the reporting period, shall be submitted semiannually.</p> <p>An algorithm, including example calculations and emission factors, explaining the method used to determine emission rates shall only be included in the initial report. Subsequent submittals of the algorithm are required within 30 days of the change if the algorithm or basis for emissions is modified or the Department requests additional information.</p>
D.12	<p>Equipment/Control Device ID: Facility Wide</p> <p>The owner/operator must keep on site for a period of 5 years, or until the source changes its operations to become an affected source, whichever comes first, a record of the applicability determination indicating the facility is an affected source, but is not subject to regulation under 40 CFR 63 and S.C. Regulation 61-62.63, Subpart A and Subpart DDDD National Emission Standards For Hazardous Air Pollutants: Plywood And Composite Wood Products, because of limitations on the source's potential to emit. The record of the detailed applicability determination, made in accordance with the requirements of Subparts A and Subpart DDDD National Emission Standards For Hazardous Air Pollutants: Plywood And Composite Wood Products and available guidance materials, must be signed by the person making the determination and must include an analysis (or other information) that demonstrates why the owner/operator believes the source is unaffected (e.g., because the source has taken federally enforceable limits to avoid major source status).</p>
D.13	<p>Equipment/Control Device ID: Emergency Fire Pump & Emergency Generator</p> <p>Emergency power generators, if applicable, have been determined to be exempt from construction permitting requirements in accordance with South Carolina Regulation 61-62.1 Section II.B.2.f. These sources shall still comply with the requirements of all applicable regulations including but not limited to</p> <p>New Source Performance Standards (NSPS) 40 CFR 60 Subparts A (General Provisions) and IIII (Stationary Compression Ignition Internal Combustion Engines); and JJJJ (Stationary Spark Ignition Internal Combustion Engines)</p>

E. RESERVED

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F. MODELING REQUIREMENTS

Condition Number	Condition
F.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 the air dispersion modeling 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 - Modeled Emission Rates of this permit. Higher emission rates may be administratively incorporated into Attachment - Modeled Emission Rates 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 - Modeled Emission Rates, not to exceed the pollutant limitations of this construction permit. Should the facility wish to increase the emission rates listed in Attachment - Modeled Emission Rates, 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>

G. NESHAP PERIODIC REPORTING SCHEDULE SUMMARY

NESHAP Part	NESHAP Subpart	Compliance Monitoring Report Submittal Frequency	Reporting Period	Report Due Date
63	ZZZZ (Emergency Generators)	N/A	N/A	N/A

1. This table summarizes only the periodic compliance reporting schedule. Additional reports may be required. See specific NESHAP Subpart for additional reporting requirements and associated schedule.
2. This reporting schedule does not supersede any other reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, 40 CFR Part 63, and/or Title V. The MACT reporting schedule may be adjusted to coincide with the Title V reporting schedule with prior approval from the Department in accordance with §63.10.a.5. This request may be made 1 year after the compliance date for the associated MACT standard.

H. NESHAP – CONDITIONS

Condition Number	Condition
H.1	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.
H.2	<p>All NESHAP notifications and the cover letter to periodic reports shall be sent to the United States Environmental Protection Agency (US EPA) at the following address:</p> <p style="text-align: center;">US EPA, Region 4 Air, Pesticides and Toxics Management Division 61 Forsyth Street Atlanta, GA 30303</p>

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H. NESHAP – CONDITIONS

Condition Number	Condition
H.3	Affected sources: All Stationary IC Engines: This facility is 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 this Subpart upon initial start-up unless otherwise noted.

I. PERIODIC REPORTING SCHEDULE

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

J. REPORTING CONDITIONS

Condition Number	Condition
J.1	Reporting required in this permit, shall be submitted in a timely manner as directed in the Periodic Reporting Schedule of this permit.
J.2	All reports and notifications required under this permit shall be submitted to the person indicated in the specific condition at the following address: <p style="text-align: center;">2600 Bull Street Columbia, SC 29201</p> The contact information for the local EQC Regional office can be found at: http://www.scdhec.gov/environment/envserv/regions.htm .
J.3	The owner/operator shall submit written notification to the Director of Engineering Services of the date construction is commenced, postmarked no later than 30 days after such date.
J.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.

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J. REPORTING CONDITIONS

Condition Number	Condition
J.5	<p>(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.</p> <p>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 as a minimum, the following:</p> <ol style="list-style-type: none"> 1. The identity of the stack and/or emission point where the excess emissions occurred; 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; 3. The time and duration of excess emissions; 4. The identity of the equipment causing the excess emissions; 5. The nature and cause of such excess emissions; 6. The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction; 7. The steps taken to limit the excess emissions; and, 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.

K. PERMIT EXPIRATION AND EXTENSION

Condition Number	Condition
K.1	<p>(S.C. Regulation 61-62.1, Section II.A.4) Approval to construct shall become invalid if construction:</p> <ol style="list-style-type: none"> 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. <p>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.</p>
K.2.	<p>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 18 months of the projected and approved commencement date.</p>

L. PERMIT TO OPERATE

Condition Number	Condition
L.1	<p>(S.C. Regulation 61-62.1 Section II.F.2) 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.</p>
L.2	<p>If construction is certified as provided in S.C. Regulation 61-62.1 Section II.F.2, the owner, operator, or representative may operate the source in compliance with the terms and conditions of the construction permit until the operating permit is issued by the Department.</p>

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L. PERMIT TO OPERATE

Condition Number	Condition
L.3	<p>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.</p> <p>Construction variances that would trigger additional requirements that have not been addressed prior to start of operation shall be considered construction without a permit.</p>
L.4	<p>(S.C. Regulation 61-62.1, Section II.F.3) For sources not yet covered by an effective Title V operating permit, the owner/operator shall submit a written request to the Director of the Engineering Services for a new Title V operating permit to cover any new, or altered source, postmarked no later than 15 days after the actual date of initial startup of each new or altered source.</p> <p>(S.C. Regulation 61-62.70.5.a) The owner/operator shall submit a timely and complete Part 70 permit application within 12 months of startup.</p>

M. EMISSIONS INVENTORY REPORTS

Condition Number	Condition
M.1	<p>All newly permitted and constructed Title V sources and/or Non-attainment Area Sources shall complete and submit an emissions inventory consistent with the schedule approved pursuant to S.C. Regulation 61-62.1, Section III. These Emissions Inventory Reports shall be submitted to the Manager of the Emissions Inventory Section, Bureau of Air Quality.</p> <p>This requirement notwithstanding, an emissions inventory may be required at any time in order to determine the compliance status of any facility.</p>

N. GENERAL CONDITIONS

Condition Number	Condition
N.1	The permittee shall pay permit fees to the Department in accordance with the requirements of S.C. Regulation 61-30, Environmental Protection Fees.
N.2	<p>In the event of an emergency, as defined in S.C. Regulation 61-62.1, Section II.L, the owner/operator shall demonstrate the affirmative defense of an emergency through properly signed, contemporaneous operating logs, and other relevant evidence that verify:</p> <ol style="list-style-type: none"> 1. An emergency occurred, and the owner/operator can identify the cause(s) of the emergency; 2. The permitted source was at the time the emergency occurred being properly operated; 3. During the period of the emergency, the owner/operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and 4. The owner/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 as 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. <p>In any enforcement action, the owner/operator seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency, or upset provision contained in any applicable requirement.</p>

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N. GENERAL CONDITIONS

Condition Number	Condition
N.3	<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/operator shall allow the Department or an authorized representative to perform the following:</p> <ol style="list-style-type: none">1. Enter the facility where emissions-related activity is conducted, or where records must be kept under the conditions of the permit.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.3. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.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.

ATTACHMENT - MODELED EMISSION RATES

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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 Modeling Requirements).

STANDARD NO. 8 – TOXIC AIR POLLUTANTS LEVEL I DE MINIMIS ANALYSIS				
POLLUTANT	CAS NUMBER	EMISSION RATE (LBS/DAY)	DE MINIMIS (LBS/DAY)	PASS (Y or N)
Arsenic	7440-38-2	0.000	0.012	Y
Benzene	71-73-2	0.004	1.800	Y
Beryllium	7440-41-7	0.000	0.000	Y
Cadmium	7440-43-9	0.002	0.003	Y
Chromium (+6)	---	0.003	0.030	Y
Cobalt	---	0.000	0.003	Y
Hexane	110-54-3	3.758	10.800	Y
Manganese	---	0.001	0.300	Y
Mercury	7439-97-6	0.001	0.003	Y
Naphthalene	91-20-3	0.001	15.000	Y
Nickel	7440-02-0	0.004	0.006	Y
Phenol	108-95-2	1.337	2.280	Y
Selenium	---	0.000	0.012	Y
Toluene	108-88-3	0.007	24.000	Y

STANDARD NO. 2 - MODELED AAQS EMISSION RATES (LBS/HR)							
STACK ID	PM₁₀	PM_{2.5}	SO₂	NO_x	CO	Lead	HF
EP1	0.68	0.68	---	---	---	---	---
EP2	0.68	0.68	---	---	---	---	---
EP3	0.68	0.68	---	---	---	---	---
EP4	10.64	8.10	4.05	45.87	15.16	---	---
EP5	7.62	0.71	0.02	2.78	2.86	---	---
FACILITY TOTAL	20.30	10.85	4.07	48.65	18.02	---	---

STANDARD NO. 8 - MODELED AIR TOXIC EMISSION RATES (LBS/HR)				
STACK ID	Acrolein	Cumene	Formaldehyde	Hydrogen Chloride
	107-02-8	98-82-8	50-00-0	7647-01-0
EP4	0.262	0.206	0.55	1.51
EP5	0.004	0.003	0.55	0.32
FACILITY TOTAL	0.266	0.209	1.10	1.83