



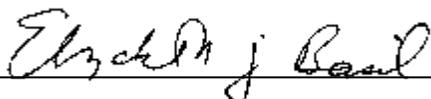
Office of Environmental Quality Control Bureau of Air Quality Registration Permit

Wood Working Operations

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 operation of these sources in accordance with the plans, specifications and other information submitted in the Registration Permit Application for Wood Working Operations.

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

Issue Date: October 15, 2013



**Director, Engineering Services Division
Bureau of Air Quality**

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RECORD OF REVISIONS	
Final Revision Date	Description of Change
11-06-2013	Condition 1.1: Typographical correction and added "stationary" to all combustion sources.
10-14-2014	Condition 1.1: Typographical correction Changed SO ₂ limit in Condition 1.6; Modified Conditions 1.1, 1.2, 1.11, 1.12, 2.1, 2.2, and 2.3; Added Conditions 3.5 through 3.9
01-20-2015	Reformatted Permit Added Conditions A.2, B.12 – B.17 Revised Conditions B.5, B.11, B.16, B.19, B.21 – B.23 and Sections C through H

Registration Permit for Wood Working Operations

A. APPLICABILITY

Condition Number	Condition
A.1	<p>This registration permit applies to wood working operations meeting all of the following criteria:</p> <ol style="list-style-type: none"> 1. Wood working operation means any operation involving the generation of small wood waste particles (shavings, sanderdust, sawdust, etc.) by any kind of mechanical manipulation of wood or wood byproducts. It includes, but is not limited to, sawing, planing, chipping, shaping, moulding, hogging, lathing and sanding and all applicable control devices such as baghouses, cyclones, and portable dust collectors or any internal combustion engines that may be used to power the wood working equipment. Additionally, it covers any wood working waste transfer or collection units such as silos, cyclones, trailers, conveyors, etc. Some wood working facilities also conduct surface finishing. This permit also covers the surface finishing of woods and all applicable finishing materials, control devices such as paint booth filters, cartridges, etc, and dryers, burn-off and curing ovens that may be used during the drying process. Sources that conduct onsite lumber or chip drying prior to machining can not be permitted under this registration permit. 2. Stationary combustion sources can only be fired on natural gas, propane, virgin No. 2 fuel oil, virgin diesel, Biodiesel that meets ASTM D6751 or any other Department approved fuels. The use of any non-specification oil, hazardous waste, or any other waste chemical as a fuel or any addition of these items to the fuel shall not be allowed. External combustion sources shall be fired on low sulfur (0.5 wt% or less) diesel/No. 2 fuel oil. 3. The maximum size for a single stationary external combustion source burning fuels other than natural gas and propane is limited to less than 20 million BTU/hr heat input capacity. 4. The maximum size for a single internal combustion source burning diesel is limited to 500 hp mechanical power output and a displacement of <10 liters per cylinder. 5. Facility wide potential to emit is less than any major source thresholds as defined in Title V, NSR, PSD, and Section 112. 6. Option A: Use less than 2667 gallons per 12 month period of HAP containing materials used for surface coatings, touchup and repairs, washoff operations, cleaning, and any other surface finishing materials containing HAP <p style="text-align: center;">OR</p> <p>Option B: Facility-wide HAP emissions of less than 10 tons of any one hazardous air pollutant and less than 25 tons of any combination of hazardous air pollutants per 12-month period.</p> <p>The following wood working tools are exempt. However, they are subject to the applicable house keeping conditions as outlined in Conditions below:</p> <ul style="list-style-type: none"> • Hand Sanders • Hand Saws (chain saw, hand drills, etc.) • Hand Distressing Tools (chisel, etc.) • Equipment used for boring, notching, etc. <p>Other Exempt Sources:</p> <ul style="list-style-type: none"> • Refer to Department Exempt Sources List that includes S.C. Regulation 61-62.1, Section II (B)(2)(a) through (h), and other sources that have been determined will not interfere with the attainment or maintenance of any State or Federal standard.
A.2	No facility covered under this permit shall be potentially major for Prevention of Significant Deterioration (PSD), Nonattainment New Source Review (NA NSR), and/or Title V.

B. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
B.1	Emission Unit ID: All

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B. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	<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>Equipment/Control Device ID: Non-enclosed Operations and Fugitive Particulate Matter</p> <p>(S.C. Regulation 61-62.5, Standard No. 4, Section X (A)), 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 and In accordance with S.C. Regulation 61-62.6, Section III (a) emissions of fugitive particulate matter shall be controlled in such a manner and to the degree that it does not create an undesirable level of air pollution.</p> <ol style="list-style-type: none"> 1. The owner/operator shall maintain dust control on the premises and any roadway it owns or controls by paving, or other suitable measures. Oil treatment is prohibited. 2. If dust suppressant aids are used, then they shall be applied according to the manufacturer specifications for quantity and frequency. A record shall be kept of the type of dust suppressant that is applied and the dates of application. 3. Fugitive Particulate (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. <ol style="list-style-type: none"> a) Proper housekeeping should be performed at least every third day of process equipment and control device operation. If the housekeeping frequency is less than the required frequency, please note why there is an excursion (i.e. the equipment did not operate). Proper housekeeping shall include, but is not limited to, the following: <ol style="list-style-type: none"> i. The use of vacuums or a broom and dustpan to remove wood dust. The wood dust should then be placed in a medium such as a closed bag or a sealed container such that it can not become airborne. ii. Not leaving open doors, windows, or operating fans such that wood dust is allowed to escape. iii. The use of blowers to move and pile wood dust is prohibited. iv. Cyclones, hoppers, silos, baghouses, should be properly connected and used as to minimize the amount of wood dust escaping the system. This includes the use of socks, tarps, mesh, etc. Additionally, all connections between the piping, equipment, trailers, etc. should be connected as to minimize fugitive dust emissions. v. Wood chip or dust trailers should be emptied such that fugitive dust emissions from the trailer are minimized. 4. Restrictions and requirements may be contained in operating permits on a case-by-case basis that are deemed appropriate and necessary to control fugitive particulate matter in accordance with reasonably available control technology. 5. No source/plant shall use any method of materials handling which will generate fugitive particulate matter that is not fully described in the permit application without prior approval from the Department. 6. Volatile organic compounds shall not be used for dust control purposes. Oil treatment is also prohibited. <p>The records of the proper housekeeping shall be maintained in logs (written or electronic). These records shall consist of the date of housekeeping, justification for any frequency exceedances and shall be initialed by the environmental contact,</p>

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B. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	shift supervisor, or manger and maintained onsite.
B.3	<p>Equipment/Control Device ID: All Woodworking and Surface Finishing Sources</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>(S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began on or before December 31, 1985, emissions from these sources (including fugitive emissions) shall not exhibit an opacity greater than 40%, each</p>
B.4	<p>Equipment/Control Device ID: All Woodworking and Surface Finishing Sources</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 $E = (F) 4.10P^{0.67}$ and</p> <p style="text-align: center;">For process weight rates greater than 30 tons per hour $E = (F) 55.0P^{0.11} - 40$</p> <p style="text-align: center;">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>
B.5	<p>Equipment/Control Device ID: Sources where a Pressure Drop Gauge Available for Measurement</p> <p>a) All pollution control devices shall be in place and operational at all times when equipment or processes controlled by the devices are operating, except during periods of pollution control device malfunction or mechanical failure.</p> <p>b) 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.</p> <p>c) 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. Operational ranges shall be determined and available for triggering corrective actions and assuring proper operation. 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.</p> <p>d) The owner/operator shall install, operate, and maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded weekly during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p> <p style="margin-left: 40px;">i. The dust collectors and any auxiliary systems will be checked for damage or other interferences with proper operation.</p> <p style="margin-left: 40px;">ii. The bags shall be replaced as necessary.</p>

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	<p>The results from the operation and maintenance checks shall be maintained in logs (written or electronic), along with any corrective action taken. Records of these logs shall be kept on site.</p>
B.6	<p>Equipment/Control Device ID: Sources where a Pressure Drop Gauge Not Available for Measurement</p> <p>a) All pollution control devices shall be in place and operational at all times when equipment or processes controlled by the devices are operating, except during periods of pollution control device malfunction or mechanical failure.</p> <p>b) Operation and maintenance checks will be made on the cyclone, ductwork and dust collection hoppers and conveying systems for proper operation. The following operation and maintenance checks will be made on at least a weekly basis for all cyclones:</p> <ol style="list-style-type: none"> i. The cyclone(s) and ductwork system(s) will be checked for damaged or worn sheet metal or other interferences with proper operation. ii. 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. Records of these logs shall be kept on site.</p> <p>c) Operation and maintenance checks will be made on the dust collectors or filter bags for proper operation. The following operation and maintenance checks will be made on at least a weekly basis for all dust collectors:</p> <ol style="list-style-type: none"> i. The dust collectors and any auxiliary systems will be checked for damage or other interferences with proper operation. ii. The bags shall be replaced as necessary. <p>The results from the operation and maintenance checks shall be maintained in logs (written or electronic), along with any corrective action taken. Records of these logs shall be kept on site.</p>
The following conditions only apply to facilities that conduct Surface Finishing Activities	
B.7	<p>Equipment/Control Device ID: Surface Finishing</p> <p>(S.C. Regulation 61-62.6, Section III (a)) emissions of fugitive particulate matter shall be controlled in such a manner and to the degree that it does not create an undesirable level of air pollution.</p> <p>The owner/operator is responsible for implementing work practices designed to minimize emissions from Surface Finishing Operations as follows:</p> <ol style="list-style-type: none"> 1. Whenever practical, airless sprayers will be used in surface finishing operations to maximize coating transfer efficiency, reduce overspray, and minimize thinner used. 2. During dry dock surface finishing operations curtains shall be positioned around the area being painted. 3. Overspray from painting operations shall be contained such that it does not leave the property's boundaries. 4. Where practical, coatings shall be applied as purchased and when thinners are required they shall be added in accordance with manufacturer's specifications. 5. Paints will be stored indoors prior to use during cold weather months to reduce paint viscosity and the need for thinners. 6. The lids/tops on paint and thinner containers will be kept closed when the containers are not actively being used to minimize evaporative emissions. 7. All handling and transfer of VOC containing materials to and from containers, tanks, vats, drums, and piping systems is conducted in a manner that minimizes spills. 8. All containers, tanks, vats, drums, and piping systems are free of cracks, holes, and other defects and remain closed unless materials are being added to or removed from them. 9. All spills shall be cleaned up immediately.

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Condition Number	Conditions								
	<p>10. The booth or work area exhaust fans shall be operating when cleaning spray guns and other equipment.</p> <p>11. The operator shall provide and maintain suitable, easily read, permanent markings on all coatings and solvents containers.</p> <p>12. All waste coatings and solvents shall be removed from the site by an authorized disposal service or disposed of at a permitted on-site waste management facility.</p> <p>Should excess emissions including fugitive emissions occur as a result of a malfunction in equipment, operator error, etc. operations shall be stopped at once. The owner/operator shall report the malfunction and the steps taken to correct the problem to the district office within 24 hours of the occurrence.</p>								
The following conditions only apply to facilities with External Combustion Sources (dryer, oven, boilers, etc.)									
B.8	<p>Equipment/Control Device ID: Indirect fired sources (boilers)</p> <p>Limits/Standards: S.C. Regulation 61-62.5, Standard No. 1, Section I</p> <p>1. If constructed on or after February 11, 1971, shall not discharge into the ambient air smoke which exceeds an opacity of 20%.</p> <p>2. If constructed before February 11, 1971, shall not discharge into the ambient air smoke which exceeds an opacity of 40%.</p> <p>The opacity standards set forth above do not apply during startup or shutdown. The owner/operator shall, to the extent practicable, maintain and operate any source including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.</p>								
B.9	<p>Equipment/Control Device ID: Indirect fired sources (boilers)</p> <p>(S.C. Regulation 61-62.5, Standard No. 1) The maximum allowable discharge:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Pollutant</th> <th style="text-align: center;">Emission Limit</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">PM</td> <td style="text-align: center;">0.6 pounds per million BTU input</td> </tr> <tr> <td style="text-align: center;">PM</td> <td style="text-align: center;">0.8 pounds per million BTU input*</td> </tr> <tr> <td style="text-align: center;">SO₂</td> <td style="text-align: center;">2.3 pounds per million BTU input</td> </tr> </tbody> </table> <p>*Fuel burning sources 10 million BTU/hr heat input and smaller constructed prior to February 11, 1971</p>	Pollutant	Emission Limit	PM	0.6 pounds per million BTU input	PM	0.8 pounds per million BTU input*	SO ₂	2.3 pounds per million BTU input
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PM	0.6 pounds per million BTU input								
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B.10	<p>Equipment/Control Device ID: Direct fired sources (dryers, ovens, etc.)</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>(S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began on or before December 31, 1985, emissions from these sources (including fugitive emissions) shall not exhibit an opacity greater than 40%, each</p>								
B.11	<p>Equipment/Control Device ID: External fuel combustion sources (Fuel oil only)</p> <p>Fuel oil sulfur content shall be less than or equal to 0.5 percent by weight. Fuel oil supplier certification shall be obtained for each batch of oil received and stored on site.</p>								
B.12	<p>Equipment/Control Device ID: External fuel combustion sources with a heat input capacity greater than or equal to 10 million BTU/hr</p> <p>The fuel combustion sources are subject to New Source Performance Standards (NSPS), 40 CFR 60 Subpart A, General Conditions and Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, and S.C. Regulation 61-62.60 Subparts A and Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, as applicable. These sources shall comply with all applicable requirements of these Subpart A and Dc.</p>								
B13	<p>Equipment/Control Device ID: Fuel Burning Combustion Sources subject to 40 CFR 60 Subpart Dc (Fuel Oil Only)</p>								

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B. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	<p>(40 CFR 60 Section 40c(a)) Fuel oil burning sources greater than or equal to 10 million BTU/hr and constructed after June 9, 1989.</p> <p>(40 CFR 60 Section 42c(d)) No owner/operator that combusts oil shall combust oil that contains greater than 0.5 weight percent sulfur.</p> <p>(40 CFR 60 Section 42c(h)) Compliance with the fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier.</p> <p>(40 CFR 60 Section 42c(i)) The SO₂ fuel oil sulfur limits apply at all times, including periods of startup, shutdown, and malfunction.</p>
B.14	<p>Equipment/Control Device ID: Fuel Burning Combustion Sources subject to 40 CFR 60 Subpart Dc (Fuel Oil Only)</p> <p>(40 CFR Section 60.44c(h)) To demonstrate compliance with the SO₂ standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in Section 60.48c(f), as applicable.</p>
B.15	<p>Equipment/Control Device ID: Fuel Burning Combustion Sources subject to 40 CFR 60 Subpart Dc (Fuel Oil Only)</p> <p>(40 CFR Section 60.48c(f)) Fuel supplier certification shall include the following information:</p> <ol style="list-style-type: none"> 1. The name of the oil supplier; 2. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and 3. The sulfur content or maximum sulfur content of the oil. <p>Records of these certifications shall be kept on site. Reports shall be submitted every six-month period. Reports shall be submitted in a timely manner. Semiannual reports are due January 30th and July 30th each year. The reports shall consist of the fuel certification records and a signed statement from the owner/operator that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.</p>
B.16	<p>Equipment/Control Device ID: Fuel Burning Combustion Sources subject to 40 CFR 60 Subpart Dc</p> <p>(40 CFR 60 Subpart Dc) The owner or operator of each boiler shall record and maintain records of the amounts and types of each fuel combusted during each calendar month or the owner or operator may elect to record and maintain records of the total amount of each fuel delivered to the property during each calendar month. The report shall indicate whether the amounts are based on fuel combusted or fuel delivered.</p>
B.17	<p>Equipment/Control Device ID: New Fuel Burning Combustion Sources subject to 40 CFR 60 Subpart Dc</p> <p>(40 CFR Section 60.7(a) and Section 60.48c(a)) The owner or operator shall submit notification of the date of construction or reconstruction and actual startup, as provided below. Any owner or operator subject to the provisions of this part shall furnish written notification as follows:</p> <ol style="list-style-type: none"> 1. All notification shall include the design heat input capacity of the boiler and identification of fuels to be combusted in the boiler. 2. A notification of the date construction (or reconstruction as defined under §60.15) of a boiler is commenced postmarked no later than 30 days after such date. 3. A notification of the actual date of initial startup of a boiler postmarked within 15 days after such date.
B.18	<p>Equipment/Control Device ID: Fuel Combustion (Existing burner assembly replaced)</p> <p>(S.C. Regulation 61-62.5, Standard No. 5.2, Section IV) For sources where an existing burner assembly is replaced, the burner assembly shall be replaced with a low NO_x burner assembly or equivalent technology capable of achieving a 30</p>

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	<p>percent reduction from uncontrolled NO_x emission levels based upon manufacturer's specifications. An exemption from this requirement shall be granted when a single burner assembly is being replaced in a source with multiple burners due to non-routine maintenance.</p> <p>(S.C. Regulation 61-62.5, Standard No. 5.2, Sections IV and V) The owner or operator shall notify and register the burner assembly replacement with the Department, in writing, within 7 days of replacing the existing burner assembly. Notification will be provided on the Department's <i>Notification For Low NO_x Burner Replacement for South Carolina Oxides of Nitrogen (NO_x) Control Guidelines</i> Form D-2935. Those sources that wish to receive an emission reduction credit for the control device will be required to submit a construction permit application. Those sources requesting an alternative control methodology must receive written approval prior to burner replacement.</p>												
B.19	<p>Equipment/Control Device ID: Fuel Combustion Sources</p> <p>(S. C. Regulation 61-62.5, Standard No. 5.2) Any boiler or water heater 10 million BTU/hr or greater constructed after June 25, 2004 is subject to the following emission limitations:</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr style="background-color: #e0e0e0;"> <th style="width: 50%;">Source Type</th> <th>Control Technology and/or Emission Limit</th> </tr> </thead> <tbody> <tr> <td>Natural gas or propane fired Boilers and Water Heaters ≥ 10 million BTU/hr and < 100 million BTU/hr</td> <td>Low NO_x Burners or equivalent technology capable of achieving 30 ppmv @ 3% O₂ Dry (0.036 lb/MMBTU)</td> </tr> <tr> <td>Distillate oil fired Boilers and Water Heaters ≥ 10 million BTU/hr and < 100 million BTU/hr</td> <td>Low NO_x Burners or equivalent technology capable of achieving 0.15 lb/MMBTU</td> </tr> <tr> <td>Wood Residue Boilers (All Types)</td> <td>Combustion controls to minimize NO_x emissions or equivalent technology capable of achieving 0.20 lb/MMBTU</td> </tr> </tbody> </table> <p>Any fuel combustion source 10 million BTU/hr or greater rated input capacity constructed after June 25, 2004 are subject to the following emission limitations:</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr style="background-color: #e0e0e0;"> <th style="width: 50%;">Source Type</th> <th>Control Technology and/or Emission Limit</th> </tr> </thead> <tbody> <tr> <td>Fuel Combustion Sources Not Otherwise Specified (Examples include but are not limited to process heaters not meeting the definition of "boiler" in Regulation 61-62.1 Section I, dryers, furnaces, ovens, duct burners, incinerators, and smelters)</td> <td>Low-NOX burners or equivalent technology capable of achieving 30 percent reduction from uncontrolled levels.</td> </tr> </tbody> </table> <p>Unless otherwise noted, all emission limits are based on monthly averages.</p> <p>(S.C. Regulation 61-62.5, Standard No. 5.2, Section VI) The owner/operator of a subject combustion source shall develop a tune-up plan and perform tune-ups every two years in accordance with manufacturer's specifications or with good engineering practices from replacement of burner. All tune-up records are required to be maintained on site.</p>	Source Type	Control Technology and/or Emission Limit	Natural gas or propane fired Boilers and Water Heaters ≥ 10 million BTU/hr and < 100 million BTU/hr	Low NO _x Burners or equivalent technology capable of achieving 30 ppmv @ 3% O ₂ Dry (0.036 lb/MMBTU)	Distillate oil fired Boilers and Water Heaters ≥ 10 million BTU/hr and < 100 million BTU/hr	Low NO _x Burners or equivalent technology capable of achieving 0.15 lb/MMBTU	Wood Residue Boilers (All Types)	Combustion controls to minimize NO _x emissions or equivalent technology capable of achieving 0.20 lb/MMBTU	Source Type	Control Technology and/or Emission Limit	Fuel Combustion Sources Not Otherwise Specified (Examples include but are not limited to process heaters not meeting the definition of "boiler" in Regulation 61-62.1 Section I, dryers, furnaces, ovens, duct burners, incinerators, and smelters)	Low-NOX burners or equivalent technology capable of achieving 30 percent reduction from uncontrolled levels.
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B.20	<p>Equipment/Control Device ID: Burn off ovens, etc.</p> <p>S.C. Regulation 61-62.5, Standard No. 3, Waste Combustion and Reduction, Section I (Industrial Incinerators):</p> <ol style="list-style-type: none"> 1. Opacity shall not exceed 20 percent. 2. Particulate matter emissions shall not exceed 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 BTUs 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 												

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	<p>such as those found in secondary combustion chambers, tertiary combustion chambers or afterburners unless those auxiliary burners are fired 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>3. Industrial incinerators with a total design capacity of less than 1×10^6 Btu/hr including auxiliary devices used to recondition parts shall be exempt from all requirements of this standard except for the following:</p> <p style="margin-left: 20px;">i. Opacity shall not exceed 20 percent</p> <p>Records documenting the contaminant being removed and possible emissions from the process shall be maintained and made available for Department review.</p>				
The following conditions only apply to facilities with Internal Combustion Engines (Generators, Diesel Engines, etc.)					
B.21	<p>Equipment/Control Device ID: Fuel combustion sources</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>(S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began on or before December 31, 1985, emissions from these sources (including fugitive emissions) shall not exhibit an opacity greater than 40%, each</p>				
B.22	<p>Equipment/Control Device ID: Fuel Combustion Sources</p> <p>(S. C. Regulation 61-62.5, Standard No. 5.2) Any non-emergency generator constructed after June 25, 2004 is subject to the following emission limitations:</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Source Type</th> <th style="width: 50%;">Control Technology and/or Emission Limit</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Internal Combustion Engines with a mechanical power output of 200 bHP or greater – Compression Ignition</td> <td style="text-align: center;">Timing Retard $\leq 4^\circ$ + Turbocharger with Intercooler or equivalent technology capable of achieving 490 ppmv @ 15% O₂ (7.64 gm/bhp-hr)</td> </tr> </tbody> </table> <p>Unless otherwise noted, all emission limits are based on monthly averages.</p> <p>(S.C. Regulation 61-62.5, Standard No. 5.2, Section VI) The owner/operator of a subject combustion source shall develop a tune-up plan and perform tune-ups every two years in accordance with manufacturer’s specifications or with good engineering practices from replacement of burner. All tune-up records are required to be maintained on site.</p>	Source Type	Control Technology and/or Emission Limit	Internal Combustion Engines with a mechanical power output of 200 bHP or greater – Compression Ignition	Timing Retard $\leq 4^\circ$ + Turbocharger with Intercooler or equivalent technology capable of achieving 490 ppmv @ 15% O ₂ (7.64 gm/bhp-hr)
Source Type	Control Technology and/or Emission Limit				
Internal Combustion Engines with a mechanical power output of 200 bHP or greater – Compression Ignition	Timing Retard $\leq 4^\circ$ + Turbocharger with Intercooler or equivalent technology capable of achieving 490 ppmv @ 15% O ₂ (7.64 gm/bhp-hr)				
B.23	<p>Equipment/Control Device ID: Fuel Combustion (Existing burner assembly replaced)</p> <p>(S.C. Regulation 61-62.5, Standard No. 5.2, Section IV) For sources where an existing burner assembly is replaced, the burner assembly shall be replaced with a low NO_x burner assembly or equivalent technology capable of achieving a 30 percent reduction from uncontrolled NO_x emission levels based upon manufacturer’s specifications. An exemption from this requirement shall be granted when a single burner assembly is being replaced in a source with multiple burners due to non-routine maintenance.</p> <p>(S.C. Regulation 61-62.5, Standard No. 5.2, Sections IV and V) The owner or operator shall notify and register the burner assembly replacement with the Department, in writing, within 7 days of replacing the existing burner assembly. Notification will be provided on the Department’s <i>Notification For Low NO_x Burner Replacement for South Carolina Oxides of Nitrogen (NO_x) Control Guidelines</i> Form D-2935. Those sources that wish to receive an emission reduction credit for the control device will be required to submit a construction permit application. Those sources requesting an alternative control methodology must receive written approval prior to burner replacement.</p>				
B.24	<p>This facility is subject to the provisions of 40 CFR Part 60, New Source Performance Standards General Provisions,</p>				

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B. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	Subparts A, Stationary Compression Ignition Internal Combustion Engines, Subpart IIII and Stationary Spark Ignition Internal Combustion Engines, Subpart JJJJ. Existing affected sources shall comply with the applicable provisions by the compliance date specified in Subparts IIII and JJJJ. Any new affected sources shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted.

C. OPERATIONAL FLEXIBILITY

Condition Number	Condition
C.1	<p>The facility may undertake minor alterations without a construction permit, or without revising or reopening the operating permit unless otherwise specified by any State or Federal requirement. These minor alterations must meet the criteria and procedures as prescribed in this condition. This flexibility only covers exempt sources and existing permitted sources. The owner or operator may be subject to possible enforcement if the activity is found to be inconsistent with the permit flexibility conditions.</p> <p>(I) Permit Flexibility Criteria for Existing and Exempt Sources</p> <ol style="list-style-type: none"> 1. The activity will not result in emissions that will exceed any limit in this permit. 2. The activity does not trigger a new regulation or regulatory requirement. See exceptions under (I)7 of this section. 3. The activity does not result in a change in a permit term, condition, or limit. 4. The activity does not result in a new permit term, condition, or limit. 5. The activity does not result in emissions that would potentially subject the facility to the Title V operating permit program. 6. The activity does not trigger S.C. Regulation 61-62.5, Standards No. 7 and No. 7.1 or synthetic minor permitting requirements. 7. The activity conducted on the existing permitted source does not meet the definition of new source, modification or reconstruction under 40 CFR Part 60, 61 or 63. This criteria does not apply to new/existing exempt sources under S.C. Regulation 61-62.1 II.B.2 or the BAQ published exempt list. Although exempt from construction permitting, sources subject to federal air rules must meet all applicable requirements. Generators shall comply with the requirements of all applicable regulations including but not limited to New Source Performance Standards (NSPS) 40 CFR 60 Subparts A (General Provisions); IIII (Stationary Compression Ignition Internal Combustion Engines); and JJJJ (Stationary Spark Ignition Internal Combustion Engines); and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAP), Subparts A (General Provisions) and ZZZZ (NESHAP for Stationary Reciprocating Internal Combustion Engines). Existing affected sources shall comply with the applicable provisions by the compliance date specified in the applicable Subpart. Any new affected sources shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted. 8. Compliance with S.C. Regulations 61-62.5 Standards No. 2 (Ambient Air Quality Standards), No. 7 (PSD) and No. 8 (Toxic Air Pollutants) is not affected. 9. Any activity exempted in S.C. Regulation 61-62.1 Section II.B.2 or the BAQ published exempt source list. Case by case exemptions described in Section II will require prior written approval. <p>(II) Ambient Air Standards Demonstration Flexibility</p> <p>Changes that impact a ambient air standards demonstration (such as air dispersion modeling), but are otherwise allowed under the permit flexibility condition, shall be allowed provided:</p> <ol style="list-style-type: none"> 1. Updated air dispersion modeling or other information demonstration is conducted prior to the source operating under the new operating scenario. A copy of these results for the new operating scenario are kept on site and available for inspection. The air dispersion model used must be BAQ approved. 2. The facility must submit a written request to modify the demonstration within 3 business days of operating under the new operating scenario. The demonstration shall include a description of the scenario, emission rates, modeling results, modeling files and a completed modeling information Form and any other pertinent information

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C. OPERATIONAL FLEXIBILITY

Condition Number	Condition
	<p>relevant to the demonstration. This request shall be submitted to the Director of Engineering Services.</p> <p>(III) Record Keeping As part of this permit flexibility procedure, the facility shall keep an on-site implementation log (OSIL) (written or electronic), to document all changes made under the procedure. The OSIL will be kept with the facility's air permit and made available for inspection. The OSIL shall provide detailed information supporting the changes made under this procedure. At a minimum all of the following items shall be included in the OSIL:</p> <ol style="list-style-type: none"> 1. A brief description of the activity and how it meets the criteria listed in this condition. Include impacted equipment identification numbers, operating permit identification unit, and stack identification. 2. The date the activity occurred. 3. A demonstration that the activity did not trigger any new regulations, standards or requirements. 4. A demonstration that the activity did not result in a change in any existing permit term, condition or limit; and did not result in a need for a new permit term, condition or limit. 5. Emissions calculations for all regulated air pollutants resulting from the activity and demonstration that when added to the existing emissions all permit limits will be met. This should include the increase and the facility-wide emissions totals from the activity. 6. A list of exempt sources will be kept with the OSIL and only the information required by the regulation for the exemption shall be included with the OSIL. <p>(IV) Reporting Reports of activities conducted under this permit flexibility condition shall be submitted every 5 years, unless no changes were made, from the permit effective date and every 5 years thereafter, to the Director of the Engineering Services. See ambient air standards demonstration flexibility section of this condition for modeling or other information demonstration reporting requirements.</p>
C.2	<p>In addition to the requirements in the flexibility condition (C.1), at the end of every calendar year, the permit holder shall review this permit to determine if any changes outside those allowed in the flexibility condition (C.1) have been made to any equipment or processes covered by the permit. If there have been changes these should be added to the facility's onsite implementation log (OSIL), along with supporting documentation explaining what has changed. If there have been no changes this should be recorded and kept on site.</p>

D. NESHAP PERIODIC REPORTING SCHEDULE SUMMARY

NESHAP Part	NESHAP Subpart	Compliance Monitoring Report Submittal Frequency	Reporting Period	Report Due Date
63	JJJJJ	Biennial ⁴	Every 2 Years	March 1
63	ZZZZ ³ (existing, non-emergency engines >300 hp only)	Semi-Annual	January 1 through June 30 July 1 through December 31	For semiannual reports, first report postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date.

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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, and/or 40 CFR Part 63. The MACT reporting schedule may be adjusted to coincide with the permit's reporting schedule with prior approval from the Department in accordance with 40 CFR Section 63.10.a.5. This request may be made 1 year after the compliance date for the associated MACT standard.
3. New engines and emergency generators are not required to submit reports unless they meet the criteria under 40 CFR 63.6650(h). Non-emergency engines are required to submit reports.
4. Each annual compliance certification report must be prepared by March 1 of the year immediately following the reporting period and kept in a readily-accessible location for inspector review. If a deviation has occurred during the year, each annual compliance report must be submitted by March 15 of the year immediately following the reporting period. If the boiler is only subject to biennial or five-year tune-ups, a biennial or five-year compliance report may be prepared.

E. NESHAP - CONDITIONS

Condition Number	Condition
E.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.
E.2	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: <div style="text-align: center;"> US EPA, Region 4 Air, Pesticides and Toxics Management Division 61 Forsyth Street Atlanta, GA 30303 </div>
E.3	(Boilers) This facility has processes subject to the provisions of S.C. Regulation 61-62.63 and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subpart A, General Provisions and Subpart JJJJJJ, National Emission Standards for Area Sources: Industrial/Commercial/Institutional Boilers. Existing affected sources shall be in compliance with the requirements of these Subparts on the compliance date, unless otherwise noted. Any new affected sources shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted.
E.3	(Boilers) In accordance with 40 CFR 63.11195 the source is not subject to 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subparts A and JJJJJJ – Industrial, Commercial, and Institutional Boilers Area Sources if the gas fired boiler, as defined in 40 CFR 63.11237, burns natural gas as primary fuel and burns fuel oil only during natural gas curtailment, gas supply emergency, or periodic testing on liquid fuel. Periodic testing on liquid fuel shall not exceed a combined total of 48 hours during any calendar year. If the gas fired boiler uses fuel oil outside of natural gas curtailment, gas supply emergency, or periodic testing on liquid fuel as defined in 40 CFR 63.11237, the boiler will be subject to Subpart JJJJJJ.
E.4	(Internal Combustion Engines) This facility has processes subject to the provisions of S.C. Regulation 61-62.63 and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subpart A, General Provisions and Subpart ZZZZ National Emission Standards for Reciprocating Internal Combustion Engines. Existing affected sources shall be in compliance with the requirements of these Subparts on the compliance date, unless otherwise noted. Any new affected sources shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted.

F. PERIODIC REPORTING SCHEDULE

Compliance Monitoring Report Submittal Frequency	Reporting Period (Begins on the effective date of the permit)	Report Due Date
Semiannual	January-June April-September July-December October-March	July 30 October 30 January 30 April 30

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F. PERIODIC REPORTING SCHEDULE

Compliance Monitoring Report Submittal Frequency	Reporting Period (Begins on the effective date of the permit)	Report Due Date
<p>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.</p>		

G. REPORTING CONDITIONS

Condition Number	Condition
G.1	<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 or operator shall also submit a written report within 30 days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality and shall include, at a minimum, the following:</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.
G.2	Reporting required in this permit, shall be submitted in a timely manner as directed in the Periodic Reporting Schedule of this permit.
G.3	<p>All reports and notifications required under this permit shall be submitted to the person indicated in the specific condition at the following address:</p> <p style="text-align: center;">2600 Bull Street Columbia, SC 29201</p> <p>The contact information for the local EQC Regional office can be found at: http://www.scdhec.gov</p>
G.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.

H. GENERAL CONDITIONS

Condition Number	Condition
H.1	Any revisions to this registration permit will supersede any existing versions of this registration permit. The Department reserves the right to revise this registration permit as deemed necessary.
H.2	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. 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.
H.3	This permit only covers equipment while physically present at the indicated facility. Unless the permit specifically

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H. GENERAL CONDITIONS

Condition Number	Condition
	provides for the equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted facility.
H.4	The permittee shall pay permit fees to the Department in accordance with the requirements of S.C. Regulation 61-30, Environmental Protection Fees.
H.5	<p>In the event of an emergency, as defined in S.C. Regulation 61-62.1, Section II.L, the owner or 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 or 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 or 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 or operator gave a verbal notification of the emergency to the Department within 24 hours of the time when emission limitations were exceeded, followed by a written report within 30 days. The written report shall include, at a minimum, the information required by S.C. Regulation 61-62.1, Section II.J.1.c.i through viii. The written report shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. <p>In any enforcement action, the owner or 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>
H.6	<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"> 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.
H.7	(S.C. Regulation 61-62.1, Section II.M) Within 30 days of the transfer of ownership/operation of a facility, the current permit holder and prospective new owner or operator shall submit to the Director of Engineering Services a written request for transfer of the source operating or construction permits. The written request for transfer of the source operating or construction permit shall include any changes pertaining to the facility name and mailing address; the name, mailing address, and telephone number of the owner 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.
H.8	The owner or operator shall comply with S.C. Regulation 61-62.2 "Prohibition of Open Burning."
H.9	The owner or operator shall comply with S.C. Regulation 61-62.3 "Air Pollution Episodes."
H.10	The owner or operator shall comply with S.C. Regulation 61-62.4 "Hazardous Air Pollution Conditions."