



Bureau of Air Quality State Operating Permit

**Westinghouse Electric Company, LLC
5801 Bluff Road
Hopkins, South Carolina 29061
Richland County**

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5), 48-1-100(A), and 48-1-110(a), the 1976 Code of Laws of South Carolina, as amended, and South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards, the Bureau of Air Quality authorizes the operation of this facility and the equipment specified herein in accordance with valid construction permits, and the plans, specifications, and other information submitted in the operating permit request received on December 4, 2017, as amended. All official correspondence, plans, permit applications and written statements are an integral part of the permit. Any false information or misrepresentation in the application for a construction or operating permit may be grounds for permit revocation.

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

Permit Number: SOP-1900-0050

Issue Date: DRAFT
Expiration Date: DRAFT

Effective Date: DRAFT
Renewal Due Date: DRAFT

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

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RECORD OF REVISIONS	
Date	Description of Changes

DRAFT

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A. EMISSION UNIT DESCRIPTION

Emission Unit ID	Emission Unit Description
01	2.51 million Btu/hr natural gas fired Industrial Incinerator.
02	VOID - 14.6 million Btu/hr natural gas/No. 2 fuel oil Boiler
03	VOID - 14.6 million Btu/hr natural gas/No. 2 fuel oil Boiler
04	VOID - 8.3 million Btu/hr natural gas/No. 2 fuel oil Boiler (moved to Unit ID 22)
05	VOID - 200 kW Emergency Generator, No. 2 fuel oil
06	VOID - 250 kW Emergency Generator, No. 2 fuel oil
07	VOID - 500 kW Emergency Generator, No. 2 fuel oil
08	VOID - 500 kW Emergency Generator, No. 2 fuel oil
09	VOID - Calciner #1: A 0.57 million Btu/hr natural gas North American Model NA-4424-0 (moved to Unit ID 24)
10	VOID - Calciner #2: A 0.57 million Btu/hr natural gas North American Model NA-4424-0 (moved to Unit ID 24)
11	VOID - Calciner #3: A 0.57 million Btu/hr natural gas North American Model NA-4424-0 (moved to Unit ID 24)
12	VOID - Calciner #4: A 0.57 million Btu/hr natural gas North American Model NA-4424-0 (moved to Unit ID 24)
13	VOID - Calciner #5: A 0.57 million Btu/hr natural gas North American Model NA-4424-0 (moved to Unit ID 24)
14	VOID - Conversion System #1. Includes a ammonium diuranate high energy venture cyclone (Heil 724) and HEPA filters (moved to Unit ID 24)
15, 16	VOID - ADU Scrap Recovery & ADU On-Line Scrubber S-1030 System (A & B). Includes KCH-Hedron V packed tower scrubber and HEPA filter (moved to Unit ID 24)
17	VOID - Ammonia Fume Scrubber. Includes KCH-Phaser IV packed tower scrubber with HEPA filters (moved to Unit ID 24)
18	VOID - ADU/Waste Recovery Waterglass Scrubber Exhaust. (moved to Unit ID 25)
19	VOID - Plating Room Scrubber Exhaust. Includes Heil 760 packed horizontal baffle scrubber (moved to Unit ID 23)
20	VOID - Uranium Recovery/Solvent Extraction. Includes Harrington horizontal packed baffle venture scrubber with cyclone scrubber and HEPA filters (moved to Unit ID 26)
21	VOID - Vapor degreasing operation; batch vapor cleaning machine, control devices; NESHP
22	Boilers
23	Plating
24	Conversion
25	Waterglass
26	Solvent Extraction

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B. EQUIPMENT AND CONTROL DEVICE(S)

B.1 EQUIPMENT FOR EMISSION UNIT 01 – Incinerator

Equipment ID	Equipment Description	Installation/Modification Date	Control Device ID	Emission Point ID
01-1	2.51 million Btu/hr natural gas fired Industrial Incinerator w/ self-contained scrubbing system	1973 / 1995	None	Incinerator

B.2 EQUIPMENT FOR EMISSION UNIT 22 – Boilers

Equipment ID	Equipment Description	Installation/Modification Date	Control Device ID	Emission Point ID
22-1	8.3 million Btu/hr natural gas/No. 2 fuel oil fired Boiler	1975	None	Boiler #3

B.3 EQUIPMENT FOR EMISSION UNIT 23 – Plating

Equipment ID	Equipment Description	Installation/Modification Date	Control Device ID	Emission Point ID
23-1	Plating Tanks	1985	S-4025	S-4025

B.4 CONTROL DEVICE(S) FOR EMISSION UNIT 23 – Plating

Control Device ID	Control Device Description	Installation/Modification Date	Pollutant(s) Controlled
S-4025	Chicago Plastics packed horizontal/cross flow scrubber for ventilation of plating tanks	2016	Nitric Acid

B.5 EQUIPMENT FOR EMISSION UNIT 24 – Conversion

Equipment ID	Equipment Description	Installation/Modification Date	Control Device ID	Emission Point ID
24-1	Calciner #1: A 0.57 million Btu/hr natural gas fired North American Model NA-4424-0 (Process gases exhaust to S-1030)	1981	None	C1 (Combustion)
24-2	Calciner #2: A 0.57 million Btu/hr natural gas fired North American Model NA-4424-0 (Process gases exhaust to S-1030)	1981	None	C2 (Combustion)
24-3	Calciner #3: A 0.57 million Btu/hr natural gas fired North American Model NA-4424-0 (Process gases exhaust to S-1030)	1981	None	C3 (Combustion)

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B.5 EQUIPMENT FOR EMISSION UNIT 24 – Conversion

Equipment ID	Equipment Description	Installation/Modification Date	Control Device ID	Emission Point ID
24-4	Calciner #4: A 0.57 million Btu/hr natural gas fired North American Model NA-4424-0 (Process gases exhaust to S-1030)	1981	None	C4 (Combustion)
24-5	Calciner #5: A 0.57 million Btu/hr natural gas fired North American Model NA-4424-0 (Process gases exhaust to S-1030)	1981	None	C5 (Combustion)
24-6	Conversion Area (Exhausts to S-1030) <ul style="list-style-type: none"> - Scrap cage filter press (1) - Standpipe and flex hose at standpipe (1) - Scrubber Tanks A-J (10 total) - Dissolver hood (filter press cake) (1) - Decon Room flex arms) (2) - X-06 column cream can ventilation (5) - Off-gas condenser, s-x31 (5) - Flex hoses at decanters (5) - Flex hose at x05 and x06 (5) - Flex hoses at ADU Receiver Tanks, x19 (5) - Flex hoses used to rod out calciner scrubber (5) - Flex hoses used to rod out calciner vent lines (5) - Mop water dump stations 	1981	None	None
S-1030	ADU Scrap Recovery & ADU On-Line Scrubber System. Includes KCH-Hedron V packed tower scrubber and divergent HEPA filter houses	1975 / 2019	None	S-1030
24-7	Non-ammonia service vessels, URRS, and Solvent Extraction (SOLX) (Exhausts to S-2A/2B) <ul style="list-style-type: none"> - Vaporizers (10) - Hydrolysis columns passive overflow (5) - Spiking Station Mix tanks (2) - S-707 Scrubber for dissolver residue drying (URRS oxidation ovens) - Vent Pot 717 (services all SOLX vessels through a main header) - Dirty Dissolver Processing Tanks, V-756, V-754A, and V-754B (3 total) 	1985	None	None

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B.5 EQUIPMENT FOR EMISSION UNIT 24 – Conversion

Equipment ID	Equipment Description	Installation/Modification Date	Control Device ID	Emission Point ID
S-2A/S-2B	Conversion system that includes two ammonium diuranate high energy venture cyclones (Heil 724) operating in parallel and divergent HEPA filter houses	1985 / 2013	None	S2A/S2B
24-8	Ammonia Fume Ventilation System (<i>Exhausts to S-1008</i>) <ul style="list-style-type: none"> - Q-tanks (6) - Vent Pot, "V-1019" (includes vent from liquid scrap, V1005, V1006, V1016) - Line filter presses (10) - Precipitator columns (7) - Ammonia Centrate Clarifying Tanks (5) - Dryer condenser exhaust (5) - Dryer filter bag housing (5) - ADU receiver tanks, V-x19 (5) - Ammonia Centrate Receiver Tanks V-x20 (5) - Pressure relief form ammonia heat exchanger, "HX-1278" (1) 	1995	None	None
S-1008	Ammonia Fume Scrubber. Includes KCH-Phaser IV packed tower scrubber with divergent HEPA filter houses	1995 / 2008	None	S-1008

B.6 EQUIPMENT FOR EMISSION UNIT 25 – Waterglass

Equipment ID	Equipment Description	Installation/Modification Date	Control Device ID	Emission Point ID
25-1	Waterglass Ventilation System (<i>Exhausts to S-1190</i>) <ul style="list-style-type: none"> - Ammonium Hydroxide Storage Tanks - (2) Ammonia Stills - Waterglass Process 	1997	None	None
S-1190	Waterglass (ADU Waste Recovery) Scrubber Exhaust. Includes KCH-Hedron packed tower scrubber	1997 / 2013	None	S-1190

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Equipment ID	Equipment Description	Installation/ Modification Date	Control Device ID	Emission Point ID
26-1	Safe Geometry Dissolver Process (<i>Exhausts to S-958</i>) <ul style="list-style-type: none">- Dissolver Channels (5)- Clean dissolver process vessels, V-736, V-746, and V-743 (3 total)- Maintenance Rebuild Hood- Wet Residue Discharge Hoods (3)- SOLX product concentrator- URRS Ultrasonic Wash Bath- Wet combustible materials collection scales (2)	1985	None	None
S-958	Solvent Extraction Scrubber (Uranium Recovery) Includes Harrington horizontal packed baffle venture scrubber with cyclone scrubber and divergent HEPA filter houses	1985 / 2016	None	S-958

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
C.1	Emission Unit ID: All Equipment ID: All Control Device ID: All (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.

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C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
C.2	<p>Emission Unit ID: 23; 24; 25; 26 Equipment ID: 23-1; S-1030, S-2A, S-2B, S-1008; S-1190; S-958 Control Device ID: S-4025</p> <p>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>(S.C. Regulation 61-62.1, Section II.J.1.d) Sources required to have continuous emission monitors shall submit reports as specified in applicable parts of the permit, law, regulations, or standards.</p>
C.3	<p>Emission Unit ID: 23; 24; 25; 26 Equipment ID: 23-1; S-1030, S-2A, S-2B, S-1008; S-1190; S-958 Control Device ID: S-4025</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. Operational ranges shall be determined for triggering corrective actions and assuring proper operation. The ranges and documentation on how they were developed shall be kept on site and made available for review. Each incidence of operation outside the operational ranges, including date and time, cause, and corrective action taken, shall be recorded and kept on site. Exceedance of operational range shall not be considered a violation of an emission limit of this permit, unless the exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place.</p>

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C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
C.4	<p>Emission Unit ID: 01; 23; 24; 25; 26 Equipment ID: 01-1; 23-1; S-1030, S-2A, S-2B, S-1008; S-1190; S-958 Control Device ID: S-4025</p> <p>For any source test required under an applicable standard or permit condition, the owner, operator, or representative shall comply with S.C. Regulation 61-62.1, Section IV - Source Tests.</p> <p>Unless approved otherwise by the Department, the owner, operator, or representative shall ensure that source tests are conducted while the source is operating at the maximum expected production rate or other production rate or operating parameter which would result in the highest emissions for the pollutants being tested. Some sources may have to spike fuels or raw materials to avoid being subjected to a more restrictive feed or process rate. Any source test performed at a production rate less than the rated capacity may result in permit limits on emission rates, including limits on production if necessary.</p> <p>The owner or operator shall comply with any limits that result from conducting a source test at less than rated capacity. A copy of the most recent Department issued source test summary letter, whether it imposes a limit or not, shall be maintained with the operating permit, for each source that is required to conduct a source test.</p> <p>Site-specific test plans and amendments, notifications, and source test reports shall be submitted to the Manager of the Source Evaluation Section, Bureau of Air Quality.</p>
C.5	<p>Emission Unit ID: Facility-wide Equipment ID: Facility-wide</p> <p>It has been determined that this facility is subject to S.C. Regulation 61-62.68, Chemical Accident Prevention Provisions, due to in-process storage or use of a regulated substance in quantities above the specified threshold and that a Risk Management Plan (RMP) has already been submitted to the EPA; therefore, the following must be completed:</p> <ul style="list-style-type: none">• Submittal of subsequent revisions/corrections/updates of the RMP in accordance with S.C. Regulation 61-62.68.190 and 68.195• For Program 1 processes, the owner/operator shall submit along with the RMP the certification statement provided in Section 68.12(b)(4). For all other covered processes, the owner/operator shall submit along with the RMP a single certification that, to the best of the signer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete. <p>If it is determined by the implementing agency (or other delegated authority) that additional relevant information is needed, this facility will be required to submit the information in a timely manner.</p>

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C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
C.6	<p>Emission Unit ID: 01 Equipment ID: 01-1</p> <p>(S.C. Regulation 61-62.5, Standard No. 3, Section III.I.1) Emissions from this source shall not exhibit an opacity greater than 20%.</p>
C.7	<p>Emission Unit ID: 01 Equipment ID: 01-1</p> <p>(S.C. Regulation 61-62.5, Standard No.3, Section III.I.2) Particulate matter emissions from this source shall not exceed 0.5 lb/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 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>
C.8	<p>Emission Unit ID: 01 Equipment ID: 01-1</p> <p>(S.C. Regulation 61-62.5, Standard No. 3, Section VIII) An owner or operator of any industrial incinerator shall ensure that scheduled periodic tests for Particulate Matter are conducted in accordance with Regulation 61-62.1, Section IV, Source Tests. This test shall be conducted within 180 days after the issuance of this permit. Subsequent tests shall be performed every two years thereafter. This requirement to conduct tests may be waived if an alternative method for determining compliance with emission limits can be developed which is acceptable to the Department. Department approval of the alternative method for determining compliance must be given prior to the compliance demonstration.</p>
C.9	<p>Emission Unit ID: 01 Equipment ID: 01-1</p> <p>(S.C. Regulation 61-62.5, Standard No. 3, Section IX) All incinerator operators shall be trained based on criteria contained in S.C. Regulation 61-62.5, Standard No. 3, Section IX.C as to proper operating practices and procedures of the incinerator. The content of the above referenced training program, in addition to a list of trained personnel, shall be submitted to the Director of the Air Permitting Division, no later than thirty (30) days after the issuance of this permit. The incinerator shall not be operated without a trained operator on site, who has a certificate verifying satisfactory completion of the training program.</p>

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C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions				
C.10	<p>Emission Unit ID: 01 Equipment ID: 01-1</p> <p>(S.C. Regulation 61-62.1, Section II.J.2) The incinerator will undergo initial source tests for verification of estimated emission rates for Sulfur Dioxide, Oxides of Nitrogen, Carbon Monoxide, and Volatile Organic Compounds. These tests shall be conducted within 180 days of the permit issuance date or during the next incinerator usage; whichever is later. Periodic testing may be required based on the results of the initial tests.</p> <table border="1"> <thead> <tr> <th>Emission Point</th><th>Pollutant(s)</th></tr> </thead> <tbody> <tr> <td>Incinerator</td><td>SO₂, NO_x, CO, VOC</td></tr> </tbody> </table>	Emission Point	Pollutant(s)	Incinerator	SO ₂ , NO _x , CO, VOC
Emission Point	Pollutant(s)				
Incinerator	SO ₂ , NO _x , CO, VOC				
C.11	<p>Emission Unit ID: 01 Equipment ID: 01-1</p> <p>(S.C. Regulation 61-62.5, Standard No. 3, Section V) The owner/operator may only incinerate the materials listed below:</p> <ul style="list-style-type: none"> • Rags and mop heads used to clean process areas. • Rags and mop heads used to mitigate process upsets and one or more of the following: water, uranium solutions, ammonia, or acid. • Process filters containing residual acids or ammonia. • Personal protective equipment such as gloves, chemical protective suits, etc. (if damp or wet from acids, water, or ammonia). • Plastic or paper materials • Rags and mop heads with incidental amounts of PCE, TBP, and kerosene. <p>Other materials similar in origin and composition to the above may be incinerated with prior written approval from the Department. The owner/operator shall not incinerate any material identified as hazardous waste per S.C. Regulation 61-79.262.11; or materials for which a hazardous waste determination has not been made.</p>				
C.12	<p>Emission Unit ID: 22 Equipment ID: 22-1</p> <p>This source is permitted to burn only natural gas and No. 2 fuel oil as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.</p>				

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C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
C.13	<p>Emission Unit ID: 22 Equipment ID: 22-1</p> <p>This boiler is permitted to burn natural gas and No. 2 fuel oil. However, in accordance with 40 CFR 63.11195(e), 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 interruption, startups, 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 interruption, startups, or periodic testing on liquid fuel as defined in 40 CFR 63.11237, the boiler will be subject to Subpart JJJJJJ.</p>
C.14	<p>Emission Unit ID: 24 Equipment ID: 24-1 through 24-5 (Combustion)</p> <p>These sources are permitted to burn only natural gas as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.</p>
C.15	<p>Emission Unit ID: 22 Equipment ID: 22-1</p> <p>(S.C. Regulation 61-62.5, Standard No. 1, Section I) The fuel burning sources shall not discharge into the ambient air smoke which exceeds opacity of 20%. The opacity limit may be exceeded for sootblowing, but may not be exceeded for more than 6 minutes in a one hour period nor be exceeded for more than a total of 24 minutes in a 24 hour period. Emissions caused by sootblowing shall not exceed an opacity of 60%.</p> <p>Owners and operators 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. In addition, the owner or operator shall maintain a log of the time, magnitude, duration, and any other pertinent information to determine periods of startup and shutdown and make available to the Department upon request.</p>
C.16	<p>Emission Unit ID: 24 Equipment ID: 24-1 through 24-5 (Combustion)</p> <p>(S.C. Regulation 61-62.5, Standard No. 1, Section I) The fuel burning sources shall not discharge into the ambient air smoke which exceeds opacity of 20%. 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>

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C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
C.17	Emission Unit ID: 22; 24 Equipment ID: 22-1; 24-1 through 24-5 (Combustion) (S.C. Regulation 61-62.5, Standard No. 1, Section II) The maximum allowable discharge of particulate matter resulting from these sources is 0.6 pounds per million BTU input.
C.18	Emission Unit ID: 22; 24 Equipment ID: 22-1; 24-1 through 24-5 (Combustion) (S.C. Regulation 61-62.5, Standard No. 1, Section III) The maximum allowable discharge of sulfur dioxide (SO ₂) resulting from these sources is 2.3 pounds per million BTU input.
C.19	Emission Unit ID: 23; 24; 25; 26 Equipment ID: 23-1; 24-1 through 24-5 (Process), 24-6 through 24-8, S-1030, S-2A, S-2B, S-1008; 25-1, S-1190; 26-1, S-958 Control Device ID: S-4025 (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.

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C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions								
C.20	Emission Unit ID: 23 Equipment ID: 23-1 Control Device ID: S-4025								
	The owner/operator shall install, operate, and maintain parametric monitors on each scrubber module as specified in the table below. The monitored parameters shall be recorded daily during source operation. Operation and maintenance checks shall be made per the facility's operation and maintenance plan. The operation and maintenance plan shall be kept on-site and made available upon request. Documentation of the maintenance activities and any other work performed (emergency, etc.) shall be maintained on site. The scrubber shall be in place and operational whenever processes controlled by it are running, except during periods of scrubber malfunction or mechanical failure.								
	<table><tr><th>Equipment ID</th><th>Parametric Monitor</th><th>Parametric Monitor</th></tr><tr><td>S-4025</td><td>Differential pressure across packing</td><td>Nozzle water pressure</td></tr></table>	Equipment ID	Parametric Monitor	Parametric Monitor	S-4025	Differential pressure across packing	Nozzle water pressure		
	Equipment ID	Parametric Monitor	Parametric Monitor						
S-4025	Differential pressure across packing	Nozzle water pressure							
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. These ranges and supporting documentation (certification from manufacturer, stack test results, 30 days of normal readings, opacity readings, etc.) shall be submitted to the Director of the Air Permitting Division within 30 days of the permit issuance date. Operating ranges may be updated following submittal to the Department.									

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C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions				
C.21	<p>Emission Unit ID: 23 Equipment ID: 23-1 Control Device ID: S-4025</p> <p>Any operating condition of a scrubber where the established monitoring parameters are outside of the approved ranges is considered an excursion. Upon detecting an excursion, the owner/operator shall restore operation of the scrubber to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing any startup, shutdown or malfunction period and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion (other than those caused by excused startup and shutdown conditions).</p> <p>A semiannual report on scrubber operation and maintenance shall be submitted. The report shall include, at a minimum:</p> <ul style="list-style-type: none"> • Summary information of the number, duration, and cause (including unknown cause, if applicable) of excursions, as applicable, and the corrective actions taken; • Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with monitor maintenance and calibration, if applicable); and • Summary information of maintenance activities and any other work performed (emergency, etc.) on the scrubbers. 				
C.22	<p>Emission Unit ID: 23 Equipment ID: 23-1 Control Device ID: S-4025</p> <p>(S.C. Regulation 61-62.1, Section II.J.2) The scrubber will undergo initial source tests for Hydrogen Fluoride, Nitric Acid, Hydrochloric acid, Sulfuric acid, Nickel, Cadmium and Phosphorus to verify actual emissions are below potential emission rates. These initial tests shall be conducted within 180 days of the permit issuance date. Periodic testing may be required based on the results of the initial tests.</p> <table> <tr> <th>Emission Point</th><th>Pollutant(s)</th></tr> <tr> <td>S-4025 Outlet</td><td>HF, HNO₃, HCl, H₂SO₄, Nickel, Cadmium, Phosphorus</td></tr> </table>	Emission Point	Pollutant(s)	S-4025 Outlet	HF, HNO ₃ , HCl, H ₂ SO ₄ , Nickel, Cadmium, Phosphorus
Emission Point	Pollutant(s)				
S-4025 Outlet	HF, HNO ₃ , HCl, H ₂ SO ₄ , Nickel, Cadmium, Phosphorus				

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C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions								
C.23	<p>Emission Unit ID: 24; 25; 26 Equipment ID: S-1030; S-1190; S-958</p> <p>The owner/operator shall install, operate, and maintain parametric monitors on each scrubber module as specified in the table below. The monitored parameters shall be recorded daily during source operation. Operation and maintenance checks shall be made per the facility's operation and maintenance plan. The operation and maintenance plan shall be kept on-site and made available upon request. Documentation of the maintenance activities and any other work performed (emergency, etc.) shall be maintained on site. Each scrubber shall be in place and operational whenever processes controlled by it are running, except during periods of malfunction or mechanical failure.</p> <table border="1"> <thead> <tr> <th>Equipment ID</th><th>Parametric Monitor</th></tr> </thead> <tbody> <tr> <td>S-1030</td><td>Nozzle water pressure</td></tr> <tr> <td>S-1190</td><td>Nozzle water pressure</td></tr> <tr> <td>S-958</td><td>Pump on or off</td></tr> </tbody> </table> <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. These ranges and supporting documentation (certification from manufacturer, stack test results, 30 days of normal readings, opacity readings, etc.) shall be submitted to the Director of the Air Permitting Division within 30 days of the permit issuance date. Operating ranges may be updated following submittal to the Department.</p>	Equipment ID	Parametric Monitor	S-1030	Nozzle water pressure	S-1190	Nozzle water pressure	S-958	Pump on or off
Equipment ID	Parametric Monitor								
S-1030	Nozzle water pressure								
S-1190	Nozzle water pressure								
S-958	Pump on or off								
C.24	<p>Emission Unit ID: 24; 25; 26 Equipment ID: S-1030, S-2A, S-2B, S-1008; S-1190; S-958</p> <p>(S.C. Regulation 61-62.1, Section II.J.2) The scrubbers will undergo initial source tests for Hydrogen Fluoride, NO_x, and Nitric acid to verify actual emissions are below potential emission rates. These initial tests shall be conducted within 180 days of the permit issuance date. Periodic testing may be required based on the results of the initial tests. Scrubber S-1030 shall not need to conduct initial testing per this condition, if already conducted per Construction Permit CD.</p> <table border="1"> <thead> <tr> <th>Emission Point</th><th>Pollutant(s)</th></tr> </thead> <tbody> <tr> <td>S-1030, S-2A, S-2B, S-1008, S-1190, S-958</td><td>HF, NO_x, HNO₃</td></tr> </tbody> </table>	Emission Point	Pollutant(s)	S-1030, S-2A, S-2B, S-1008, S-1190, S-958	HF, NO _x , HNO ₃				
Emission Point	Pollutant(s)								
S-1030, S-2A, S-2B, S-1008, S-1190, S-958	HF, NO _x , HNO ₃								

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D. NESHAP PERIODIC REPORTING SCHEDULE SUMMARY

NESHAP Part	NESHAP Subpart	Compliance Monitoring Report Submittal Frequency	Reporting Period	Report Due Date
63	ZZZZ (Emergency Engines see note 3 and 4)	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 40 CFR 63.10(a)(5). This request may be made 1 year after the compliance date for the associated MACT standard.
3. Facilities with emergency engines are not required to submit reports. Only facilities with non-emergency engines are required to submit semiannual reports.
4. Facilities with emergency engines shall comply with the operations limits specified in 40 CFR 63.6640(f).

E. NESHAP - CONDITIONS

Condition Number	Conditions
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 or electronically as required by the specific subpart: US EPA, Region 4 Air, Pesticides and Toxics Management Division 61 Forsyth Street SW Atlanta, GA 30303

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E. NESHAP – CONDITIONS

Condition Number	Conditions
E.3	<p>Emergency engines less than or equal to 150 kilowatt (kW) rated capacity, emergency engines greater than 150 kW rated capacity designated for emergency use only and operated a total of 500 hours per year or less for testing and maintenance and have a method to record the actual hours of use, such as an hour meter, and diesel engine driven emergency fire pumps that are operated a total of 500 hours per year or less for testing and maintenance and have a method to record the actual hours of use, such as an hour meter, have been determined to be exempt from construction permitting requirements in accordance with South Carolina Regulation 61-62.1.</p> <p>If present, these sources shall still comply with the requirements of all applicable regulations, including but not limited to the following:</p> <p>New Source Performance Standards (NSPS) 40 CFR 60 Subpart A (General Provisions); NSPS 40 CFR 60 Subpart IIII (Stationary Compression Ignition Internal Combustion Engines); NSPS 40 CFR 60 Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines); National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart A (General Provisions); and NESHAP 40 CFR 63 Subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines).</p>

F. PERMIT FLEXIBILITY

Condition Number	Conditions
F.1	<p>The facility may install exempt sources as allowed in S.C. Regulation 61-62.1, Section II.B, without revising or reopening the operating permit. The addition of these sources is allowed without a construction permit except when the activity triggers a new operating permit status (i.e. does not potentially subject the facility to the Title V operating permit program) and/or any activity triggers major source or synthetic minor permitting requirements. A list of exempt sources must be maintained on site, along with any necessary documentation to support the determination that the source is exempt, and shall be made available to a Department representative upon request. The list and necessary documentation shall be submitted with the next renewal application. Emissions from these sources shall be reflected in the facility-wide emissions tabulation in any subsequent construction permit application.</p>

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G. AMBIENT AIR STANDARDS REQUIREMENTS

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

H. PERIODIC REPORTING SCHEDULE

Compliance Monitoring Report Submittal Frequency	Reporting Period (Begins on the effective date of the permit)	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

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H. PERIODIC REPORTING SCHEDULE

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

I. REPORTING CONDITIONS

Condition Number	Conditions
I.1	Reporting required in this permit, shall be submitted in a timely manner as directed in the Periodic Reporting Schedule of this permit.
I.2	All reports and notifications required under this permit shall be submitted to the person indicated in the specific condition at the following address: 2600 Bull Street Columbia, SC 29201 The contact information for the local Environmental Affairs Regional office can be found at: http://www.scdhec.gov
I.3	Unless elsewhere specified within this permit, all reports required under this permit shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality.

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I. REPORTING CONDITIONS

Condition Number	Conditions
I.4	<p>(S.C. Regulation 61-62.1, Section II.J.1.c) For sources not required to have continuous emission monitors, any malfunction of air pollution control equipment or system, process upset, or other equipment failure which results in discharges of air contaminants lasting for one (1) hour or more and which are greater than those discharges described for normal operation in the permit application, shall be reported to the Department within twenty-four (24) hours after the beginning of the occurrence and a written report shall be submitted to the Department within thirty (30) days. The written report shall include, at a minimum, the following:</p> <ol style="list-style-type: none">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. <p>The initial twenty-four (24) hour notification should be made to the Department's local Environmental Affairs Regional office.</p> <p>The written report should be sent to the Manager of the Technical Management Section, Bureau of Air Quality and the local Environmental Affairs Regional office.</p>

J. GENERAL CONDITIONS

Condition Number	Conditions
J.1	The owner or operator shall comply with S.C. Regulation 61-62.2 "Prohibition of Open Burning."
J.2	The owner or operator shall comply with S.C. Regulation 61-62.3 "Air Pollution Episodes."
J.3	The owner or operator shall comply with S.C. Regulation 61-62.4 "Hazardous Air Pollution Conditions."
J.4	The owner or operator shall comply with S.C. Regulation 61-62.6 "Control of Fugitive Particulate Matter", Section III "Control of Fugitive Particulate Matter Statewide."
J.5	This permit only covers emission units and control equipment while physically present at the indicated facility. Unless the permit specifically provides for the equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted facility, notwithstanding the expiration date specified on the permit.

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J. GENERAL CONDITIONS

Condition Number	Conditions
J.6	The permittee shall pay permit fees to the Department in accordance with the requirements of S.C. Regulation 61-30, Environmental Protection Fees.
J.7	<p>In the event of an emergency, as defined in S.C. Regulation 61-62.1, Section II.L, the owner or operator may document an emergency situation through properly signed, contemporaneous operating logs, and other relevant evidence that verify:</p> <ol style="list-style-type: none">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; and4. 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>This provision is in addition to any emergency or upset provision contained in any applicable requirement.</p>
J.8	<p>(S.C. Regulation 61-62.1, Section II.O) Upon presentation of credentials and other documents as may be required by law, the owner or operator shall allow the Department or an authorized representative to perform the following:</p> <ol style="list-style-type: none">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. <p>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.</p>
J.9	(S.C. Regulation 61-62.1, Section II.J.1.a) No applicable law, regulation, or standard will be contravened.
J.10	(S.C. Regulation 61-62.1, Section II.J.1.e) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to S.C. Regulation 61-62.1 or with the terms of any approval to construct, or who commences construction after the effective date of S.C. Regulation 61-62.1 without applying for and receiving approval hereunder, shall be subject to enforcement action.

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

Condition Number	Conditions
K.1	This permit may be reopened by the Department for cause or to include any new standard or regulation which becomes applicable to a source during the life of the permit.
K.2	This permit may be modified by the Department for cause, to include any applicable requirement or to add or alter a permit's expiration date.
K.3	(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 Air Permitting 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.
K.4	(S.C. Regulation 61-62.1, Section II.H) The owner or operator shall submit an operating permit renewal request to the Department within 90 days prior to the operating permit expiration date. The operating permit renewal requests shall include a description of any changes at the facility that have occurred since issuance of the last operating permit that may affect the operating permit or operating permit review. In general, the description shall include any addition, alteration or removal of sources, including sources exempt from construction permit requirements; addition, alteration or removal of emission limitations; any changes to monitoring, recordkeeping, or reporting requirements; and any changes or additions to special permit conditions.
K.5	Submission of a request for renewal meeting the requirements in S.C. Regulation 61-62.1, Section II.H, shall allow the owner or operator to continue operating pursuant to the most recent operating permit, until such time as the Department has taken final action on the request for renewal.

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

AMBIENT AIR QUALITY STANDARDS – STANDARD NO. 2						
Emission Point ID	Emission Rates (lbs/hr)					
	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	Lead
S-22	0.555	0.555	0.034	2.683	0.458	2.12E-05
S-23	0.555	0.555	0.034	2.683	0.458	2.12E-05
S-958	--	--	--	3.520	--	--
S-1030	--	--	--	0.36	--	--
S-4025	--	--	--	--	--	5.65E-05

TOXIC AIR POLLUTANTS – STANDARD NO. 8				
Emission Point ID	Emission Rates (lbs/hr)			
	Beryllium	Cadmium	Hydrogen Fluoride	Nickel
	7440-41-7	7440-43-9	7664-39-3	7440-02-0
S-2A/2B	--	--	0.0030	--
S-958	--	--	0.0040	--
S-1008	--	--	0.0015	--
S-1030	--	--	0.0100	--
S-1190	--	--	0.0045	--
S-4025	3.62E-06	4.67E-04	0.0465	7.15E-04

TOXIC AIR POLLUTANTS – STANDARD NO. 8				
Emission Point ID	Emission Rates (lbs/hr)			
	Nitric Acid	Phosphorus	Sulfuric Acid	Tetrachloro-ethylene
	7697-37-2	7723-14-0	7664-93-9	127-18-4
S-2A/2B	0.0070	--	--	--
S-958	0.1870	--	--	--
S-1008	0.0045	--	--	--
S-1030	0.0500	--	--	--
S-1190	0.0110	--	--	--
S-4025	0.3270	2.66E-03	0.1425	--
Fugitive	--	--	--	0.848

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TOXIC AIR POLLUTANTS - STANDARD NO. 8				
Emission Point ID	Emission Rates (lbs/hr)			
	Antimony Compounds	Arsenic	Chromium (+6) Compounds	Cobalt Compounds
	N/A	7440-38-2	N/A	N/A
S-4025	1.58E-05	1.65E-05	5.45E-05	1.49E-05

TOXIC AIR POLLUTANTS - STANDARD NO. 8				
Emission Point ID	Emission Rates (lbs/hr)			
	Hydrochloric Acid	Manganese Compounds	Selenium Compounds	--
	7647-01-0	N/A	N/A	--
S-4025	0.0375	9.50E-05	3.13E-04	--