



Bureau of Air Quality State Construction Permit

**SCE&G McMeekin Station
6055 Bush River Road
Columbia, South Carolina 29212
Lexington County**

Pursuant to the provisions of the *Pollution Control Act*, Sections 48-1-50(5) and 48-1-110(a), the 1976 *Code of Laws of South Carolina*, as amended, and *South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards*, the Bureau of Air Quality authorizes the construction of this facility and the equipment specified herein in accordance with the plans, specifications, and other information submitted in the construction permit application received on October 13, 2016, as amended. All official correspondence, plans, permit applications, and written statements are an integral part of the permit. Any false information or misrepresentation in the application for a construction permit may be grounds for permit revocation.

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

Permit Number: 1560-0003-CK
Issue Date: December 5, 2016

**Engineering Services Division
Bureau of Air Quality**

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A. PROJECT DESCRIPTION

Permission is hereby granted to replace the sixteen existing 10 million Btu/hr (MMBtu/hr) fuel oil-fired startup igniters on each Utility Boiler (UB1 and UB2) with sixteen 12 MMBtu/hr natural gas-fired startup igniters. The associated equipment allowing the boilers to burn No. 2 fuel oil as a primary fuel will be removed and or made inoperable as part of this project. The boilers will be fired on natural gas only. The baghouse for each boiler (01 and 02) will remain on site but no longer used as a control device.

Permission is also granted to implement a 2,000 ton per year SO₂ facility-wide limit per 40 CFR 51, Subpart BB-Data Requirements for Characterizing Air Quality for the Primary SO₂ NAAQS (National Ambient Air Quality Standards), 40 CFR §51.1203(e)(1).

B.1 EQUIPMENT

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
UB1	1,182 MMBtu/hr Natural Gas-Fired Utility Boiler No.1 (Existing)	None	UB
UB2	1,182 MMBtu/hr Natural Gas-Fired Utility Boiler No.2 (Existing)	None	UB

B.2 CONTROL DEVICES

Control Device ID	Control Device Description	Pollutant(s) Controlled
01	Void - Unit 1 BAG (Decommissioned)	PM
02	Void - Unit 2 BAG (Decommissioned)	PM

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
C.1	Equipment/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.
C.2	Equipment/Control Device ID: UB1, UB2 (S.C. Regulation 61-62.5, Standard No. 1, Section I) The fuel burning source(s) shall not discharge into the ambient air smoke which exceeds opacity of 40%. The opacity limit may be exceeded for sootblowing, but

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C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	<p>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.3	<p>Equipment/Control Device ID: UB1, UB2</p> <p>(S.C. Regulation 61-62.5, Standard No. 1, Section II) The maximum allowable discharge of particulate matter resulting from these sources is 0.03 pounds per million BTU input.</p>
C.4	<p>Equipment/Control Device ID: UB1, UB2</p> <p>(S.C. Regulation 61-62.5, Standard No. 1, Section III) The maximum allowable discharge of sulfur dioxide (SO₂) resulting from these sources is 2.3 pounds per million BTU input.</p>
C.5	<p>Equipment/Control Device ID: UB1, UB2</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 Department.</p>
C.6	<p>Equipment/Control Device ID: Facility Wide</p> <p>(40 CFR 51) This facility is an applicable source under 51.1200(2) Data Requirements Rule for Characterizing Air Quality for the Primary SO₂ NAAQS (DRR). Per 51.1203(e)(1), facility-wide actual emissions will be limited to less than 2,000 tons per year. This limit is based on a twelve-month rolling sum. The first compliance period shall start on January 1, 2017 and end on December 31, 2017. To demonstrate compliance with this requirement the facility will be restricted to the use of natural gas only for the utility boilers (UB1 and UB2).</p>
C.7	<p>Equipment/Control Device ID: Facility Wide</p> <p>The owner or operator shall continue to operate under all applicable requirements, including emission limits and standards, testing, monitoring, record keeping, and reporting of the existing Title V Operating Permit (TV-1560-0003) that are not changed or contravened by this construction permit.</p>
C.8	<p>Equipment/Control Device ID: UB1, UB2</p> <p>(S.C. Regulation 62.5, Standard No. 7 (r) (6)(iii and iv)) The owner/operator shall maintain production rate records, fuel usage records, and any other records necessary to determine NO_x and CO emissions from UB1 and UB2. All emissions shall be calculated on an annual basis, in tons per year on a calendar year basis, for a period of five years following resumption of regular operations to UB1 and UB2. The owner/operator shall submit a report to the Department within 60 days after the end of each year showing the UB1 and UB2 annual emissions during the calendar year that preceded submission of the report.</p>

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C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	The owner/operator shall submit notification of the date that regular operations were resumed for approval to the Director of Engineering Services within 30 days of regular operations resuming.

D. RESERVED

E. RESERVED

F. AMBIENT AIR STANDARDS REQUIREMENTS

Condition Number	Condition
F.1	<p>Air dispersion modeling (or other method) has demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air standard. Any changes in the parameters used in 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>

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G. PERIODIC REPORTING SCHEDULE

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

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

H. REPORTING CONDITIONS

Condition Number	Condition
H.1	Reporting required in this permit, shall be submitted in a timely manner as directed in the Periodic Reporting Schedule of this permit.
H.2	All reports and notifications required under this permit shall be submitted to the person indicated in the specific condition at the following address: 2600 Bull Street Columbia, SC 29201 The contact information for the local EQC Regional office can be found at: http://www.scdhec.gov
H.3	The owner/operator shall submit written notification to the Director of Engineering Services of the date construction is commenced, postmarked within 30 days after such date.
H.4	Unless elsewhere specified within this permit, all reports required under this permit shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality.
H.5	(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. The owner/operator shall also submit a written report within 30 days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality and shall include, at a minimum, the following:

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H. REPORTING CONDITIONS

Condition Number	Condition
	<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.

I. PERMIT EXPIRATION AND EXTENSION

Condition Number	Condition
I.1	<p>(S.C. Regulation 61-62.1, Section II.A.4) Approval to construct shall become invalid if construction:</p> <ol style="list-style-type: none">a. is not commenced within 18 months after receipt of such approval;b. is discontinued for a period of 18 months or more; orc. is not completed within a reasonable time as deemed by the Department. <p>The Department may extend the construction permit for an additional 18-month period upon a satisfactory showing that an extension is justified. This request must be made prior to the permit expiration.</p>
I.2	<p>This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.</p>

J. PERMIT TO OPERATE

Condition Number	Condition
J.1	<p>(S.C. Regulation 61-62.1 Section II.F.2) The owner/operator or professional engineer in charge of the project shall certify that, to the best of his/her knowledge and belief and as a result of periodic observation during construction, the construction under application has been completed in accordance with the specifications agreed upon in the construction permit issued by the Department.</p>
J.2	<p>If construction is certified as provided in S.C. Regulation 61-62.1 Section II.F.2, the owner or operator, may operate the source in compliance with the terms and conditions of the construction permit until the operating permit is issued by the Department.</p>

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J. PERMIT TO OPERATE

Condition Number	Condition
J.3	<p>If construction is not built as specified in the permit application and associated construction permit(s), the owner/operator must submit to the Department a complete description of modifications that are at variance with the documentation of the construction permitting determination prior to commencing operation.</p> <p>Construction variances that would trigger additional requirements that have not been addressed prior to start of operation shall be considered construction without a permit.</p>
J.4	<p>(S.C. Regulations 61-62.1 Section II.F.3 and 61-62.70.7) The owner or operator shall submit a written request to the Director of the Engineering Services for a new or revised operating permit to cover any new or altered source postmarked within 15 days after the actual date of initial startup unless a more stringent time frame is required by regulation. The request should be made using the appropriate Title V modification form.</p>

K. GENERAL CONDITIONS

Condition Number	Condition
K.1	<p>The permittee shall pay permit fees to the Department in accordance with the requirements of S.C. Regulation 61-30, Environmental Protection Fees.</p>
K.2	<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>
K.3	<p>(S.C. Regulation 61-62.1, Section II.O) Upon presentation of credentials and other documents as may be required by law, the owner 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.

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K. GENERAL CONDITIONS

Condition Number	Condition
	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.

L. EMISSIONS INVENTORY REPORTS

ATTACHMENT - Emission Rates for Ambient Air Standards

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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
UB	68.01	68.01	7938.15	907.24	187.23	1.16E-03