

South Carolina Department of Health and Environmental Control

Office of Environmental Quality Control Bureau of Air Quality State Construction Permit

Dorchester Compressor Station County Road S-18-37 St. George, South Carolina 29477 Dorchester 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 December 21, 2015, 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: 0900-0115-CA-R1 Issue Date: April 8, 2016

Director, Engineering Services Division
Bureau of Air Quality

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A. PROJECT DESCRIPTION

Permission is hereby granted to Dominion Carolina Gas Transmission, LLC (DCG) to construct a new natural gas compressor station near St. George (Dorchester County), SC. The primary emission sources will consist of three (3) natural gas-fired combustion turbine compressor sets. These units and certain ancillary equipment will be relocated from the DCG's Southern Compressor Station.

B. EQUIPMENT

Equipment ID	Equipment Description	Control Device ID	Emission Point ID
D-1	13.92 MMBtu/hr Simple Cycle Natural Gas-Fired Combustion Turbine	None	S-1
D-2	13.92 MMBtu/hr Simple Cycle Natural Gas-Fired Combustion Turbine	None	S-2
D-3	13.92 MMBtu/hr Simple Cycle Natural Gas-Fired Combustion Turbine	None	S-3

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions		
	Equipment/Control Device ID: All		
C.1	(S.C. Regulation 61-62.1, Section II.J.1.g) A copy of the Department issued construction and/or operating permit must be kept readily available at the facility at all times. The owner or operator shall maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze emissions or discharges in accordance with prescribed methods at locations, intervals, and procedures as the Department shall prescribe; and provide such other information as the Department reasonably may require. All records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of at least 5 years from the date the record was generated and shall be made available to a Department representative upon request.		
	Equipment/Control Device ID: All		
C.2	(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.		
	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.		
	Equipment/Control Device ID: All		
C.3	These sources are subject to New Source Performance Standards (NSPS), 40 CFR 60 Subpart A, General Provisions and Subpart OOOOa, Standards Of Performance For Crude Oil And Natural Gas Facilities For Which Construction, Modification, Or Reconstruction Commenced After September 18, 2015 and S.C. Regulation 61-62.60 Subparts A and OOOOa Standards Of Performance For Crude Oil And Natural Gas Facilities For Which Construction, Modification, Or Reconstruction Commenced After September 18, 2015, as applicable. These sources shall comply with all applicable requirements of Subparts A and OOOOa.		

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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	None	None	None

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

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.		
	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:		
E.2	US EPA, Region 4		
L.2	Air, Pesticides and Toxics Management Division		
	61 Forsyth Street SW		
	Atlanta, GA 30303		
	Emergency power generators less than or equal to 150 kilowatt (kW) rated capacity or 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		
	with 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. These sources shall still		
	comply with the requirements of all applicable regulations including but not limited to the following:		
E.3			
	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).		

F. AMBIENT AIR STANDARDS REQUIREMENTS

Condition Number	Condition		
F.1	Air dispersion modeling (or other method) has demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air standard. Any changes in the parameters used in this demonstration may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment - Emission Rates for Ambient Air Standards of this permit. Higher emission rates may be administratively incorporated into Attachment - Emission Rates for Ambient Air Standards of this permit provided a demonstration using these higher emission rates shows the attainment and maintenance of any state or federal ambient air quality standard or with any other applicable requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the		

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F. AMBIENT AIR STANDARDS REQUIREMENTS

Condition Number	Condition
	maximum allowable ambient concentrations identified in the standard are exceeded. The owner/operator shall maintain this facility at or below the emission rates as listed in Attachment - Emission Rates
	for Ambient Air Standards, not to exceed the pollutant limitations of this permit. Should the facility wish to increase the emission rates listed in Attachment - Emission Rates for Ambient Air Standards, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified above. This is a State Only enforceable requirement.

G. PERIODIC REPORTING SCHEDULE

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

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

H. REPORTING CONDITIONS

Condition Number	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.	
	All reports and notifications required under this permit shall be submitted to the person indicated in the specific condition at the following address:	
H.2	2600 Bull Street Columbia, SC 29201	
	The contact information for the local EQC Regional office can be found at: http://www.scdhec.gov	
Н.3	The owner/operator shall submit written notification to the Director of Engineering Services of the date construction is commenced, postmarked no later than 30 days after such date.	
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	

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H. REPORTING CONDITIONS

Condition Number	Condition		
	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: 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;		
	 The time and duration of excess emissions; The identity of the equipment causing the excess emissions; 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
	(S.C. Regulation 61-62.1, Section II.A.4) Approval to construct shall become invalid if construction:
	a. is not commenced within 18 months after receipt of such approval;
I.1	b. is discontinued for a period of 18 months or more; or
1.1	c. is not completed within a reasonable time as deemed by the Department.
	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.
I.2	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.

J. PERMIT TO OPERATE

Condition Number	Condition		
J.1	(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.		
J.2	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.		

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J. PERMIT TO OPERATE

Condition Number	Condition		
J.3	If construction is not built as specified in the permit application and associated construction permit(s), the owner/operator must submit to the Department a complete description of modifications that are at variance with the documentation of the construction permitting determination prior to commencing operation.		
	Construction variances that would trigger additional requirements that have not been addressed prior to start of operation shall be considered construction without a permit.		
J.4	(S.C. Regulation 61-62.1, Section II.F.3) If a source is not yet covered by an effective Title V operating permit, 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 no later than 15 days after the actual date of initial startup of each new or altered source.		
J.4	(S.C. Regulation 61-62.70.5.a) The owner or operator shall submit a timely and complete Part 70 permit application within 12 months of startup. This Title V application submittal requirement applies to facilities unless they obtain an effective Conditional Major Operating Permit within 12 months of startup of this permit activity. A request for a Conditional Major Operating Permit should address the requirements specified in S.C. Regulation 61-62.1.		

K. GENERAL CONDITIONS

Condition Number	Condition							
K.1	The permittee shall pay permit fees to the Department in accordance with the requirements of S.C. Regulation 61-30, Environmental Protection Fees.							
K.2	In the event of an emergency, as defined in S.C. Regulation 61-62.1, Section II.L, the owner or operator shall demonstrate the affirmative defense of an emergency through properly signed, contemporaneous operating logs, and other relevant evidence that verify: 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. 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.							
K.3	 (S.C. Regulation 61-62.1, Section II.O) Upon presentation of credentials and other documents as may be required by law, the owner or operator shall allow the Department or an authorized representative to perform the following: Enter the facility where emissions-related activity is conducted, or where records must be kept under the conditions of the permit. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit. As authorized by the Federal Clean Air Act and/or the S.C. Pollution Control Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. 							

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L. EMISSIONS INVENTORY REPORTS

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

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	Emission Rates (lbs/hr)								
ID	PM_{10}	PM _{2.5}	SO ₂	NOx	CO	Lead	Gaseous Fluorides (as HF)		
S-1	0.0846	0.0846	0.044	8.72	15.26				
S-2	0.0846	0.0846	0.044	8.72	15.26				
S-3	0.0846	0.0846	0.044	8.72	15.26				

TOXIC AIR POLLUTANTS - STANDARD NO. 8								
Emission Point	Emission Rates (lbs/hr)							
ID	Hexane 110-54-3							
IA-BD	0.01							
IA-EL	0.05							
IA-PD	0.01							
IA-WSD	0.00474							