# STATE OF MISSISSIPPI
# AIR POLLUTION CONTROL
# PERMIT

AND PREVENTION OF SIGNIFICANT
DETERIORATION AUTHORITY
TO CONSTRUCT AIR EMISSIONS EQUIPMENT

**THIS CERTIFIES THAT**

Transcontinental Gas Pipe Line Company LLC, Seminary Station 77
Highway 535 North
Seminary, Mississippi
Covington County

has been granted permission to construct air emissions equipment to comply with emission limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder and under authority granted by the Environmental Protection Agency under 40 CFR 52.01 and 52.21.

**MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD**

Krystal Rudolph

**AUTHORIZED SIGNATURE**
**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

Issued: May 28, 2009
Modified: January 27, 2021

Permit No.: 0640-00005

2870 PER20090001

## Part I

## A. GENERAL CONDITIONS

1. This permit is for air pollution control purposes only. (Ref.: APC-S-2, Section I.D)

2. Any activities not identified in the application are not authorized by this permit. (Ref.: Miss. Code Ann. 49-17-29 1.b)

3. The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for operating without a valid permit pursuant to State Law. (Ref.: APC-S-2, Section II.B.5)

4. It is the responsibility of the applicant/permittee to obtain all other approvals, permits, clearances, easements, agreements, etc., which may be required including, but not limited to, all required local government zoning approvals or permits. (Ref.: APC-S-2, Section I.D.6)

5. The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities. (Ref.: APC-S-2, Section II.B.7)

6. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit, unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state. (Ref.: APC-S-2, Section II.B.15(a))

7. The permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. (Ref.: APC-S-2, Section II.B.15(b))

8. The permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: APC-S-2, Section II.B.15(c))

9. The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to the DEQ along with a claim of confidentiality.

The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. (Ref.: APC-S-2, Section II.B.15(d))

10. Design and Construction Requirements: The stationary source shall be designed and constructed so as to operate without causing a violation of an Applicable Rules and Regulations, without interfering with the attainment and maintenance of State and National Ambient Air Quality Standards, and such that the emission of air toxics does not result in an ambient concentration sufficient to adversely affect human health and well-being or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries. (Ref.: APC-S-2, Section V.A)

11. Solids Removal: The necessary facilities shall be constructed so that solids removed in the course of control of air emissions may be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits. (Ref.: Miss. Code Ann. 49-17-29)

12. Diversion and Bypass of Air Pollution Controls: The air pollution control facilities shall be constructed such that diversion from or bypass of collection and control facilities is not needed except as provided for in Regulation APC-S-1, "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants", Section 10. (Ref.: APC-S-1, Section 10)

13. Fugitive Dust Emissions from Construction Activities: The construction of the stationary source shall be performed in such a manner so as to reduce fugitive dust emissions from construction activities to a minimum. (Ref.: APC-S-2, Section V.A.4)

14. Right of Entry: The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives upon presentation of credentials:

    a) To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and

    b) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air emissions. (Ref.: Miss. Code Ann. 49-17-21)

15. Permit Modification or Revocation: After notice and opportunity for a hearing, the Permit Board may modify the permit or revoke it in whole or in part for good cause shown including, but not limited to:

    a) Persistent violation of any of the terms or conditions of this permit;

b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

c) A change in federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

(Ref.: APC-S-2, Section II.C)

16. Public Record and Confidential Information: Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality, Office of Pollution Control. (Ref.: Miss. Code Ann. 49-17-39)

17. Permit Transfer: This permit shall not be transferred except upon approval of the Permit Board. (Ref.: APC-S-2, Section XVI.B)

18. Severability: The provisions of this permit are severable. If any provision of the permit, or the application of any provision of the permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. (Ref. APC-S-2, Section I.D.7)

19. Permit Expiration: The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance or if construction is suspended for eighteen (18) months or more. (Ref.: APC-S-2, Section V.C.1)

20. Certification of Construction: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee. (Ref.: APC-S-2, Section V.D.3)

21. Beginning Operation: Except as prohibited in Part I, Condition 24 of this permit, after certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the Title V Permit or the application for issuance or modification of the State Permit to Operate, whichever is applicable, is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by APC-S-2, Section XIII.G. (Ref.: APC-S-2, Section V.D.4)

22. Application for a Permit to Operate: Except as otherwise specified in Part I, Condition 24 of this permit, the application for issuance or modification of the State Permit to Operate or the Title V Permit, whichever is applicable, is due twelve (12) months after beginning operation or such earlier date or time as specified in the Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon

certification of construction, unless the permittee specifies differently in writing. (Ref.: APC-S-2, Section V.D.5)

23. Operating Under a Permit to Construct: Except as otherwise specified in Part I, Condition 24 of this permit, upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Permit, whichever is applicable, the applicant may continue to operate under the terms and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate. (Ref.: APC-S-2, Section V.D.6)

24. Application Requirements for a Permit to Operate for Moderate Modifications: For moderate modifications that require contemporaneous enforceable emissions reductions from more than one emission point in order to "net" out of PSD/NSR, the applicable Title V Permit to Operate or State Permit to Operate must be modified prior to beginning operation of the modified facilities. (Ref.: APC-S-2, Section V.D.7)

25. Compliance Testing: Regarding compliance testing:

    a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations or this permit and in units of mass per time.

    b) Compliance testing will be performed at the expense of the permittee.

    c) Each emission sampling and analysis report shall include but not be limited to the following:

        (1) detailed description of testing procedures;

        (2) sample calculation(s);

        (3) results; and

        (4) comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

    (Ref.: APC-S-2, Section VI.B.3, 4, and 6)

## B. GENERAL NOTIFICATION REQUIREMENTS

1. Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun. (Ref.: APC-S-2, Section V.C.2)

2. The permittee must notify DEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for eighteen (18) months or more. (Ref.: APC-S-2, Section V.C.3)

3. Upon the completion of construction or installation of an approved stationary source or modification, the applicant shall notify the Permit Board that construction or installation was performed in accordance with the approved plans and specifications on file with the Permit Board. (Ref.: APC-S-2, Section V.D.1)

4. The Permit Board shall be promptly notified in writing of any change in construction from the previously approved plans and specifications or permit. If the Permit Board determines the changes are substantial, it may require the submission of a new application to construct with "as built" plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an "as built" application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law. (Ref.: APC-S-2, Section V.D.2)

## Part II.
## EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

**Beginning Permit Modification Date, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point AA-021, the 4735 HP Natural Gas Internal Combustion Compressor Engine with emissions controlled by an oxidation catalyst.**

**The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.**

### EMISSIONS LIMITATIONS

| | |
|---|---|
| **Carbon Monoxide** | **0.260 g/hp-hr, not to exceed 2.71 lbs/hr and 11.89 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.** |
| **Nitrogen Oxides** | **0.5 g/hp-hr, not to exceed 5.21 lbs/hr and 22.84 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.** |
| **Volatile Organic Compounds** | **0.211 g/hp-hr, not to exceed 2.21 lbs/hr and 9.67 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A.** |
| **Particulate Matter/$PM_{10}$** | **1.59 tons/year, as determined by EPA Test Methods 1-5 and 202, 40 CFR 60, Appendix A.** |
| **Opacity** | **40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.** |

**All test methods specified above shall be those versions, or their approved equivalents, which are in effect May 28, 2009.**

### OPERATIONAL RESTRICTION

**The permittee shall only operate the compressor engine with emission controlled by the oxidation catalyst.**

### MONITORING REQUIREMENTS

**The permittee shall continuously monitor temperature rise across the catalyst bed by monitoring inlet and outlet temperature of the catalyst bed. The permittee shall maintain proper catalyst operation and efficiency.**

## Part II
## EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

**Beginning May 28, 2009, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point AA-001, the 2100 HP Natural Gas Internal Combustion Compressor Engine.**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

## Part II
## EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

**Beginning May 28, 2009, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point AA-002, the 3400 HP Natural Gas Internal Combustion Compressor Engine.**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

**Part II (Continued)**

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

**Beginning May 28, 2009, the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-003, the 5500 HP Natural Gas Internal Combustion Compressor Engine.**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

**Part II (Continued)**

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

**Beginning May 28, 2009, the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-004, the 585 HP Natural Gas Emergency Generator.**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

**Part II (Continued)**

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

**Beginning May 28, 2009, the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-005, the 8 MMBTU/hr Natural Gas Indirect Heater.**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

**Part II (Continued)**

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

**Beginning May 28, 2009, the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-006, the 4 MMBTU/hr Glycol Dehydration Reboiler with vapor recovery unit.**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

**Part II (Continued)**

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

**Beginning May 28, 2009, the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-007, the two (2) 5.25 MMBTU/hr Natural Gas Fired Water Bath Heaters (T2H).**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

## Part II (Continued)

## EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

**Beginning May 28, 2009, the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-008, the 2.5 MMBTU/hr Glycol Regeneration Reboiler with vapor recovery unit.**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

**Part II (Continued)**

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

**Beginning May 28, 2009, the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-009, the two (2) 5.25 MMBTU/hr Natural Gas Fired Water Bath Heaters (T3H).**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

**Part II (Continued)**

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

**Beginning May 28, 2009, the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-010, the 2.5 MMBTU/hr Glycol Regeneration Reboiler with vapor recovery unit.**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

**Part II (Continued)**

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

**Beginning May 28, 2009, the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-012, the two (2) 5.25 MMBTU/hr Natural Gas Fired Water Bath Heater (T4H).**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

**Part II (Continued)**

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

**Beginning May 28, 2009, the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-013, the 2.5 MMBTU/hr Glycol Regeneration Reboiler with vapor recovery unit.**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

**Part II (Continued)**

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

**Beginning May 28, 2009, the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-014, the two (2) 5.25 MMBTU/hr Natural Gas Fired Water Bath Heater (T5H).**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

**Part II (Continued)**

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

**Beginning May 28, 2009, the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-015, the 2.5 MMBTU/hr Glycol Regeneration Reboiler with vapor recovery system.**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

**Part II (Continued)**

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

**Beginning May 28, 2009, the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-016, the two (2) 5.25 MMBTU/hr Natural Gas Fired Water Bath Heaters (T6H).**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

**Part II (Continued)**

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

**Beginning May 28, 2009, the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-017, the 2.5 MMBTU/hr Glycol Regeneration Reboiler with vapor recovery unit.**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

**Part II (Continued)**

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

**Beginning May 28, 2009, and the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-022, the Natural Gas Starter 1.**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

**Part II (Continued)**

**EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

**Beginning May 28, 2009, the permittee is authorized to operate air emissions equipment and emit air contaminants from Emission Point AA-023, the Natural Gas Starter 2.**

**Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.**

## Part III
## OTHER REQUIREMENTS

1. **For Emission Point AA-021, the compressor engine is subject to the requirements of the New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart JJJJ. The permittee shall comply with the standards listed in 40 CFR 60.4233, the testing in 40 CFR 60.4243.**

2. **For Emission Point AA-021, the compressor engine is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ. The permittee must reduce CO emissions by 93%.**

3. **The permittee shall conduct an initial stack test for Nitrogen Oxides (NOx) and Carbon Monoxide (CO) in accordance with EPA Test Method 7 and 10 or an approved equivalent within 180 days of startup. The testing shall be performed for each individual engine to ensure that the NOx and CO emissions are in accordance with limitation set forth in the permit. During the test, the permittee shall monitor the inlet and outlet temperature of the catalyst bed. The unit shall operate at maximum production during this test and engine operating load data shall be collected during the test. The stack test results, calculations indication NOx and CO emissions, and data collected during the test shall be submitted within 180 days of startup.**

   **The permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to DEQ. Also, the permittee shall notify the DEQ in writing at least ten (10) days prior to the intended test date(s) so that an observer may be afforded the opportunity to witness the test.**

4. **The permittee shall report any deviations from the emission limitation or any occurrences where the compressor engines operated without the oxidation catalyst. This report shall include the time, date, reason for the deviation, and corrective actions or preventive measures taken. The report shall be submitted with five (5) days of the time the deviation began.**

5. **For Emission Points AA-001 through AA-010; AA-012 through AA-017; AA-021 through AA-023, the permittee shall use pipeline natural gas only.**

6. **For Emission Point AA-004, the permittee shall only operate the emergency generator less than 500 hours per year.**

7. **The permittee shall monitor fuel usage, including type and quantity of fuel used. The permittee shall also record the hours of operation of the emergency generator.**

1. **For Emission Points AA-006, AA-008, AA-010, AA-013, AA-015, and AA-017, the permittee shall not operate the associated glycol dehydration or regeneration reboilers without the vapor recovery units. Including the routing of all uncondensed vapors from the dehydrator vent gas stream to the reboiler firebox during normal operations.**

2. **For Emission Points AA-007, through AA-010 and AA-012 through AA-017, the permittee shall not operate more than 5, 500 hours per year on a 12 month rolling total.**

3. **The facility is subject to the National Emission Standards for Hazardous Air Pollutants from Source Categories and Natural Gas Transmission and Storage Facilities, 40 CFR 63, Subpart HHH.**

4. **For Emission Points AA-006, AA-008, AA-010, AA-013, AA-015, and AA-017, the permittee shall monitor and record the hours of operation for each dehydrator on a daily basis and on a 12 rolling total. The permittee shall also perform and record weekly inspections of the air pollution control equipment. Maintenance shall be performed and recorded as necessary to maintain proper operation of the pollution control equipment.**

5. **For Emission Points AA-007 through AA-010 and AA-012 through AA-017, the permittee shall monitor and record hours of operation on a daily basis and on a 12 month rolling total.**

6. **The permittee shall conduct an initial stack test for $PM/PM_{10}$ in accordance with EPA Test Method 5 (for filterable particulate) and 202 (for condensable particulate) or an approved equivalent within 180 days of startup. The testing shall be performed to ensure that the $PM/PM_{10}$ emissions are in accordance with limitation set forth in the permit. EPA Test Method 202 shall include EPA procedures to address sample bias for testing natural gas-fired sources, as defined in the March 25, 2009 Federal Register notice (see 74 FR 12970). Since the trace PM levels from a gas-fired source test are subject to sample artifacts that can cause positive bias, the permittee can choose to complete a re-test if the initial test results appear anomalous. The emission factor derived from the stack test results shall be used to calculate and record the $PM/PM_{10}$ emissions on a 12 month rolling average. If a re-test is conducted, these test results will be used to validate compliance with the 1.59 tons per year PM/PM10 limit and as the emission factor for semi-annual reporting.**

   **The permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to DEQ. Also, the permittee shall notify the DEQ**

**in writing at least ten (10) days prior to the intended test date(s) so that an observer may be afforded the opportunity to witness the test.**

7. **For Emission Point AA-021, the permittee shall calculate and record the PM/$PM_{10}$ emissions on a 12 month rolling average. The permittee shall submit semi-annual reports of PM/$PM_{10}$ emissions calculated on a monthly basis. These reports shall be submitted by January 31 and July 31 for the proceeding six-month basis.**

8. **For Emission Point AA-021, the permittee shall conduct an initial stack test for Volatile Organic Compounds (VOC) in accordance with EPA Test Method 25 or an approved equivalent within 180 days of permit modification. Stack test results shall be submitted within 60 days of stack test.**

## Part III
## OTHER REQUIREMENTS CONTINUED
## (CONTINUED)

**None.**