

**STATEMENT OF BASIS  
SOUTHERN NATURAL GAS COMPANY, LLC  
AUBURN COMPRESSOR STATION  
AUBURN, LEE COUNTY, ALABAMA  
FACILITY NO. 206-0021**

This proposed Title V Major Source Operating Permit (MSOP) renewal has been developed in accordance with the provisions of ADEM Admin. Code chap. 335-3-16. The above-named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans, and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

The facility was originally constructed/began operations in 1965. The initial application for this renewal was received June 27, 2024, and the application was deemed complete on July 1, 2024. The initial MSOP was issued on December 28, 1999, and this is the fifth renewal. The current MSOP was issued on November 26, 2019, became effective on December 28, 2019, and is scheduled to expire on December 27, 2024.

The facility is located in Lee County, which is currently listed attainment/unclassifiable with all National Ambient Air Quality Standards (NAAQS).

There are no current or ongoing enforcement actions against Southern Natural Gas Company (SNGC) necessitating additional requirements to achieve compliance with the proposed permit conditions. The enforcement and compliance history for the facility can be found at <https://echo.epa.gov/> (Search using Facility ID AL0000000108100021).

### **Facility Operations**

SNGC operates a compressor station for the transmission of pipeline natural gas. The significant sources of air pollutants at this facility are two 9,160 hp GE MS-3002G natural gas-fired combustion turbines (Compressor Turbine Nos. 1 and 2) and two 260 hp 4-stroke, rich-burn (4SRB) natural gas-fired emergency engines. Insignificant emission sources at this station include one 4,905 gallon lube oil storage tank, one 2,068 gallon lube oil storage tank, one 3,000 gallon pipeline condensate tank, one 500 oily water tank, one 500 gallon used oil tank, one 55 gallon drum used for storage and handling of engine coolant, two stationary electric air compressor engines, one portable air compressor, one potable water pump, one natural gas-fired fuel heater (3 MMBtu/hr), three portable handheld generators, and one space heater (<0.5 MMBtu/hr).

### **Proposed Changes**

There have been no modifications to or additions of significant emission sources at this facility since the issuance of the fourth renewal MSOP.

### **Permit History**

The Auburn Compressor Station was originally constructed/began operation in 1965. At that time SNGC installed two 6,500 hp GE model MS3002G natural gas fired turbines which were “grandfathered” under PSD regulations.

*The following is a history of previously issued permits for this facility:*

<b>Issuance No./Permit No.</b>	<b>Issuance Date</b>	<b>Effective Date</b>	<b>Expiration Date</b>	<b>Amendments/ Modifications (Where Applicable)</b>	<b>PSD Significant Emission Rates Exceeded (Y/N)</b>
X001 - 4,390 hp Turbine	May 23, 1989 (Never Constructed)	--	--	--	N
X002 - 4,390 hp Turbine	May 23, 1989 (Never Constructed)	--	--	--	N
X001 - modified 6,500 hp to 9,160 hp. NO <sub>x</sub> limits established	March 2, 1998	--	--	--	Y
X002 - modified 6,500 hp to 9,160 hp. NO <sub>x</sub> limits established	March 2, 1998	--	--	--	Y
Initial MSOP	December 28, 1999	December 28, 1999	December 27, 2004	--	--
MSOP 1st Renewal	December 31, 2004	December 31, 2004	December 27, 2009	--	--
MSOP 2nd Renewal - rolled in emergency engines 003 and 004	December 21, 2009	December 28, 2009	December 27, 2014	--	N
MSOP 3rd Renewal	March 17, 2015	March 17, 2015	December 19, 2019	--	--
MSOP 4 <sup>th</sup> Renewal	November 26, 2019	December 28, 2019	December 27, 2024	--	--

**Plant-Wide Potential to Emit (PTE)**

<b>Pollutant</b>	<b>Potential Emissions (tpy)</b>
PM	9.40
SO <sub>2</sub>	4.83
NO <sub>x</sub>	465.10
CO	71.9
VOC	54.20
CO <sub>2</sub>	146,333.00
HAP □ 10 tpy (by CAS)	N/A

## **Applicability: Federal Regulations**

### *Title V*

This facility is a major source under Title V regulations because the potential emissions for nitrogen oxides (NO<sub>x</sub>) exceed the 100 TPY major source threshold. It is not a major source of Hazardous Air Pollutants (HAP) because individual HAP potential emissions are less than 10 TPY and the total HAP potential emissions are less than 25 TPY.

SNGC operates a compressor station, so there is very little propensity for fugitive dust. In addition, all roads, parking lots, or service areas are paved or graveled. Therefore, the Department has found that a facility specific plan is not necessary at this time. ADEM has clear authority to require the facility to develop and implement a fugitive dust control plan at any time necessary in the future. Additionally, ADEM's records show no findings of fugitive dust issues at Wiessner Enterprises, LLC.

### *Prevention of Significant Deterioration (PSD)*

This facility is located in an attainment area for all criteria pollutants, and the facility operations are not one of the 28 listed major source categories; therefore, the applicable major source threshold is 250 TPY for criteria pollutants. The facility is a major source for PSD because the facility-wide potential NO<sub>x</sub> emissions exceed 250 TPY. However, there have not been any modifications at this facility that would trigger a PSD review. The two turbines underwent PSD review when their brake horsepower was increased in 1998, and each is limited to 53.0 lb/hr of NO<sub>x</sub>.

### *NSPS*

#### 40 CFR Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines (Subpart GG) [Adopted by reference in ADEM Admin. Code r. 335-3-10-.02(33)]

Compressor Turbine Nos. 1 and 2 were modified after the Subpart GG applicability date of October 3, 1977 (March 2, 1998); therefore, they are each subject to applicable NO<sub>x</sub> and SO<sub>2</sub> emission limits under the Subpart. Performance testing has demonstrated each of the turbines are able to comply with the applicable NO<sub>x</sub> standard (110 ppmvd @ 15% O<sub>2</sub>). In order to demonstrate compliance with the standard for SO<sub>2</sub>, SNGC utilizes an approved custom monitoring schedule for monitoring the sulfur content of the fuel as specified in 40 CFR §60.334(h)(3)(i) or 40 CFR §60.334(h)(3)(ii).

#### 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (Subpart JJJJ) [Adopted by reference in ADEM Admin. Code r. 335-3-10-.02(88)]

The two 260 hp natural gas-fired emergency engines at this facility are not subject to Subpart JJJJ, because these engines were each manufactured in 1998, which is prior to the applicability date of this Subpart.

#### 40 CFR Part 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines (Subpart KKKK) [Adopted by reference in ADEM Admin. Code r. 335-3-10-.02(89)]

This subpart applies to stationary gas turbines with a heat input at a peak load equal to or greater than 10 MMBtu/hr and have a commenced construction, modification, or reconstruction after February 18, 2005. This standard is potentially applicable to Compressor Turbin Nos. 1 and 2 because they

have peak loads greater than 10 MMBtu/hr. However, both units were installed and modified prior to 2005, therefore, this regulation is not applicable.

40 CFR Part 60, Subpart OOOO, Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015 (Subpart OOOO) [Adopted by reference in ADEM Admin. Code r. 335-3-10-.02(91)]

The compressors associated with Compressor Turbine Nos. 1 and 2 were installed prior to the August 23, 2011, applicability of 40 CFR Part 60, Subpart OOOO, therefore, these units are not subject to this Subpart.

40 CFR Part 60, Subpart OOOOa, Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015 and On or Before December 6, 2022 (Subpart OOOOa) [Adopted by reference in ADEM Admin. Code r. 335-3-10-.02(91)(a)]

The Auburn Compressor Station is considered a natural gas compressor facility and is potentially subject to 40 CFR Part 60, Subpart OOOOa. However, all equipment and processes potentially subject to this regulation were installed and modified prior to the applicability date, therefore, this facility is not subject to this Subpart.

40 CFR Part 60, Subpart OOOOb, Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After December 6, 2022 (Subpart OOOOb)

The compressors associated with all units at this facility were installed prior to the December 6, 2022, applicability date of this regulation; therefore, this facility is not subject to this Subpart.

### NESHAP

40 CFR Part 63, Subpart YYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines (Subpart YYYY) [Adopted by reference in ADEM Admin. Code r. 335-3-11-.06(102)]

This facility is not a major source for HAP; therefore, the combustion turbines are not affected sources under Subpart YYYY.

40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (Subpart ZZZZ) [Adopted by reference in ADEM Admin. Code r. 335-3-11-.06(103)]

The two 260 hp natural gas-fired emergency engines are affected sources under 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) (Subpart ZZZZ). Under Subpart ZZZZ, these two RICE are each classified as an existing 4-stroke, rich-burn (4SRB), spark ignition (SI), emergency RICE less than 500 hp located at an area source of HAP emissions. Each of these engines are subject to the work practice requirements of 40 CFR §63.6602 and Item 5 of Table 2d to Subpart ZZZZ, which include:

- Change oil and filter every 500 hours of operation or annually, whichever comes first;

- Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

In addition, to retain the emergency classification under 40 CFR §63.6640(f), each engine is limited to operating during:

- Emergency situations;
- Maintenance checks and readiness testing, not to exceed 100 hours per year; and
- Non-emergency situations, not to exceed 50 hours per year (those 50 hours are counted towards the 100 hours per year provided for maintenance and testing).

No emission testing is required for the two 260 hp emergency engines.

SNGC is required to record the hours of operation for each of these units on a monthly and 12-month rolling total basis to ensure that the permittee operates this engine as an emergency stationary RICE as indicated by 40 CFR §63.6640(f). In addition, SNGC is required to report to the Air Division any failure to perform a work practice on the schedule required. The report must be submitted within two working days of the deviation. These records are required to be maintained in a permanent form suitable for inspection and be made available upon request

### **Mandatory Greenhouse Gas Reporting**

#### **40 CFR Part 98, Subpart A General Provision**

Although this facility is not subject to a listed source category as defined in 40 CFR §98.2(a)(1) or (2), it is potentially subject to this rule in accordance with 40 CFR §98.2(a)(3) since the aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility is 30 MMBtu/hr or greater and the facility has the potential to emit 25,000 metric tons (27,558 TPY) of CO<sub>2</sub>e or more per year from all stationary fuel combustion sources combined. SNGC must calculate greenhouse gas quantities according to the methodologies described in 40 CFR §98.2(c). SNGC would be required to maintain records of actual CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions to determine the actual CO<sub>2</sub>e emissions. If such emissions exceed the 25,000 metric tons per year threshold, then an annual report must be submitted no later than March 31 of each calendar year thereafter per 40 CFR §98.3. In accordance with 40 CFR §98.5, the annual report must be submitted electronically in accordance with the requirements of 40 CFR §98.4 (via EPA's Central Data Exchange).

#### **Applicability: State Regulations**

##### **ADEM Admin. Code r. 335-3-4-.01, "Control of Particulate Emissions: Visible Emissions"**

The turbines and emergency engines are subject to the State visible emissions standards of ADEM Admin. Code r. 335-3-4-.01(1), which states that no air emission source may emit particulate of an opacity greater than 20% (as measured by a six-minute average) more than once during any 60 minute period and at no time shall emit particulate of an opacity greater than 40% (as measured by a six-minute average).

##### **ADEM Admin. Code r. 335-3-4-.03, "Control of Particulate Emissions: Fuel Burning Equipment"**

Although the turbines and emergency engines are fuel combustion sources, they are not subject to any particulate matter (as TSP) emission limitation of ADEM Admin. Code Chap. 335-3-4 because they do not meet the definition of fuel burning equipment and is not considered one of the process industries, general or specific.

ADEM Admin. Code r. 335-3-5-.01, “Control of Sulfur Compound Emissions: Fuel Combustion”

Although the turbines and emergency engines are fuel combustion sources, they are not subject to any sulfur dioxide (SO<sub>2</sub>) emission limitation of ADEM Admin. Code Chap. 335-3-5 because they do not meet the definition of fuel burning equipment nor is this facility considered one of the process industries, general or specific. Since they are fired exclusively with natural gas, they are expected to be able to comply with this standard.

**Emission Testing and Monitoring**

SNGC is required to certify on a semiannual basis that only natural gas was burned in the two turbines and the two emergency engines as a method for monitoring compliance with the visible emission requirements of ADEM Admin. Code r. 335-3-4-.01(1) since opacity is expected to be negligible while combusting natural gas.

Monitoring for Combustion Turbine Nos. 1 and 2 consists of emissions testing for NO<sub>x</sub> once per peak season (October – March) and once per off-peak season (April – September). However, if the operating time for a turbine during the off-peak season does not exceed 250 hours, then no emission testing is required for that turbine during that season. The first emission testing conducted following the effective date of this renewal permit must be conducted using the appropriate EPA Reference Method. Emission testing for the remainder of the permit term may be conducted using either the appropriate EPA Reference Method or an alternate method if approved in advance by the Air Division.

No emission testing is required for the two 260 hp emergency engines.

To monitor compliance with the SO<sub>2</sub> standard of 40 CFR Part 60, Subpart GG, SNGC is required to monitor compliance with the applicable SO<sub>2</sub> standard in accordance with at least one of the options specified in 40 CFR §60.334.

**Recordkeeping and Reporting**

As part of the Semiannual Monitoring Report, SNGC is required to include a statement addressing whether only natural gas was fired in each unit during the respective reporting period. SNGC is also required to maintain records of the fuel sulfur content on-site in a form suitable for inspection.

In addition to certifying that only natural gas was fired in the emergency engines, SNGC is required to record the hours of operation for each of these units on a monthly and 12-month rolling total basis to ensure that the permittee operates this engine as an emergency stationary RICE as indicated by 40 CFR §63.6640(f). In addition, SNGC is required to report to the Air Division any failure to perform a work practice on the schedule required. The report must be submitted within two working days of the deviation. These records are required to be maintained in a permanent form suitable for inspection and be made available upon request.

**Compliance Assurance Monitoring (CAM)**

Compliance Assurance Monitoring (CAM), 40 CFR Part 64, applies to any pollutant-specific emission unit at a major source that is required to obtain an operating permit, in accordance with 40 CFR §64.5, if it meets all of the following criteria:

- It is subject to an emission limit or standard for an applicable regulated air pollutant.
- It uses a control device to achieve compliance with the applicable emission limit or standard.
- It has potential emissions, prior to the control device, of the applicable regulated air pollutant of 100 TPY of a criteria pollutant, 10 TPY of an individual HAP, or 25 TPY of total HAP.

Compressor Turbine Nos. 1 and 2 do not use an active control device as defined in the CAM regulations to meet the applicable emission limitations. As such, the facility is not subject to CAM requirements.

**Environmental Justice Screen**

The Draft Permit contains emission limits based on state and federal regulations that are protective of human health and the environment. In addition, the Department has robust public engagement that utilizes a number of tools, such as EPA’s EJ Screen: Environmental Justice Screening and Mapping Tool, to ensure that local residents and stakeholders are provided a meaningful opportunity to participate in the permitting process.

<http://www.adem.alabama.gov/Moreinfo/pubs/ADEMCommunityEngagement.pdf>.

**Public Participation**

The renewal of this Title V MSOP would require a 30-day public comment period and a 45-day EPA review period.

**Recommendation**

Based on the above analysis, I recommend that Southern Natural Gas Company, LLC’s Title V MSOP (206-0021) be renewed with the requirements noted above, pending the resolution of any comments received during the 30-day public comment period and 45-day EPA review.

*Brandon Cranford*

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September 12, 2024  
Date

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