STATEMENT OF BASIS
SOUTHERN NATURAL GAS COMPANY
HOLY TRINITY COMPRESSOR STATION
HOLY TRINITY, RUSSELL COUNTY, ALABAMA
FACILITY NO. 211-0023

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 1951. The initial application for this renewal was received April 10, 2025, and the application was deemed complete on May 1, 2025. The initial MSOP was issued on October 11, 2000, and this is the fifth renewal. The current MSOP was issued on July 2, 2020, became effective on October 11, 2020, and is scheduled to expire on October 10, 2025.

The facility is located in Russell 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 AL0000000111300023).

Facility Operations

Southern Natural Gas Company, LLC (SNGC) operates a compressor station for the transmission of pipeline natural gas. The significant sources of air pollutants at this facility are two 1,200 hp Cooper-Bessemer 2-stroke, lean-burn (2SLB) natural gas-fired reciprocating internal combustion engines (RICE) (Emission Unit Nos. C001 and C002) and one 173 hp Onan, Ford 100GGHD 4-stroke, rich-burn (4SRB) natural gas-fired emergency generator engine (Emergency Generator Engine No. 1). Insignificant emission sources at this station include one 10,000 gallon oil storage tank, two 1,100 gallon oil storage tanks, one 1,025 gallon coolant storage tank, a 15 gallon parts washer, small oil/paint drums and containers, maintenance equipment (drilling/grinding), gas scrubbers, one 0.7 MMBtu/hr gas-fired boiler, one 5,000 Btu/hr gas-fired heater, one 40 gallon gas-fired water heater, and one electric air compressor.

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 facility was originally constructed/began operations in 1951.

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

Issuance No./Permit No.	Issuance Date	Effective Date	Expiration Date	PSD SER Exceeded (Y/N)
Unpermitted Two 1,200 hp RICE	1951	--	--	N
Initial MSOP	October 11, 2000	October 11, 2000	October 10, 2005	--
MSOP 1st Renewal	September 13, 2005	October 11, 2005	October 10, 2010	--
MSOP 2nd Renewal - Rolled in Emer. Eng. No. 1	September 10, 2010	October 11, 2010	October 10, 2015	---
MSOP 3rd Renewal	August 31, 2015	October 11, 2015	October 10, 2020	--
MSOP 4th Renewal	July 2, 2020	October 11, 2020	October 10, 2025	--

Plant-Wide Potential to Emit (PTE)

Pollutant	Potential Emissions (TPY)
PM	7.32
SO_2	0.09
NO_x	529.24
CO	29.69
VOC	47.54
CO_2e	17,312.85
HAP ≥ 10 TPY (by CAS)	N/A
HAP (Total)	11.18

Applicability: Federal Regulations

Title V

This facility is a major source under Title V regulations because the potential emissions for nitrogen oxides (NO_x) exceed the 100 TPY major source threshold. It is not a major source of Hazardous Air Pollutants (HAP) because individual HAP potential emissions are not greater than 10 TPY and the total HAP potential emissions are not greater than 25 TPY.

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 sources categories; therefore, the applicable major source threshold is 250 TPY for criteria pollutants. The facility is a major source under PSD regulations because the facility-wide potential emissions for NO_x exceed 250 TPY. However, the two 1,200

hp RICE were installed in 1967 (prior to the PSD applicability date of January 1977) and have not been modified since their installation. Therefore, there are no regulatory emission limits applicable to these engines under PSD regulations.

New Source Performance Standards (NSPS)

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)]

Emission Unit Nos. C001 and C002, and Emergency Generator Engine No. 1 at this facility are not subject to 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (Subpart JJJJ) based on the dates that these engines were manufactured (1967, 1967, and 1997, respectively), all of which are prior to each units applicability date.

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 Engine Nos. 1 and 2 (Emission Unit Nos. C001 and C002) were each installed prior to the August 23, 2011, applicability date of Subpart OOOO; therefore, this facility is 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 Holy Trinity 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/or 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 Holy Trinity Compressor Station is considered a natural gas compressor facility and is subject to 40 CFR Part 60, Subpart OOOOb. However, all equipment and processes potentially subject to this regulation were installed and/or modified prior to the applicability date, therefore, this facility is not subject to this Subpart.

National Emission Standards for Hazardous Air Pollutants (NESHAP/MACT)

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)]

This facility is not a major source for HAPs and operates two 1,200 hp 2SLB reciprocating engines (Emission Unit Nos. C001 and C002) that were installed in 1967. These units are affected sources under 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT), which applies to both major and area sources for HAP. These engines are considered existing RICE because they were manufactured prior to the area source applicability date of June 12, 2006. As existing non-emergency 2SLB stationary RICE located at an area source of HAP emissions, the units are subject to the requirements of 40 CFR §63.6603, 40 CFR §63.6640 and Item No. 6 of Table 2d of this Subpart which include:

- Change oil and filter every 4,320 hours of operation or within 1 year plus 30 days of the previous change, whichever comes first, or utilize an oil analysis program;
- Inspect spark plugs every 4,320 hours of operation or within 1 year plus 30 days of the previous inspection, whichever comes first, and replace as necessary; and
- Inspect all hoses and belts every 4,320 hours of operation or within 1 year plus 30 days of the previous inspection, whichever comes first, and replace as necessary.

The 173 hp natural gas-fired emergency engine is an existing affected source under the RICE MACT. As an existing emergency spark ignition (SI) stationary RICE less than 500 hp located at an area source of HAP emissions, this engine is subject to the requirements of 40 CFR §63.6603 and Item No. 5 of Table 2d of this Subpart which include:

- Change oil and filter every 500 hours of operation or within 1 year plus 30 days of the previous change, whichever comes first, or utilize an oil analysis program;
- Inspect spark plugs every 1,000 hours of operation or within 1 year plus 30 days of the previous inspection, whichever comes first, and replace as necessary; and
- Inspect all hoses and belts every 500 hours of operation or within 1 year plus 30 days of the previous inspection, whichever comes first, and replace as necessary.

In accordance with 40 CFR §63.6640(f), this 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).

<u>40 CFR Part 63, Subpart JJJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources</u>

The boiler, fuel heater, and the water heater are not subject to 40 CFR Part 63, Subpart JJJJJ, Industrial, Commercial, and Institutional Boilers at Area Sources since these units are fired exclusively by natural gas. Natural gas-fired boilers are exempt from this Subpart in accordance with 40 CFR §63.11195(e), and hot water heaters are exempt from this Subpart in accordance with 40 CFR §63.11195(f).

<u>Mandatory Greenhouse Gas Reporting</u>

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_2e 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_2, CH_4, and N_2O emissions to determine the actual CO_2e 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). While this facility is required to report greenhouse gas emissions to EPA per 40 CFR Part 98, these requirements do not meet the definition of "applicable requirements" under 40 CFR 70.2 and ADEM Admin. Code r. 335-3-16-.01(1)(e). Therefore, the requirements of 40 CFR Part 98 are not required to be included in the Title V permit.

Applicability: State Regulations

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

Compressor Engine Nos. 1 and 2 and Emergency Generator Engine No. 1 are each 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-.02, "Fugitive Dust and Fugitive Emissions"

This rule is applicable. However, all plant roads are paved or graveled. There are no raw materials, storage piles, products, etc. capable of generating fugitive dust at this facility. Therefore, additional specific requirements for fugitive dust are not necessary for this facility.

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

Although Compressor Engine Nos. 1, 2 and Emergency Generator Engine No. 1 are fuel combustion sources, they are not subject to any particulate matter (as TSP) emission limitation of ADEM Admin. Code r. 335-3-4-.03 because they do not meet the definition of fuel burning equipment and the facility 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 Compressor Engine Nos. 1, 2 and Emergency Generator Engine No. 1 are fuel combustion sources, they are not subject to any sulfur dioxide (SO_2) emission limitation of ADEM Admin. Code r. 335-3-5-.01 because they do not meet the definition of fuel burning equipment nor is this facility considered one of the process industries, general or specific.

Emission Testing and Monitoring

SNGC is required to certify on a semiannual basis that only natural gas was burned in the

reciprocating engines as a method for monitoring compliance with the visible emission requirements of ADEM Admin. Code r. 335-3-4-.01(1) because opacity would be negligible while combusting natural gas.

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 as a method for monitoring compliance with the visible emission requirements of ADEM Admin. Code r. 335-3-4-.01(1).

SNGC is required to record the hours of operation for the Emergency Generator Engine No. 1 on a calendar year basis to ensure that the permittee operates the engine as an emergency stationary RICE as specified by 40 CFR §63.6640(f). These records are required to be maintained in a permanent form suitable for inspection and be made available upon request.

In accordance with ADEM Admin. Code r. 335-3-16-.05(c)2(ii), all required records must be maintained in a permanent form suitable for inspection for a period of five years from the date of generation of each record 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 Engine Nos. 1 and 2 do not have applicable emission limitations. As such, the facility is not subject to CAM requirements.

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 the Title V Major Source Operating Permit (211-0023) be renewed with the requirements noted above, pending the resolution of any comments received during a 30-day public comment period and 45-day EPA review.

Brandon R. Cranford
Chemical Branch
Air Division

September 11, 2025
Date

11263 211-0023 113 09-11-2025 T5SOB BRC 5REN