

Facility Name: **Southern Natural Gas Company, L.L.C. – Ocmulgee Compressor Station**

City: Macon

County: Bibb

AIRS #: 04-13-02100021

Application #: TV-997887

Date SIP Application Received:

Date Title V Application Received: June 26, 2025, April 23, 2026

Permit No: 4922-021-0021-V-05-1

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Introduction

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and draft operating permit amendment. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Sections 391-3-1-.03(1) and 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public comment period and EPA review process will be described in an addendum to this narrative.

I. Facility Description**A. Existing Permits**

Table 1 below lists the current Title V permit, and all administrative amendments, minor and significant modifications to that permit, and 502(b)(10) attachments.

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Description
4922-021-0021-V-05-0	July 29, 2021	Title V Renewal

B. Regulatory Status**1. PSD/NSR/RACT**

The facility is located in Bibb County, currently an attainment area for all criteria pollutants. The facility is not one of the 28 named source categories under PSD regulations. It is classified as a major source under PSD regulations because its potential to emit (PTE) for nitrogen oxides (NO_x) is greater than 250 tons per year. However, the facility has never undergone any PSD review. Note that the major NO_x emitting sources, Compressor Engines C001 through C006, were all installed prior to the promulgation of the PSD regulations.

2. Title V Major Source Status by Pollutant**Table 2: Title V Major Source Status**

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	Yes			✓
PM ₁₀	Yes			✓
PM _{2.5}	Yes			✓
SO ₂	Yes			✓
VOC	Yes	✓		✓
NO _x	Yes	✓		
CO	Yes			✓
TRS	No			
H ₂ S	No			
Individual HAP	Yes	✓		
Total HAPs	Yes	✓		

II. Proposed Modification

A. Description of Modification

The facility proposes to add one Caterpillar G3516 Emergency Generator (Unit ID No. G002) rated at 2,264 hp, an electric motor-driven centrifugal Compressor (Unit ID No. C007) rated at 13,000 hp with dry seals, and an Oxidation Catalyst to existing Compressor Engine C006.

B. Emissions Change

Table 3: Emissions Change Due to Modification

Pollutant	Is the Pollutant Emitted?	Net Actual Emissions Increase (Decrease) (tpy)	Net Potential Emissions Increase (Decrease) (tpy)
PM			+0.01
PM ₁₀			+0.01
PM _{2.5}			+0.01
SO ₂			+0.00
VOC			-8.67
NO _x			+0.25
CO			+0.50
TRS	N/A		
H ₂ S	N/A		
Individual HAP (Formaldehyde)			-2.05
Total HAPs			-4.09

The addition of an Oxidation Catalyst to existing Compressor Engine (Unit ID No.C006) is providing a 40% reduction of formaldehyde and 30% reduction of acetaldehyde, acrolein and benzene. The VOC's overall have a 4.8% reduction for the net project impact.

C. PSD/NSR Applicability

As an existing major source, physical changes and/or changes in the method of operation must be evaluated to determine whether they would result in a significant net emission increase and thereby qualify as a “major modification” subject to PSD review requirements. However, as identified in Table 3-2 of the application, the proposed project will not exceed pollutant-specific PSD significant modification thresholds; therefore, PSD review is not required.

III. Facility Wide Requirements

A. Emission and Operating Caps

There are no changes in facility wide emission and operating caps.

B. Applicable Rules and Regulations

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

The facility is subject to this regulation.

This subpart applies to the collection of fugitive emissions components at a compressor station that was modified as applicable to 40 CFR 60.5397b as “when one or more compressors is replaced by one or more compressors of greater total horsepower than the compressor(s) replaced” that commenced construction, modification, or reconstruction after December 6, 2022. Fugitive emissions components are any components that has the potential to emit fugitive emissions of methane or VOC, such as valves, connectors, pressure relief devices, open-ended lines, flanges, covers and closed vent systems not subject to 40 CFR 60.5411b, thief hatches or other openings on a storage vessel not subject to 40 CFR 60.5395b, compressors, instruments, meters, and yard piping.

Compressor (ID No. C007) is an electric motor-driven compressor with dry seals, that will be installed after December 6, 2022, meeting the definition of a *modification* applicable to 40 CFR 60.5397b, and thus fugitive emissions components at the facility are subject to this subpart.

The facility is subject to GHG and VOC standards and must comply with those standards by meeting the requirements of 40 CFR 60.5397b. These requirements include the development of fugitive emissions monitoring plan, the use of monitoring surveys to identify fugitive emissions, and the repair of any identified fugitive emissions components.

The facility plans to use audible, visible, and olfactory (AVO) inspections and optical gas imaging (OGI) as the method to identify fugitive emissions, as allowed by 40 CFR 60.5397b(c) upon meeting the requirements of 40 CFR 60.5397b(c)(7).

Annual reports are required by 40 CFR 60.5420b(b), and records are required by 40 CFR 60.52420b(c). There are no notifications requirements.

The facility is also subject to super-emitter events and the standards applicable to those events after January 22, 2027.

There are no closed vents, recovery systems, or control devices.

Requirements applicable to compressor (Unit ID No. C007) as a centrifugal compressor under this subpart are discussed in Section IV.C.

C. Compliance Status

The application did not indicate any non-compliance issues.

D. Permit Conditions

Condition 2.2.1 establishes the applicability of 40 CFR 60 Subpart A and 40 CFR 60 Subpart OOOOb.

Condition 2.2.2 requires the monitoring of all fugitive emissions components located at the facility in accordance with Conditions 5.2.2 through 5.2.6, per 40 CFR 60 Subpart OOOOb.

Condition 2.2.3 lists the requirements of repairs for when fugitive emissions are identified, per 40 CFR 60 Subpart OOOOb.

Condition 2.2.4 lists the criteria for initial and continuous compliance for the fugitive emissions components, per 40 CFR 60 Subpart OOOOb.

Condition 2.2.5 establishes the applicability of 40 CFR 60.5371b for super-emitter events, after January 22, 2027, per 40 CFR 60 Subpart OOOOb.

IV. Regulated Equipment Requirements

A. Brief Process Description

The project will include the installation and operation of one Caterpillar G3516 Emergency Generator (Unit ID No. G002), an electric motor-driven centrifugal Compressor (Unit ID No. C007) and an Oxidation Catalyst on existing Compressor Engine C006. Fugitive emissions from additional piping and piping components from the new emission sources are anticipated as part of this project.

B. Equipment List for the Process

3.1.1 Additional Emission Units

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
C006	No. 6 Compressor Engine Cooper Bessemer, GMVC-10 2-SLB, 1,800 hp 18.5 MMBtu/hr Installed in 1963	40 CFR 63 Subpart A 40 CFR 63 Subpart ZZZZ Rule 391-3-1-.02(2)(b)1. Rule 391-3-1-.02(2)(g)2.	OC6	Oxidation Catalyst
C007	No. 7 Compressor Engine with electric motor drive 13,000 hp	40 CFR 60 Subpart A 40 CFR 60 Subpart OOOOb		
G002	Emergency Generator Engine Caterpillar G3516 4-SLB, 2,264 hp 15.01 MMBtu/hr Manufactured/Installed in 2025	40 CFR 60 Subpart A 40 CFR 60 Subpart JJJJ 40 CFR 63 Subpart A 40 CFR 63 Subpart ZZZZ Rule 391-3-1-.02(2)(b)1. Rule 391-3-1-.02(2)(g)2.	None	None

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards are intended as a compliance tool and may not be definitive.

C. Equipment & Rule Applicability

40 CFR 60 Subpart JJJJ

The new emergency generator engine (ID No. G002) is subject to 40 CFR 60 Subpart A “General Provisions” and Subpart JJJJ. According to 40 CFR 60.4230(a)(4)(iv), 40 CFR 60 Subpart JJJJ is applicable to G002 because the emergency generator engine’s commence construction date is after June 12, 2006, its manufacturing date is after January 1, 2009, and its maximum power is greater than 25 hp. Owners and operators of a stationary spark ignition internal combustion engine (SI ICE) greater than 100 hp, according to 40 CFR 60.4233(e), must comply with the

emission standards in Table 1 to 40 CFR 60 Subpart JJJJ. G002 is subject to emission standards found in Table 1 to 40 CFR 60 Subpart JJJJ. According to 40 CFR 60.4234, the engine must achieve the emission standards over its entire life. These requirements are included in Condition 3.3.2.

According to 40 CFR 60.4243(b)(1) and (2)(ii), in order to demonstrate compliance with the emission standards in Table 1 to 40 CFR 60 Subpart JJJJ, the facility must either purchase a certified engine or demonstrate compliance with each emission standard in an initial performance test. New emergency engine G002 is a certified engine.

40 CFR 60.4244(a) and Table 2 to 40 CFR 60 Subpart JJJJ contains the required test methods for the performance testing. Condition 4.1.3 includes the test methods.

40 CFR 60.4244(a) through (g) include detailed test procedures for the performance testing required by Condition 4.2.1. The testing procedures and requirements are included in Condition 4.2.2.

40 CFR 60.4243(b)(2)(ii) also requires that the facility maintain and operate G002 in a manner consistent with good air pollution control practice for minimizing emissions and keep a maintenance plan and records of conducted maintenance. Condition 3.3.4 includes these requirements.

Although the emergency use of G002, per 40 CFR 60.4243(d)(1), is unlimited, the emergency use of G002 is limited to 500 hours per year, per Georgia Rules for Air Quality Control 391-3-1-.03(6)(b)11.(v)(I) to meet the definition of an emergency engine. Therefore, the permit modification does not include the requirement of 40 CFR 60.4243(d)(1).

40 CFR 60.4243(d)(2) and (3) includes the allowable hours of operation for maintenance, and testing for G002. Condition 3.3.5 includes the provisions of 40 CFR 60.4243(d)(2) and (3).

40 CFR 60.4237(a) requires that the facility install and operate a non-resettable hour meter on G002. The monitoring requirement is included in Condition 5.2.1.

The facility is also subject to the record keeping and reporting requirements specified in 40 CFR 60.4245(a) through (e). The record keeping requirements specified in 40 CFR 60.4245(a) and (b) are included in Conditions 6.2.1 and 6.2.2. The reporting requirements specified in 40 CFR 60.4245(d) are included in Condition 4.1.1. The annual reporting requirements of 40 CFR 60.4245(e), if applicable, are included in Condition 6.2.3.

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

Applicable to Compressor (Unit ID No. C007).

This subpart applies to centrifugal compressors, not located at a well site that commenced construction, modification, or reconstruction after December 6, 2022.

Compressor (Unit ID No. C007) is a centrifugal compressor, not located at a well site, that will commence construction after December 6, 2022, and thus is subject to this subpart.

Because it is equipped with dry seals, Compressor (Unit ID No. C007) is subject to GHG and VOC standards in 40 CFR 60.5380b and will comply with those standards by using volumetric flow rate as a surrogate, per 40 CFR 60.5380b(6). Each seal must have a volumetric flow rate of no greater than 10 standard cubic feet per minute (scfm) per seal, per 40 CFR 60.5382b(6)(i).

The facility plans to use AVO and OGI to screen for leaks, as allowed by 40 CFR 60.5380b(a)(7)(iii). If no leaks are identified by OGI, volumetric emissions are assumed to be zero. Otherwise, the facility is required to use either a flow meter or a high-volume sampler to determine the volumetric flow rate to determine compliance.

The requirements for repairs whenever a flow rate measurement from any compressor seal is higher than the limit are listed in 40 CFR 60.5380b(a)(8).

Annual reports are required by 40 CFR 60.5420b(b), and records are required by 40 CFR 60.52420b(c). There are no notifications requirements.

40 CFR 63 Subpart ZZZZ

The facility is a major source for single HAP and Total HAPs under Title V of 1990 CAAA. According to 40 CFR 63.6580 and 6585, a stationary reciprocating internal combustion engine (RICE) located at a major source of HAPs is subject to 40 CFR 63 Subpart ZZZZ – “National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.” Therefore, emergency generator engine (ID No. G002) is subject to 40 CFR 63 Subpart A – “General Provisions,” and Subpart ZZZZ.

As defined under 40 CFR 63.6590(a)(2)(i), G002 is a new RICE at a major source of HAPs with a site rating greater than 500 hp. According to 40 CFR 63.6590(b)(1)(i), G002 does not have to meet the requirements of Subpart A or Subpart ZZZZ, with the exception of submitting an initial notification per 40 CFR 63.6645(f), stating that the engine has no additional requirements.

Applicable Georgia State Rules

G002 is subject to the visible emission limit (40 percent opacity) specified in Georgia Air Quality Rule 391-3-1-.02(2)(b) “Visible Emissions,” and the fuel sulfur content limit specified in Georgia Air Quality Control Rule 391-3-1-.02(2)(g) “Sulfur Dioxide.” The GA Rule (b) limit is included in Condition 3.4.1. The GA Rule (g) fuel sulfur content limit is subsumed in Condition 3.2.1. Since the engine burns only natural gas, and natural gas has a minimal amount of sulfur and is a clean fuel, compliance with the GA Rule (b) visible emission limit and the GA Rule (g) fuel sulfur content limit is always expected.

D. Permit Conditions

3.2.1 specifies the fuel type for the emergency generator engine (ID No. G002). This condition subsumes the GA Rule (g) fuel sulfur content limit.

Condition 3.3.1 subjects G002 to all applicable provisions of 40 CFR 60 Subpart A and Subpart JJJJ.

Condition 3.3.2 subjects G002 to the emission standards listed in Table 1 to 40 CFR 60 Subpart JJJJ. Note that the facility can choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O₂.

Condition 3.3.3 includes the compliance option for G002 specified in 40 CFR 60.4243(b)(2)(ii).

Condition 3.3.4 includes the operating requirements for G002 specified in 40 CFR 60.4243(b)(2)(ii).

Condition 3.3.5 includes the operating time limit for G002 specified in 40 CFR 60.4243(d)(2) and (3).

Condition 3.3.6 subjects G002 to 40 CFR 63 Subpart A and Subpart ZZZZ. Note that they are actually not subject to any requirements of these subparts.

Condition 3.3.7 establishes the applicability of 40 CFR 60 Subpart A and 40 CFR 60 Subpart OOOOb to Compressor (ID No.C007).

Condition 3.3.8 requires compliance with GHG and VOC standards to Compressor (ID No. C007) by using volumetric flow rate as a surrogate, per 40 CFR 60 Subpart OOOOb.

Condition 3.3.9 requires the determination of volumetric flow rate of Compressor (ID No. C007), per 40 CFR 60 Subpart OOOOb.

Condition 3.3.10 lists the requirements for repairs whenever volumetric emissions measurements exceeds the applicable standard, per 40 CFR 60 Subpart OOOOb.

Condition 3.3.11 lists the criteria for initial compliance for Compressor (ID No. C007), per 40 CFR 60 Subpart OOOOb.

Condition 3.4.1 subjects G002 to the GA Rule (b) visible emission limit.

V. Testing Requirements (with Associated Record Keeping and Reporting)

The emergency generator engine (ID No. G002) is certified by its manufacturer. As a certified stationary RICE greater than 500 hp located at a major source of HAPs, G002 is not subject to the repeated performance testing requirement specified in 40 CFR 60.4243(b)(2)(ii).

Condition 4.2.3 requires the use of OGI to screen for emissions from the dry seal(s) of Compressor (Unit ID No. C007) in accordance with the elements for OGI monitoring found in the fugitive emissions monitoring plan of Condition 2.2.3g, as required by Condition 3.3.9, per 40 CFR 60 Subpart OOOOb.

Condition 4.2.4 requires the determination of volumetric flow rate using the requirements of Method 2D of 40 CFR 60 Appendix A-1, as required by Condition 3.3.9, per 40 CFR 60 Subpart OOOOb.

Condition 4.2.5 requires the determination of emissions using a high-volume sample according to the requirements of 40 CFR 60.5386b(c), as required by Condition 3.3.9, per 40 CFR 60 Subpart OOOOb.

Condition 4.2.6 allows for an alternative to Conditions 4.2.4 and 4.2.5, subject to the Division's approval, per 40 CFR 60 Subpart OOOOb.

VI. Monitoring Requirements (with Associated Record Keeping and Reporting)

The emergency generator engine (ID No. G002) is subject to the monitoring requirement specified in 40 CFR 60.4237(a). The facility must install and operate a non-resettable hour meter to monitor G002's operating time.

Condition 5.2.2 requires the development of a fugitive emissions monitoring plan and lists the requirements of the plan, per 40 CFR 60 Subpart OOOOb.

Condition 5.2.3 requires the monitoring of each fugitive emissions component during monitoring surveys, per 40 CFR 60 Subpart OOOOb.

Condition 5.2.4 requires an initial monitoring survey, per 40 CFR 60 Subpart OOOOb.

Condition 5.2.5 requires subsequent monthly monitoring surveys using AVO, per 40 CFR 60 Subpart OOOOb.

Condition 5.2.6 requires subsequent quarterly monitoring surveys using OGI, per 40 CFR 60 Subpart OOOOb.

VII. Other Record Keeping and Reporting Requirements

There are no excess emissions as defined in this subpart for fugitive emissions components and for centrifugal compressors. No change to Condition 6.1.7.

Condition 6.2.1 includes the record keeping requirements, which are specified in 40 CFR 60.4245(a), for the emergency generator engine (ID No. G002).

Condition 6.2.2 includes the record keeping requirements, which are specified in 40 CFR 60.4245(b), for the emergency generator engine (ID No. G002).

Condition 6.2.3 includes the annual reporting requirements, which are specified in 40 CFR 60.4245(e), for the emergency generator engine (ID No. G002).

New Condition 6.2.4 requires the facility to prepare and submit a one-time facility-wide air toxics assessment of all emission sources listed in Section 3.1, including a comparison to the Minimum Emission Rates (MER) and modeling for pollutants not screened out by the MER in accordance with the Georgia Environmental Protection Division's most recent Guideline for Ambient Impact Assessment of Toxic Air Pollutant Emissions, for Division review. The requirements are to be fulfilled within six (6) months of this permit issuance.

New Condition 6.2.5 requires the submittal of annual reports, including the initial report, for fugitive emissions components, per 40 CFR 60 Subpart OOOOb.

New Condition 6.2.6 requires the submittal of annual reports, including the initial report, for Compressor (Unit ID No. C007), per 40 CFR 60 Subpart OOOOb.

New Condition 6.2.7 requires reporting of super-emitter events, per 40 CFR 60 Subpart OOOOb.

New Condition 6.2.8 requires records for fugitive emissions components, per 40 CFR 60 Subpart OOOOb.

New Condition 6.2.9 requires records for Compressor (ID No. C007), per 40 CFR 60 Subpart OOOOb.

Addendum to Narrative

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//