Jefferson County Department of Health
Environmental Health Services
Air Pollution Control Program

Statement of Basis for Title V Renewal Permit – Southern Natural Gas Company, LLC,- Tarrant Compressor Station

Facility Information:

PLANT LOCATION	OWNER ADDRESS	CONTACT FOR PERMIT
Tarrant Compressor Station	Kinder Morgan	Wayne Parrot
666 Springdale Road	1001 Louisiana Street, Suite 1000	Sr. Air Permitting & Compliance Specialist
Tarrant, Alabama	Houston, Texas	478-216-9338
35217-2040	77002 - 5089	

Description of Permit Action:

This action is pursuant to the 40 CFR Part 70 requirement that Title V permits to be reviewed and reissued every 5 years. The current permit for the Tarrant Compressor Station (TCS), 4-07-0267-06, was issued on April 5, 2019. There are no changes to the facility's potential emissions and no changes to the applicable requirements associated with this action. However, the following updates have been made:

- Updated wording of general conditions and citations to the most up to date versions where needed
- Removed the Emergency Provision for consistency with 88 FR 47029, July 21, 2023
- Added references to 40 CFR 60, Subpart OOOOa and 40 CFR 60 Subpart OOOOb
- Updated definitions with most up to date versions and added additional definitions, as needed.

Description of Operations:

At the Tarrant Compressor Station (TCS), Southern Natural Gas Company, LLC (SNG) operates 8 natural gas fired reciprocating compressor engines for the purpose of compressing natural gas. One emergency generator is also present at the facility. The facility operates 8,760 hours/yr. The SIC Code for the facility is 4922, Natural Gas Transmission. The following AFS source classifications codes (SCC) are applicable:

- 20200252 – Internal Combustion Engine/Industrial/Natural Gas/2 Cycle Lean Burn
- 20200253 – Internal Combustion Engine/Industrial/Natural Gas/4 Cycle Rich Burn.

SNG operates the compressor station for the purpose of increasing the pressure in the pipeline system and maintaining downstream flow. Low pressure pipeline natural gas enters the facility and is divided among the 8 compressor units, each of which is powered by a small portion of the incoming gas stream. After passing through a compressor, high pressure natural gas is reintroduced into the pipeline. The primary emissions from this operation come from natural gas combustion by the engines that operate

the compressors. Additional emissions from blowdown of natural gas for safety reasons associated with the repair and maintenance of the facility equipment and transmission pipeline sections adjacent to the facility occur as well.

The facility also includes an emergency generator to provide electricity when the commercial power supply is interrupted and a parts cleaner. The 8 compressor engines and 1 emergency generator combust only pipeline natural gas. Oil, coolant, pipeline drip oil, and oily water are stored in 9 storage tanks, each with a capacity of 10,000 gallons or less.

Permitting, Application, and Construction History:

The current Title V renewal application was submitted on September 29, 2023. The application was determined to be complete on October 9, 2023. Consistent with Section 18.12.2 of the Rules and Regulations, SNG TCS's right to operate will extend past the expiration of the current Title V permit on April 4, 2024.

The following table summarizes SNG TCS's application and permitting history with the Department since the inception of the Title V program.

Application	Purpose	Department Action
12/15/1995	Initial Title V	4-07-0267-01 issued 9/8/1999
03/08/2004	Title V Renewal (timely)	4-07-0267-02 issued 9/13/2004
05/12/2009	Title V Renewal (timely)	4-07-0267-03 issued 7/24/2009
12/14/2012	Minor Modification – change facility name from Southern Natural Gas Company – Tarrant Compressor Station to Southern Natural Gas Company, LLC. – Tarrant Compressor Station	4-07-0267-04 issued 02/18/2013
03/03/2014	Title V Renewal	4-07-0267-05 issued 05/12/2014
11/08/2018	Title V Renewal (timely)	4-07-0267-06 issued 04/05/2019
09/23/2023	Title V Renewal (timely)	This application is for the current draft permit to be numbered 4-07-0267-07.

Compliance and Enforcement (Air only)

The facility is in compliance with the current Title V Operating Permit based on the most recent annual inspection and full compliance evaluation (dated January 4, 2024). There are no outstanding consent decrees, court judgements, administrative orders or other enforcement orders for air emissions which have been issued against the facility at the time of this draft permit which are not properly addressed in the permit. The most recent annual compliance certification was received on October 10, 2023. The company reported status was in compliance without deviations. No compliance schedule is required at this time.

List of All Units and Emissions Generating Activities:

8 Natural Gas-Fired Compressor Engines:

- EU 001, C001, Cooper-Bessemer Model GMVS-10, 2-stroke, lean-burn (2SLB) Compressor Engine No. 14, rated for 2,000 hp, installed 1980
- EU 002, C002, Cooper-Bessemer Model GMVS-10, 2SLB Compressor Engine No. 13, rated for 2,000 hp, installed 1980
- EU 003, C003, Cooper-Bessemer Model GMVS-10, 2SLB Compressor Engine No. 12, rated for 2,000 hp, installed 1980
- EU 005, C005, Cooper-Bessemer Model GMV-10 STF, 2SLB Compressor Engine No. 11, rated for 1,350 hp, installed 1950
- EU 006, C006, Cooper-Bessemer Model GMV-10 STF, 2SLB Compressor Engine No. 10, rated for 1,350 hp, installed 1950
- EU 007, C007, Cooper-Bessemer Model GMV-10, 2SLB Compressor Engine No. 9, rated for 1,000 hp, installed 1948
- EU 008, C008, Cooper-Bessemer Model GMV-10, 2SLB Compressor Engine No. 8, rated for 1,000 hp, installed 1947
- EU 009, C009, Cooper-Bessemer Model GMV-10 STF, 2SLB Compressor Engine No. 7, rated for 1,350 hp, installed 1947

1 Emergency Generator:

- EU 012, G001, Caterpillar Model 399, 4-stroke, rich-burn (4SRB) Compression Ignition Engine, rated for 660 hp, installed 2004

Facility-Wide Activities and Small Sources Not Assigned an Emission Unit Number:

- Fugitive Dust from vehicle traffic
- Solvent Degreaser
- Truck Loading
- Blowdown
- 9 Storage Tanks
- Portable Equipment

Facility-Wide Potential to Emit (PTE):

The potential to emit is calculated using the maximum capacity of the facility under its physical and operational design. The calculation includes federally enforceable limits, restrictions or requirements, including but not necessarily limited to air pollution control equipment, and restrictions on the hours of operation, types of materials combusted or amounts of materials processed. The most recent permit application may include adjustments to the PTE calculation which incorporate better information than was available when previous applications were submitted. The independent calculations performed by the Department may differ from those submitted by the facility. Differences will not be discussed unless an issue of applicability is presented. Potential to emit is meant to be a worst-case emissions calculation.

The following table presents the average of the actual facility-wide emissions of criteria pollutants and selected HAP pollutants (HAP emitted at ≥10 pounds per year) during calendar years 2019 – 2023, as entered in the Department's emission reporting database. It also includes the facility-wide potential to emit to put the size of the facility in context and to aid in understanding which regulations apply.

The Department's full calculations of potential emissions for the facility using the best available information is attached to this statement, including the sources of emission factors and other assumptions. Site-specific factors were used for CO, NO_x, and VOC. 40 CFR 98 values were used for N_2O and CO_2e. Emissions factors from AP-42, Section 3.2 for a natural gas-fired, 2 stroke lean burn engine were used for all other pollutants for the compressor engines and factors for a natural gas-fired, 4-stroke rich burn engine were used for the emergency engine. Emissions factors for blowdown emissions and fugitive emissions were provided by the facility. VOC emissions from the coolant and parts cleaner were calculated using usage rates provided by the facility. The emissions factor for truck loading was calculated using Equation 1 of AP-42, Section 5.2 and facility supplied data.

Pollutant	**Average 2019 – 2023 (tons/year)**	**Potential to Emit (tons/year)**
Carbon Monoxide (CO)	26.7	133
Nitrogen Oxides (NO_X)	276.1	2,773
Total Suspended Particulates (TSP)	9.5	37
Particulate Matter ≤10 µm (PM10)	9.5	37
Particulate Matter ≤2.5 µm (PM2.5)	9.5	37
Sulfur Dioxide(SO_2)	0.09	0.45
Volatile Organic Compounds (VOC)	25.9	173
Ethylbenzene	0.021	0.068
Styrene	0.005	0.035
Ethylene Dibromide	0.014	0.047
1,3-Butadiene	0.147	0.521
Acrolein	1.466	4.933
Ethylene dichloride (1,2-dicholroethane)	-	0.027
Ethylene glycol	-	3.348
Toluene	0.193	0.611
Chlorobenzene	0.009	0.028
Phenol	0.008	0.027
n-Hexane	0.128	0.508
Total PAH	0.025	0.085
Xylenes	0.052	0.17
Formaldehyde	10.452	35.001
2,2,4-Trimethylpentane	0.172	0.536
1,3-dichloropropene	0.008	0.028
Carbon tetrachloride	0.012	0.038
Methanol	0.623	1.577
Chloroform	0.01	0.03
Benzene	0.369	1.232
Vinyl chloride	0.005	0.016

Pollutant	Average 2019 – 2023 (tons/year)	Potential to Emit (tons/year)
Acetaldehyde	1.506	4.92
Methylene chloride	0.029	0.093
Ethylidene dichloride	-	0.025
Propylene dichloride	-	0.028
1,1,2-trichloroethane	0.095	0.033
1,1,2,2-tetrachloroethane	0.012	0.042
Naphthalene	0.02	0.061
Total HAP	**15.296**	**54.070**

NAAQS Attainment Status & Major Source Thresholds:

Jefferson County is designated attainment for all National Ambient Air Quality Standards (NAAQS) currently in effect. The provisions of Part 2.4, "Air Permits Authorizing Construction in Clean Areas (Prevention of Significant Deterioration Permitting (PSD))" of the Rules and Regulations determine the major source threshold for all NSR regulated pollutants. SNG TCS is not a source category listed under Subdivision 2.4.2(a)(1)(i) of the Rules and Regulations and so the major source threshold for NSR/PSD is 250 tons/year. Under Title V (Paragraph 18.1.1(q)), the major source threshold is 100 tons/year for regulated NSR pollutants (excluding lead) and the major source thresholds for HAPs are 10 tons/year for a single HAP and 25 tons/year for total HAP.

An insignificant activity means an air emissions unit at the facility which has the potential to emit less than 5 tons per year of any criteria pollutant or less than 1,000 pounds per year of any HAP (Paragraph 18.1.1(o) of the Rules and Regulations). However, activities which have applicable requirements cannot be considered insignificant.

Implications of Major or Area Source Status:

SNG TCS is an actual major source for NO_x and a potential major source of VOC and CO, which means that any modification (a physical change or a change in the method of operation which increases the amount of air pollutant emitted or causes the emission of a pollutant not previously emitted by the facility) will be subject to New Source Review (NSR) under the PSD program to determine whether any requirements for Best Available Control Technology (BACT) have been triggered.

Applicable requirements under New Source Performance Standards (NSPS) are determined by date of construction and other details including but not limited to the equipment capacity, material stored, and/or fuel combusted, but are generally not determined directly from the PTE of individual equipment or of the entire facility.

Applicable requirements under the State Implementation Plan (SIP) apply based on the activity or equipment generating emissions, although some exemptions based on (low) PTE or actual emissions are incorporated into some rules.

SNG TCS is an actual major source of formaldehyde and a potential major source of total HAP. The PTE for HAP is often relevant to the determination of which National Emission Standards for Hazardous Air Pollutants (NESHAP) are applicable. In general, NESHAPs apply to specifically defined source categories

based on equipment or type of activity. For 40 CFR Part 61 NESHAP, PTE is not considered. For 40 CFR Part 63 NESHAP, some subparts are applicable only to major sources of HAP, others are applicable only to area sources of HAP, and some subparts include requirements for both major and area sources of HAP.

Applicable Requirements:

The following discussions address applicable requirements for processes and equipment at this facility, requirements that typically apply to Title V facilities, and requirements that may appear applicable but are not.

New Source Review (NSR) & Prevention of Significant Deterioration (PSD):

There is no modification (a physical change or a change in the method of operation which increases the potential to emit or causes the emission of a pollutant not previously emitted by the facility) included in or associated with this permit renewal.

Compliance Assurance Monitoring (CAM):

The requirements of 40 CFR Part 64 apply to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if the unit satisfies all of the following criteria:

1. The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under §64.2(b)(1);
2. The unit uses a control device to achieve compliance with any such emission limitation or standard; and
3. The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. For purposes of this paragraph, "potential pre-control device emissions" shall have the same meaning as "potential to emit," as defined in §64.1, except that emission reductions achieved by the applicable control device shall not be taken into account.

The emissions units are subject to SIP emission limitations for visible emissions and sulfur dioxide, however, no control device is used. Therefore, CAM does not apply to the permitted sources.

State Implementation Plan (SIP):

Visible Emissions and Sulfur Dioxide:

State Implementation Plan, Parts 6.1 and 7.1 of the Rules and Regulations (ADEM Administrative Code (AAC) Sections 335-3-4-.01 and 335-3-5-.01) applies to all 9 emission units. These rules set emission limits for opacity and sulfur dioxide.

Fugitive Dust:

State Implementation Plan, Part 6.2 of the Rules and Regulations (ADEM Administrative Code (AAC) Section 335-3-4-.02) applies to fugitive dust emissions throughout the facility. SNG TCS does not handle or store particulate materials.

VOC Storage & Loading:

State Implementation Plan, Part 8.3 of the Rules and Regulations (ADEM Administrative Code (AAC) Section 335-3-6-.26) applies to loading and storage of VOC with a true vapor pressure of 1.5 psia or greater under actual storage conditions.

Solvent Metal Cleaning:

State Implementation Plan, Part 8.12 of the Rules and Regulations (ADEM Administrative Code (AAC) Section 335-3-6.33) applies to solvent metal cleaning devices, including cold cleaning devices, open vapor degreasers, and conveyorized degreasers. Equipment and operating parameters for cold cleaning devices are listed in Section 8.12.4

NESHAP & NSPS:

National Emission Standards for Hazardous Air Pollutants (NESHAP):

40 CFR 63, Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines," applies to stationary spark ignition engines based on the size, date of construction, and combustion characteristics of each engine as well as the facility-wide potential to emit HAP. SNG TCS is a major source of total HAP and formaldehyde. None of the engines have been identified as modified or reconstructed.

All 8 compressor engines are 2-stroke lean-burn (2SLB) engines greater than 500 hp and are "existing" (constructed before December 19, 2002). Therefore, these engines do not have to meet the requirements of Subpart ZZZZ and 40 CFR 63, Subpart A, "General Conditions" per §63.6590(b)(3)(i).

The emergency generator is a 4-stroke rich-burn (4SRB) engine greater than 500 hp and is "new" (constructed after December 19, 2002). Per §63.6590(b), the emergency engine is not subject to requirements under Subpart ZZZZ if non-emergency operation conforms to the limitations set forth in §63.6640(f) and the engine meets the definition of emergency engine at §63.6675.

Potentially Applicable Requirements:

40 CFR 60, Subpart OOOOc, "Emissions Guidelines for Greenhouse Gas Emissions from Existing Crude Oil and Natural Gas Facilities" establishes guidelines and compliance schedules for the control of greenhouse gas emissions from designated facilities in the crude oil and natural gas industries. A SIP is required to be submitted to EPA by March 9, 2026. If the SIP becomes effective during the permit term and it is determined that SNG TCS is subject to it, the permit will be revised in order to incorporate its requirements, consistent with paragraph 18.5.3(a)(1) of the Rules and Regulations

Non-Applicable Regulations:

SIP:

State Implementation Plan, Part 6.3 of the Rules and Regulations (ADEM Administrative Code (AAC) Section 335-3-4-.03) does not apply to the engines because they do not meet the definition of "fuel burning equipment" at Part 1.3 of the Rule and Regulations.

State Implementation Plan, Part 10.4 of the Rules and Regulations (ADEM Administrative Code (AAC) Section 335-3-8-.04) does not apply to the engines because no engine at the facility emitted more than 1 ton/day of NO_X during the baseline period.

NSPS:

40 CFR 60, Subpart Kb, "Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984," does not apply because all vessels at the facility are smaller than the regulatory threshold.

40 CFR 60, Subpart JJJJ, "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines," applies to owners and operators of engines which commenced construction after June 12, 2006 per §63.4230(a)(4). All engines at SNG TCS were constructed prior to the applicability date and are therefore not subject to the NSPS.

40 CFR 60, Subpart OOOO, "Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced After August 23, 2011, and on or before September 18, 2015," ,40 CFR 63, Subpart OOOOa, "Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015," and 40 CFR 63, Subpart OOOOb, "Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction After December 6, 2022" do not apply because the natural gas transmission facility has not been constructed, modified, or reconstructed after August 23, 2011.

NESHAP:

40 CFR 63, Subpart H, "National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks," does not apply because the natural gas compressed at the facility does not contain 5% or more (by weight) of total organic HAP.

40 CFR 63, Subpart HH, "National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities," does not apply because the facility is located after the point at which natural gas has entered the natural gas transmission and storage source category.

40 CFR 63, Subpart HHH, "National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities," does not apply because there are no glycol dehydrators at the facility.

40 CR 63, Subpart EEEE, "National Emission Standard for Hazardous Air Pollutants: Organic Liquids Distribution (non-gasoline)" does not apply to natural gas transmission facilities.

Title V Monitoring

Compliance with the emissions limits set in State Implementation Plan, Parts 6.1 and 7.1 of the Rules and Regulations (ADEM Administrative Code (AAC) Sections 335-3-4-.01 and 335-3-5-.01) will be met with a fuel restriction to only combust natural gas. The emissions limit for SO_2 is higher than the potential to emit when natural gas is combusted and a properly functioning unit combusting natural gas will not produce opacity. Records indicating that natural gas is the only fuel that is combusted will demonstrate compliance with this requirement.

The ground surface at the facility is covered with pavement or vegetation, which minimizes the potential for wind-borne dust. Vehicle traffic consists of a small number of employee vehicles driven to an from the parking area, plus occasional contractor or service vehicles. No particulate materials are stored or

processed at this site. Potential to emit fugitive dust is less than 5 tons per year, therefore no Title V monitoring is required in regard to State Implementation Plan, Part 6.2 of the Rules and Regulations (ADEM Administrative Code (AAC) Section 335-3-4-.02). The Department will investigate any complaints of fugitive dust and could require specific measures or monitoring if the fugitive dust originating at the facility is observed crossing property lines.

The only stored VOC which exceeds the regulatory threshold of State Implementation Plan, Part 8.3 of the Rules and Regulations (ADEM Administrative Code (AAC) Section 335-3-6-.26) is pipeline condensate, however, the only requirement for this tank under the SIP is that the storage tank be equipped with a submerged or bottom fill pipe.

State Implementation Plan, Section 8.12.4 of the Rules and Regulations (ADEM Administrative Code (AAC) Section 335-3-6.33) lists equipment and operating requirements for cold cleaning solvent metal cleaning devices.

Compliance with 40 CFR 63, Subpart ZZZZ will be demonstrated by maintaining records that the operations of the emergency generator meet the restrictions set forth in §63.6640(f) and records of the duration and purpose of the non-emergency operations of the emergency generator.

To demonstrate that the engines do not meet the definition of reconstruction in §60.15(b) and have not become subject to 40 CFR 60, Subpart JJJJ, records will be maintained of the fixed capital cost of replacement components for each maintenance project for each engine.

Permit Shield

A permit shield under Section 18.10 is included in the permit that states that compliance with the permit will be considered compliance with all applicable requirements as of the date of permit issuance. This permit shield includes a list of regulations that have been determined not to apply to this facility and a concise summary of the reason for each determination.

Alternative Operating Scenarios

An alternative operating scenario is a change to an emission unit that either results in the unit being subject to one or more applicable requirements which differ from those applicable to the emission unit prior to the implementation of the change or renders inapplicable one or more requirements previously applicable to the emission unit prior to the implementation of the change. There are no reasonably anticipated alternative operating scenarios for any emission unit at the facility.

Environmental Justice/Community Engagement

One element of Plan EJ 2014 is “to ensure that environmental justice concerns are given as full consideration as possible in the decision to issue a permit and the terms of the permits issued under existing federal environmental laws.” (Source: EPA, Considering Environmental Justice In Permitting – Implementation Plan (2011).) To further this goal, EPA has developed a tool called EJSCREEN designed to identify areas of minority and/or low-income populations that may be disproportionately impacted by environmental problems so that enhanced efforts may be made to further community participation in the permitting process.

Initial Screening

SNG TCS is located in Tarrant, Alabama. There are approximately 7,338 residents within a 2.5 km radius. EJScreen reports were also generated at 1 km radius (335 residents) and a 5 km radius (22,011 residents).

Using the EPA's EJSCREEN tool, the population of the 2.5 km search area was determined to have an above average percentage of persons who are included in the following demographic categories:

- People of Color (66%, or the 77th percentile within Alabama)
- Low Income (47%, or the 68th percentile within Alabama)
- Unemployment Rate (6%, or the 64th percentile within Alabama)
- Limited English Speaking Households (6%, or the 93rd percentile within Alabama)
- Less Than High School Education (20%, or the 76th percentile within Alabama)
- Under Age 5 (5%, or the 52nd percentile within Alabama)
- Low Life Expectancy (27%, or the 88th percentile within Alabama).

EJScreen reported similar but non-identical values for a 1 km radius and a 5 km radius.

According to EPA's website at https://www.epa.gov/ejscreen/ej-and-supplemental-indexes-ejscreen, the EJ Indexes for environmental factors factor in the low-income population and the people of color populations at a census block group level. EPA also calculates a supplemental index, which includes the following factors: low income, unemployment, limited English, less than high school education, and low life expectancy.

Applying the EPA guideline for initial screening (a threshold of the 80th percentile nationally for any of the 13 EJ Indexes) as identified at https://www.epa.gov/ejscreen/how-interpret-ejscreen-data, further review may be needed for air emissions of PM, ozone, and air toxics.

Based on the demographics, the potential impact of SNG TCS on the surrounding neighborhood merits further consideration, which follows below.

NAAQS Attainment Status & Ambient Monitoring

Jefferson County is in attainment for all National Ambient Air Quality Standards (NAAQS) at this time, as demonstrated by ambient air monitoring. The Department's 2023 Annual Ambient Air Monitoring Network Plan is available at https://www.jcdh.org/SitePages/Misc/PdfViewer?AdminUploadId=3655. JCDH operates an ambient air monitoring station at Tarrant Elementary School, including one O_3 monitor, one continuous FEM PM_{10} monitor, one manual FRM $PM_{2.5}$ monitor, and one continuous FEM $PM_{2.5}$ monitor.

PM, Ozone, and Air Toxics Emissions

SNG TCS is an actual and potential minor source of PM emissions. Additionally, Jefferson County is a designated attainment area for PM_{10} and $PM_{2.5}$.

SNG TCS is a major source of NO_x and a minor source of VOC, the precursors for ozone. Ozone precursor emissions are limited via a fuel limit in SNG TCS's permit. To demonstrate compliance with this requirement, SNG TCS must document and maintain record of the type and quantity of the fuel used. As mentioned above, there is an ambient air monitoring station at Tarrant that monitors ozone. Jefferson County is also a designated attainment area for ozone.

The Birmingham Air Toxics Study (published February 2009 and available at https://www.epa.gov/sites/default/files/2020-01/documents/jeffersoncountyfr.pdf) concluded that assuring compliance with MACT standards (Maximum Achievable Control Technology) for major source categories and GACT standards (Generally Achievable Control Technology) for area source categories is sufficient to protect the public from chronic cancer and noncancer risks from stationary sources in Jefferson County. These standards are promulgated by EPA under 40 CFR Parts 61 and 63 and are also called NESHAP (National Emissions Standards for Hazardous Air Pollutants). EPA has promulgated a NESHAP for most engines that combust natural gas, however EPA decided not to promulgate requirements for large engines (greater than 500 hp/hour) located at major sources of HAP.

EPA conducts risk evaluations for existing chemical substances under the Toxic Substances Control Act (TSCA). The risk evaluation is to "determine whether a chemical substances presents an unreasonable risk to health or the environment, under the condition of use, including an unreasonable risk to a relevant potentially exposed or susceptible subpopulation" (Source: Risk Evaluations for Existing Chemicals under TSCA | US EPA). If EPA determines that the substance poses an unreasonable risk, the risk management process is initiated to scientifically evaluate options to protect health and the environment.

EPA released a draft risk evaluation on formaldehyde in March 2024 for comment. Public comments were due on May 14, 2024 and a public peer review meeting was held May 20-23, 2024. The preliminary findings of the risk evaluation for formaldehyde were that it may pose an "unreasonable risk to human health" to populations expected to have greater exposure to formaldehyde, including those who work or live near facilities that emit formaldehyde. EPA evaluated health risk based on formaldehyde concentration, years of exposure, exposure duration and frequency, lifetime of those exposed, and many other variables. EPA has preliminarily determined that there is no cancer risk effects to the general population, also including those that work or live near facilities that emit formaldehyde. As for non-cancer effects, EPA has preliminarily identified formaldehyde as a sensory irritant of the eyes and respiratory tract and cause of other respiratory effects, such as reduced pulmonary function and increased risk of allergy and asthma symptoms. The full methodology used by EPA to calculate health risk and description of the identified health effects are included in the "Human Health Risk Assessment" and associated files of the draft risk evaluation.

EPA has preliminarily determined that formaldehyde may not pose an unreasonable risk to the environment, as it relates to ambient air, because air concentrations are much lower than its toxicity value. As stated above, the EPA will finalize its draft risk evaluation and determination for formaldehyde after reviewing the public comments received. If the finalized risk determination is that formaldehyde poses an "unreasonable risk to health or the environment", the risk management process will be initiated. If EPA promulgates any new rules or guidance as a result during the permit term, the Department will determine if it applies to SNG TCS and revise the permit as needed, consistent with paragraph 18.5.3(a)(1) of the Rules and Regulations. Information and documents for the formaldehyde risk evaluation can be found on EPA's website at https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-evaluation-formaldehyde.

The Department will investigate any complaints of excessive emissions or permit violations. If SNG TCS is ever determined to be in violation of their permit, the Department can require specific measures, such

as additional monitoring and reporting, to ensure their compliance and protect the health of the surrounding community.

Outreach

The communities primarily affected by this permitting action are Tarrant, Alabama and the Brummitt Heights neighborhood of Birmingham. Outreach to provide greater awareness and to encourage community engagement regarding this permit action in these areas will include direct communication with local officials to inform them of the draft permit and request that they publicize it within their community. The letter will inform them of the availability of the draft permit, including points of access and contact information for questions, and the duration of the public comment period. JCDH will also email the public notice to persons who have requested to receive notification of air permitting activity. These measures will enhance the more general means of communication regarding a permit action, specifically publication of a notice in the Alabama Messenger and posting of the draft permit on the Department's website.

Public Participation & Comment Periods

There will be a 30-day public comment period for this draft permit. Any person may request a public hearing during the public comment period. Public notice will be given by publication in the Alabama Messenger regarding the availability of the draft permit, application, and statement of basis on the Department's website. Additional community outreach measures for this permit renewal include providing a copy of the public notice to the appropriate city and county executives, and to other persons who have submitted a written request to be notified of permit actions. Comments may be submitted by mail or by email.

The ADEM will have the opportunity to comment during the public comment period. EPA will have 45 days to comment on the proposed permit (including any changes to this draft permit made in response to public comments), beginning when the proposed permit is submitted to EPA. The Department will request that EPA review the draft permit as a proposed permit for concurrent review. If there are substantial comments which result in changes to the draft, EPA's review period will begin when the revised draft is submitted as a proposed permit.

The deadline for submitting a citizen petition asking EPA to object to the permit will be determined as if EPA's 45-day review period is performed after the public comment period has ended (i.e. sequentially), even if EPA actually reviews the permit concurrently with the public notice period. Refer to EPA's website for accurate information on the petition deadline: https://www.epa.gov/caa-permitting/alabama-proposed-title-v-permits.

The Department has established an email list for persons who wish to be notified of public comments periods by email. To request to be added to this list, send an email to airpermitcomments@jcdh.org.

Changes Made As a Result of Comments Received

If changes are made to the draft permit and/or Statement of Basis as a result of public comments received, this section will be updated to describe them. The revised Statement of Basis will accompany the proposed permit as re-submitted to EPA if significant public comments are received.

- Revised Item F of General Condition No. 48, "Submission of Reports and Notifications" to better align with the wording of Section 1.12.2 of the Rules and Regulations for the reporting of malfunctions (within 24 hours rather than 2 working days) and removed mentions of emergencies for consistency with 88 FR 47029, July 21, 2023 and the removal of the emergency provision from the Rules and Regulations, as of August 14, 2024
- Revised Permit Condition No. 2, "Emission Limitations for Engines from the State Implementation Plan (SIP)" to include additional monitoring
    - Added wording to specify that the natural gas combusted must meet the sulfur specification of the FERC tariff and that records demonstrating natural gas is in specification with the sulfur content specification set forth in the facility's FERC tariff is sufficient to demonstrate that this requirement is met
    - Added a requirement that for every week of operation of the facility, SONAT observes each emissions unit in operation for visible emissions, at least once weekly
        - A weekly frequency was determined to be satisfactory, as there is low associated risk with a unit combusting only natural gas for opaque emissions, as natural gas contains a negligible amount of particulate matter and the FERC tariff requires that the natural gas be free of objectional liquids and solids
        - If no visible emissions are observed, it must be documented and record of the observation must be maintained
        - If visible emissions are observed, a Method 9 observation or Method ALT-082 must immediately be conducted, corrective actions must be initiated as appropriate, and records must be maintained thereof
            - ALT-082 is used by SONAT at other facilities around the country for determining compliance with opacity requirements and is a more feasible alternative, given the staffing levels at the Tarrant station