



September 13, 2024

Jason Howanitz  
Environmental Health Services  
Air & Radiation Protection Division  
Jefferson County Department of Health  
P.O. Box 2648  
Birmingham, AL 35202

**VIA ELECTRONIC MAIL** to [airpermitcomments@jcdh.org](mailto:airpermitcomments@jcdh.org) and [Jason.Howanitz@jcdh.org](mailto:Jason.Howanitz@jcdh.org)

Re: Comments on the Draft Renewal Title V Operating Permit for the Tarrant Compressor Station (Permit No. 04-07-0267-07)

Dear Mr. Howanitz,

We are submitting these comments on behalf of GASP and the Southern Environmental Law Center (“SELC”) (collectively, “Commenters”) regarding the Jefferson County Department of Health (“JCDH”) proposal to issue a renewal Title V Operating Permit No. 4-07-0267-07 (“Draft Permit”) to Southern Natural Gas Company, LLC (“Southern Gas” or “Permitee”) for the Tarrant Compressor Station (“Compressor Station” or “Source”) in Tarrant, Alabama.<sup>1</sup>

GASP is a nonprofit organization with a mission to advance healthy air and environmental justice in the Greater-Birmingham area and throughout Alabama through education, advocacy, and collaboration. This includes actively engaging impacted community on air pollution issues, reviewing air pollution permits, and addressing concerns related to air quality, including potential environmental justice impacts. One way in which GASP seeks to improve air quality and address historic and ongoing air pollution issues is through advocating for more robust public participation and community involvement in matters that affect them, such as this proposed renewal of a Title V permit in Jefferson County.

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<sup>1</sup> Public Notice, Southern Natural Gas Company, LLC – Tarrant Compressor Station (Permit N. 4-07-0267-07), <https://www.jcdh.org/SitePages/Programs-Services/Scores-Lists/Air/AirDocumentation.aspx?NoticeId=453&Type=1>.

SELC is a non-profit, regional environmental legal advocacy organization rooted in and focused on the South. SELC is dedicated to protecting the basic right to clean air, clean water, and a livable climate; to preserving the South's national treasures and rich biodiversity; and to providing a healthy environment for all.

After reviewing the Draft Permit,<sup>2</sup> Statement of Basis ("SOB"),<sup>3</sup> Permit Application,<sup>4</sup> and other documents available in the JCDH on-line records for the Compressor Station,<sup>5</sup> Commenters note several issues JCDH must address before issuing any final Title V renewal permit to this Source. In general, Commenters want to ensure that any final permit issued to Southern Gas includes all applicable requirements, is adequate to ensure that the very old compressor engines used at this Source – some of which are more than 75 years old and none of which are newer than 44 years old<sup>6</sup> – comply with those requirements, and protects the nearby environmental justice community from any potential impact of its emissions, as explained below.

**A. JCDH must strengthen the Draft Permit's monitoring, recordkeeping, and reporting requirements.**

The Clean Air Act ("CAA") requires that Title V permits issued by ADEM "include enforceable emission limitations and standards...and other such conditions as are necessary to assure compliance with applicable requirements of [the Act], including the requirements of the applicable state implementation plan."<sup>7</sup> Title V permits are also required to "set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions."<sup>8</sup> The Draft Permit includes a number of specific emission limitations and standards that are not accompanied by adequate monitoring, recordkeeping, and reporting requirements. Specifically:

- 1) **Opacity Monitoring:** The Draft Permit includes the 40% opacity limit required by the Alabama state implementation plan ("SIP") and corresponding JCDH air rules.<sup>9</sup> That

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<sup>2</sup> Draft Title V Operating Permit, Southern Natural Gas Company, LLC – Tarrant Compressor Station (Permit N. 4-07-0267-07) ("Draft Permit"), <https://www.jcdh.org/SitePages/Programs-Services/Scores-Lists/Air/AirDocumentation.aspx?NoticeId=453&Type=2>.

<sup>3</sup> Statement of Basis for Title V Renewal Permit – Southern Natural Gas Company, LLC, - Tarrant Compressor Station (Aug. 14, 2024) ("SOB"), contained in the same PDF file as the Draft Permit, starting at PDF page 25.

<sup>4</sup> Southern Natural Gas Company, LLC, Tarrant Compressor Station, Jefferson County, Alabama, Title V Permit Renewal Application, Permit No.: 4-07-0267-06 (Sept. 2023) ("Permit Application"), <https://www.jcdh.org/SitePages/Programs-Services/Scores-Lists/Air/AirDocumentation.aspx?NoticeId=453&Type=3>.

<sup>5</sup> JCDH, Air Facilities & Public Records/Notices, <https://www.jcdh.org/SitePages/Programs-Services/Scores-Lists/Air/AirPollutionControl.aspx?AQTab=Records> (searched the "Public Records" tab for "Southern Natural Gas Corp." files in the years 1996-2000; 1996 was the earliest available year).

<sup>6</sup> Draft Permit at 19 and SOB at 3 (Five compressor engines were installed from 1947-1950 and three compressor engines were installed in 1980).

<sup>7</sup> 42 U.S.C. § 7661c(a).

<sup>8</sup> 42 U.S.C. § 7661c(c).

<sup>9</sup> Draft Permit at 19, Engine Condition 2, and Admin. Code 335-3-4.01(1)(a), JCDH Air Pollution Control Rule ("Air Rule") 6.1.1(a).

permit term, as well as the SIP and JCDH rules, require that compliance with the 20% opacity limit be demonstrated using EPA Method 9.<sup>10</sup> However, Southern Gas is not required to show compliance with the opacity limit using EPA Method 9. Instead, the Draft Permit's monitoring and compliance requirements only require "records indicating that natural gas is the only fuel combusted."<sup>11</sup> Accordingly, the Draft Permit is not in compliance with the Alabama SIP and applicable JCDH rules because it does require monitoring of opacity the Compressor Station using EPA Method 9. JCDH must revise the Draft Permit to include monitoring, recordkeeping, and reporting to ensure compliance with the opacity limit is determined using EPA Method 9.

- 2) **Sulfur Dioxide Limits:** The Alabama SIP and applicable JCDH rules limit sulfur dioxide ("SO<sub>2</sub>") emissions from combustion sources, such as the compressor engines at this Source, to no more than 1.8 pounds SO<sub>2</sub> per million BTU heat input.<sup>12</sup> The Draft Permit includes that general SO<sub>2</sub> limit and specific SO<sub>2</sub> limits for each emission unit at the Compressor Station, ranging from 14.3 to 43.2 lb/hr SO<sub>2</sub>.<sup>13</sup> However, the Draft Permit does not include any monitoring, recordkeeping, or reporting requirements to show compliance with these hourly emission limits. Instead, the Draft Permit simply states that compliance with these limits "shall be demonstrated by records indicating that natural gas is the only fuel combusted."<sup>14</sup> While the Draft Permit requires Southern Gas to maintain records regarding the monthly quantity of natural gas combusted at each engine,<sup>15</sup> nothing in the Draft Permit or the SOB explains how use of natural gas show compliance with the general 1.8 pounds of SO<sub>2</sub> per million BTU heat input or specific pounds per hour SO<sub>2</sub> limits for the various engines. To the extent achieving these limits through use of natural gas relies on calculations based on certain assumptions about the composition of natural gas, those specific parameters must be set forth in the Draft Permit and Southern Gas must be required to monitor and record those parameters. JCDH must revise the permit record to explain how the Draft Permit includes monitoring, recordkeeping, and reporting adequate to ensure compliance with the SO<sub>2</sub> limits and revise the Draft Permit as needed to meet that requirement.

**B. JCDH must revise the Draft Permit to address the requirements of NSR/PSD and any existing air permits for this Source.**

The Alabama SIP and corresponding JCDH air rules include the New Source Review ("NSR") and Prevention of Significant Deterioration ("PSD") preconstruction permitting

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<sup>10</sup> Draft Permit at 19, Engine Condition 2, Admin. Code 335-3-4.01(1)(e)(2), JCDH Air Pollution Control Rule ("Air Rule") 6.1.2.

<sup>11</sup> Draft Permit at 19, Engine Condition 2.

<sup>12</sup> Admin. Code 335-3-5.01(1)(a), JCDH Air Rule 7.1.1

<sup>13</sup> Draft Permit at 19, Engine Condition 2, referencing the hourly limits in the summary table at 18.

<sup>14</sup> Draft Permit at 19, Engine Condition 2.

<sup>15</sup> Draft Permit at 15, General Condition 46

requirements.<sup>16</sup> Accordingly, any NSR/PSD permitting requirements – as well as the requirements of any existing air permits for the Compressor Station – are applicable requirements that JCDH must include in the Draft Permit.<sup>17</sup> The SOB for the Draft Permit includes a summary of the Title V permitting history for this Source and describes the types of future actions that may require NSR/PSD permitting,<sup>18</sup> but it does not address whether the Compressor Station is already subject to NSR/PSD or any other air permits, and if so, how those requirements are adopted in the Draft Permit.

The SOB clearly states that the Compressor Station “is an actual major source for NO<sub>x</sub> and a potential major source of VOC and CO,”<sup>19</sup> but the Draft Permit does not cite to the JCDH NSR/PSD permitting regulations in Parts 2.4 and 2.5 or any existing air permits for this Source. Commenters note that five of the Compressor Engines addressed in the Draft Permit (emission units 005, 006, 007, 008, and 009) were constructed between 1947 and 1950, before the existence of the CAA or the specific NSR and PSD permitting requirements.<sup>20</sup> However, four other emission units at the Source were constructed after these CAA permitting requirements were established: three compressor engines (emission units 001, 002, and 003) were constructed in 1980, and one emergency generator (emission unit 012) was constructed in 2004.<sup>21</sup> Commenters asked JCDH for the application and SOB that accompanied the Compressor Station’s original Title V permit in 1999 to determine if they addressed any NSR/PSD permitting requirements applicable to this Source and how those requirements might have been included in this Source’s Title V permit, but JCDH informed us that “does not have any of [those] documents” and directed us to the documents posted online with the notice (i.e., the Draft Permit, SOB, and Permit Application) and JCDH’s general online public records.<sup>22</sup>

Commenters searched the current permitting records and historic online records as directed by JCDH and could not locate copies of any existing NSR/PSD or other non-Title V air permits for the Compressor Station. However, those records did indicate that such permits exist. Southern Gas’s current Title V renewal Permit Application references “Air Permit No. 4-07-0267-1501 (issued 3/8/81)” as the basis for current emission calculations for the three newer compressor engines.<sup>23</sup> The Air Permit was not included in the Permit Application, and Commenters could not locate it in the online records for the Compressor Station, which only

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<sup>16</sup> Ala. Admin. Code 335-3-14.04 and 14.06, JCDH Air Rules Part 2.4 and 2.5.

<sup>17</sup> See Ala. Admin. Code 335-3-16-.01(1)(e)(1) and (2), JCDH Air Rules 18.1.1(e)(1) and (2), and 40 C.F.R. § 70.2 (definition of “applicable requirement” at (1) and (2)).

<sup>18</sup> SOB at 2 and 5. See also Permit Application at 5.

<sup>19</sup> SOB at 5.

<sup>20</sup> The modern Clean Air Act was enacted in 1970. See <https://www.epa.gov/nsr> and <https://www.epa.gov/clean-air-act-overview/evolution-clean-air-act>. The NSR and PSD preconstruction permitting requirements were included in the 1977 CAA Amendments, and sources were required to comply with them in early 1979. See *id.* and 43 Fed. Reg. 26388 (June 19, 1978) (Original PSD Regulations) at 26390-91.

<sup>21</sup> Draft Permit at 19 and SOB at 3.

<sup>22</sup> Attachment 1, Commenters’ document request letter (Aug. 27, 2024), and Attachment 2, JCDH’s email reply (August 28, 2024).

<sup>23</sup> Permit Application at 21-23

contain records dating to 1996.<sup>24</sup> Historic documents in the online records make clear that this Source had emissions well above NSR/PSD permitting levels in 1999,<sup>25</sup> and emission calculations provided right before issuance of the original Title V permit were based also referenced “Permitted” conditions for the three compressor engines constructed in 1980.<sup>26</sup>

Based on the Draft Permit, SOB, and Application, it is not possible for the public to determine whether Air Permit No. 4-07-0267-1501 contains any NSR/PSD permitting requirements that are applicable requirements for the Compressor Station. In addition, since neither the Draft Permit nor the SOB reference this existing Air Permit, it is not clear that the Draft Permit contains all applicable requirements from that existing Air Permit. Accordingly, JCDH must: (1) revise the Draft Permit to incorporate and reference all applicable requirements from Air Permit No. 4-07-0267-1501, (2) revise the SOB to address this existing Air Permit and the applicable permitting requirements from it, including NSR/PSD, that apply to this Source, and (3) re-notice the Draft Permit and revised SOB so that the public can ensure the Draft Permit contains all applicable requirements of Air Permit No. 4-07-0267-1501 and adequate monitoring, recordkeeping, and reporting requirements to assure compliance with them.

**C. JCDH should include additional permit terms to address the potential impacts of pollution from the Compressor Station on the surrounding environmental justice community.**

JCDH conducted an Environmental Justice Initial Screening for this permitting action and concluded that additional review of the impacts of PM, ozone, and air toxic emissions from the Compressor Station on the surrounding community was needed.<sup>27</sup> However, that additional review simply provides general facts about the status of Jefferson County air quality and existing general emission requirements.<sup>28</sup> Even though the Compressor Station is clearly operating in an EJ community, JCDH has not taken any steps to revise or strengthen the Draft Permit terms to reduce the potential environmental and health burden borne by that community. This lack of substantive permitting requirements to protect the surrounding community is especially concerning given the extremely old age of the engines operating at this Source – most of which are more than 73 years old – and the large quantities of highly combustible natural gas they process. While the Draft Permit contains the general requirement for Southern Gas to report any “malfunctions, deviations, emergencies and violations of any permit condition” within two

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<sup>24</sup> See n. 5, *supra*.

<sup>25</sup> Compare Attachment 3, 1998 Emission Calculations, Southern Natural Gas Company, LLC – Tarrant Compressor, <https://www.jcdh.org/SitePages/Programs-Services/Scores-Lists/Air/DisplayImagePublicRecords.aspx?F0pwiGOVJDmlGaNckDCWrSX5agwhwaEc5kzaMogw5rbjGdz67Y9Ta+wndNe6DOyN>, at PDF page 8 (showing actual NOx emissions of 874.080 tons per years (“tpy”), allowable NOx emissions of 2476.91 tpy, and potential NOx emissions of 2056.15 tpy) *with* JCDH Air Rules 2.4.2(a)(1), (b)(1), and (w) (major source threshold is a potential to emit 250 tpy NOx and major modification threshold of 40 tpy NOx), Ala. Admin. Code 335-3-14.04(2)(a)(1), (b)(2), and (w) (same), and 40 C.F.R. § 52.21(b)(1)(i),(2)(i),(23), and (40) (same).

<sup>26</sup> See Attachment 3 at PDF page 3.

<sup>27</sup> SOB at 10.

<sup>28</sup> *Id.* at 10-12.

working days,<sup>29</sup> that term is insufficient to protect the surrounding EJ community from the potential impacts of any significant failure of these old engines. Basing the timing of reporting on “working days” could result in harmful emission releases for many days before JCDH was informed, and nothing in the permit term requires Southern Gas or JCDH to inform the surrounding public of such events when they occur. To minimize the potential impacts of these events on the overburdened EJ community surrounding this facility, as well as the protect the public health of people throughout Jefferson County, Commenters request that JCDH revise the Draft Permit to require the reporting of any malfunctions, deviations, emergencies and violations within 48 hours and that any such events that result in fires or large releases of pollutants to the surrounding community also require public reporting through local news outlets, the internet, and other public forums.

As discussed above, JCDH must revise and re-notice the Draft Permit and accompanying record before issuing a final title V renewal permit for the Compressor Station. We request notification of JCDH’s final decisions regarding this Draft Permit, as well as notice of any revised permit or other related permitting activity for this source.

Please do not hesitate to contact either of us if you or your staff have any questions about these requests.

Respectfully submitted,



Jilisa Milton  
GASP  
Director  
Jmilton@gaspgroup.org  
(205) 701-4277



Keri N. Powell  
Southern Environmental Law Center  
Air Program Leader  
Carol Remmer Angle Senior Attorney for Community Health  
kpowell@selcga.org  
(678) 433-6851

#### Attachments

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<sup>29</sup> Draft Permit at 17, General Condition 48.F.

# ATTACHMENT 1



August 27, 2024

Jason Howanitz  
Environmental Health Services  
Air & Radiation Protection Division  
Jefferson County Department of Health  
P.O. Box 2648  
Birmingham, AL 35202

**VIA ELECTRONIC MAIL** to [airpermitcomments@jcdh.org](mailto:airpermitcomments@jcdh.org) and [Jason.Howanitz@jcdh.org](mailto:Jason.Howanitz@jcdh.org)

Re: Request for File Review, Public Hearing, and Extension of the Public Comment Period for Renewal Title V Operating Permit for the Tarrant Compressor Station (Permit No. 04-07-0267-07)

Dear Mr. Howanitz,

JCDH recently provided Public Notice of the draft renewal Title V Operating Permit to be issued to Southern Natural Gas Company, LLC for the Tarrant Compressor Station (Permit No. 4-07-0267-07) in Tarrant, Alabama ("Draft Permit").<sup>1</sup>

After reviewing the Public Notice and accompanying Draft Permit with Statement of Basis,<sup>2</sup> GASP and the Southern Environmental Law Center ("SELC") are writing to request a File Review, Public Hearing, and Extension of the Public Comment Period for this permitting action, as explained below.

- 1) **File Review:** We would like a copy of the application for (dated 12/15/95) and JCDH Statement of Basis that accompanied the Initial Title V Permit issued for the Tarrant

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<sup>1</sup> Public Notice, Southern Natural Gas Company, LLC – Tarrant Compressor Station (Permit N. 4-07-0267-07), <https://www.jcdh.org/SitePages/Programs-Services/Scores-Lists/Air/AirDocumentation.aspx?NoticeId=453&Type=1>.

<sup>2</sup> Draft Title V Operating Permit, Southern Natural Gas Company, LLC – Tarrant Compressor Station (Permit N. 4-07-0267-07), <https://www.jcdh.org/SitePages/Programs-Services/Scores-Lists/Air/AirDocumentation.aspx?NoticeId=453&Type=2>.

The JCDH Statement of Basis ("SOB") is contained in the same PDF file as the Draft Permit, starting at PDF page 25.



Tarrant Compressor Station  
GASP & SELC File, Hearing, and Extension Request

Compressor Station on September 8, 1999. These documents were referenced in the Statement of Basis for the current Draft Permit,<sup>3</sup> but they are not contained in the documents available for the Southern Natural Gas Company on the JCDH Air Facilities & Public Records/Notices webpage.<sup>4</sup>

- 2) Public Hearing: GASP<sup>5</sup> and SELC<sup>6</sup> are nonprofit organizations actively working to monitor and improve air quality and air permitting in Jefferson County. We and our members are concerned about the high concentration of air pollution sources operating in North Birmingham and nearby areas such as Tarrant. In fact, GASP previously requested information regarding the potential renewal of the Title V Operating Permit for this facility.<sup>7</sup> Accordingly, we are requesting that JCDH hold a public hearing so that GASP, SELC, our members, and the general public can raise concerns regarding the continuing air pollution authorized by the Draft Permit and the potential impact of that pollution on nearby environmental justice communities.<sup>8</sup>
- 3) Extension of the Public Comment Period: We are also requesting an extension of at least 30 days for all members of the public to comment on the Draft Permit. Such an extension is necessary to provide us with adequate time to receive and review the information resulting from the File Request above, as well as the record accompanying the Draft Permit and any other relevant information available regarding this facility's air pollution and permitting history. Additional time is also necessary to coordinate with our members and other community members regarding public comments on the Draft Permit. Finally, an extension is consistent with our request for a public hearing, since Title V permitting rules require that permitting authorities provide at last 30 days public notice of any public hearing.<sup>9</sup>

Since the public comment period currently ends on September 13, 2024, we ask that JCDH provide us with a response to these requests, especially the comment period extension, by this Friday, August 30, 2024.

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<sup>3</sup> Statement of Basis ("SOB") at 2.

<sup>4</sup> JCDH, Air Facilities & Public Records/Notices, <https://www.jcdh.org/SitePages/Programs-Services/Scores-Lists/Air/AirPollutionControl.aspx?AQTab=Records> (searched the "Public Records" tab for "Southern Natural Gas Corp." files in the years 1996-2000 (1996 was the earliest available year)).

<sup>5</sup> GASP is a nonprofit organization with a mission to advance healthy air and environmental justice in the Greater-Birmingham area and throughout Alabama through education, advocacy, and collaboration. This includes actively engaging impacted community on air pollution issues, reviewing air pollution permits, and addressing concerns related to air quality, including potential environmental justice impacts.

<sup>6</sup> SELC is a non-profit, regional environmental legal advocacy organization rooted in and focused on the South. SELC is dedicated to protecting the basic right to clean air, clean water, and a livable climate; to preserving the South's national treasures and rich biodiversity; and to providing a healthy environment for all.

<sup>7</sup> Attachment, Letter from Jilisa Milton, GASP, to Jason Howanitz, JCDH, *Re: Request for Title V Operating Permit Renewal Applications for ABC Coke (Permit No. 4-07-0001-05) and Tarrant Compressor Station (Permit N. 4-07-0267-06)* (Feb. 13, 2024).

<sup>8</sup> See SOB at 9-12.

<sup>9</sup> 40 C.F.R. § 7037(h)(4).

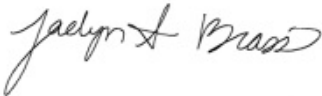
Tarrant Compressor Station  
GASP & SELC File, Hearing, and Extension Request

Please do not hesitate to contact either of us if you or your staff have any questions about these requests.

Respectfully submitted,

A handwritten signature in black ink that reads "Jilisa Milton". The script is cursive and fluid.

Jilisa Milton  
Director, GASP  
Jmilton@gaspgroup.org  
(205) 701-4277

A handwritten signature in black ink that reads "Jaclyn Brass". The script is cursive and fluid.

Jaclyn Brass  
Southern Environmental Law Center  
Project Attorney, Alabama Office  
jbrass@selcal.org  
(205) 745-3060

Attachment

# ATTACHMENT 2

**From:** airpermitcomments <[airpermitcomments@jcdh.org](mailto:airpermitcomments@jcdh.org)>

**Sent:** Wednesday, August 28, 2024 1:33 PM

**To:** 'Jilisa Milton' <[jmilton@gaspgroup.org](mailto:jmilton@gaspgroup.org)>; Howanitz, Jason <[Jason.Howanitz@jcdh.org](mailto:Jason.Howanitz@jcdh.org)>;  
airpermitcomments <[airpermitcomments@jcdh.org](mailto:airpermitcomments@jcdh.org)>

**Cc:** Jaclyn Brass <[jbrass@selcal.org](mailto:jbrass@selcal.org)>

**Subject:** RE: File, Hearing, and Extension Request for Renewal Title V Operating Permit for the  
Tarrant Compressor Station (Permit No. 04-07-0267-07)

Ms. Milton,

Thank you for your August 27<sup>th</sup> request concerning Southern Natural Gas Company, LLC (SONAT). With respect to your file review request, JCDH does not have any of the documents you requested. All relevant documents used during the permitting process are posted online with the notice. Further, JCDH posts all permitted facilities' public records online for public consumption at any time. Finally, JCDH is not granting your request for an extension or a hearing. Please review the associated documents and look to the Statement of Basis for the changes that have been made for this permitting action. As a reminder the public comment period will end on September 13<sup>th</sup>. If you have any questions or concerns feel free to reach out.

Thanks

Jason Howanitz, PE

Principal Air Pollution Control Engineer

Air and Radiation Protection Division

Office: 205-930-1284

Mobile: 205-960-6601

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**From:** Jilisa Milton <[jmilton@gaspgroup.org](mailto:jmilton@gaspgroup.org)>

**Sent:** Tuesday, August 27, 2024 6:01 PM

**To:** Howanitz, Jason <[Jason.Howanitz@jcdh.org](mailto:Jason.Howanitz@jcdh.org)>; airpermitcomments  
<[airpermitcomments@jcdh.org](mailto:airpermitcomments@jcdh.org)>

**Cc:** Jaclyn Brass <[jbrass@selcal.org](mailto:jbrass@selcal.org)>

# ATTACHMENT 3

FACILITY NAME

Southern Natural Gas Company, L.L.C.-Tarrant Compressor

PERMIT #

4-07-0267-0

SECTION/TAB NAME

Calculations (Production Data)

YEAR

1998

Jefferson County Department of Health  
Environmental Health Services  
Air and Solid Waste Division  
P.O. Box 2648  
Birmingham, AL 35202

**EMISSION FEE INVOICE**

Date: April 1, 1998

PAYMENT DUE DATE: May 1, 1998

REFERENCE No.: 00-267-97

TO: Mr. Cy Harper  
Southern Natural Gas Company  
P.O. Box 2563  
Birmingham, AL 35202 - 2563

Total amount due \$20,114.87 for Air Emissions in 1997. Make all checks payable to the Jefferson County Department of Health and return one copy of this invoice with your remittance. Failure to make payment within 30 days of the above due date will result in the assessment of a late fee of three percent of the original fee per month or fraction thereof.

The above emission fee is based on production information you furnished to this Department for 1997 activities and is calculated as follows:

Air Pollutants	Emissions (TPY)		\$Per Ton Fee		Total \$
Particulate	_____	x	26.00	=	\$ _____
SO <sub>2</sub>	_____	x	26.00	=	\$ _____
NO <sub>x</sub>	874.0	x	26.00	=	\$22,724.00
VOC	49.0	x	26.00	=	\$ 1,274.00
			Subtotal		\$23,998.00
			Less Rebate, 1997		\$- 2,218.93
			Less Rebate, 1998		\$- 1,664.20
			Total Fees Due		\$20,114.87

If you have any questions concerning this invoice, please contact Richard Walker at 930-1284.

Jefferson County Department of Health

By: R. H. Barrett  
Robert H. Barrett  
Senior Air Pollution Control Engineer  
Air and Solid Waste Division

## SOUTHERN NATURAL GAS EMISSION CALCULATION NS - 1997

Unit	Horsepower	Hours	DATA
7 (Non-Permitted)	1350	3537	
8 (Non-Permitted)	1000	2958	
9 (Non-Permitted)	1000	2258	
10 (Non-Permitted)	1350	4851	
11 (Non-Permitted)	1350	3480	
12 (Permitted)	2000	5997	
13 (Permitted)	2000	5874	
14 (Permitted)	2000	6239	

ACTUAL EMISSION FACTORS						
	1350 HP Units	1350 HP Units	1000 HP Units	1000 HP Units	2000 HP Units	2000 HP Units
NOx	29.2 g/hp-hr	86.924 lb/hr	7.79 g/hp-hr	17.1775 lb/hr		
CO	0.7 g/hp-hr	2.0838 lb/hr	1.74 g/hp-hr	3.8368 lb/hr		See next sheet.
HC	1.34 g/hp-hr	3.9890 lb/hr	0.96 g/hp-hr	2.1169 lb/hr		
SO2		0.000004 lb/HP-hr		0.000004 lb/HP-hr		
Formaldehyde	0.0879 g/hp-hr	0.26166 lb/hr	0.0879 g/hp-hr	0.1938 lb/hr		

ALLOWABLE EMISSION FACTORS			
	2000 HP Units	2000 HP Units	1000 & 1350 HP Units
NOx	16.5 g/hp-hr	72.77 lb/hr	n/a
CO		n/a	n/a
HC		n/a	n/a
SO2		n/a	n/a

OTHER			
Potential Hours	2000		
Weight	8760		
Weight	453.5		



## ACTUAL EMISSION FACTORS (CONTINUED)

2000 HP  
Units

### Unit 12

NO <sub>x</sub>	8.59 g/hp-hr	37.88313 lb/hr
CO	0.47 g/hp-hr	2.072767 lb/hr
VOC	0.27 g/hp-hr	1.190739 lb/hr
SO <sub>2</sub>		0.000004 lb/HP-hr
FOR	0.0879 g/hp-hr	0.387652 lb/hr

### Unit 13

NO <sub>x</sub>	7.52 g/hp-hr	33.16428 lb/hr
CO	0.54 g/hp-hr	2.381477 lb/hr
VOC	0.43 g/hp-hr	1.896362 lb/hr
SO <sub>2</sub>		0.000004 lb/HP-hr
FOR	0.0879 g/hp-hr	0.387652 lb/hr

### Unit 14

NO <sub>x</sub>	7.45 g/hp-hr	32.85557 lb/hr
CO	0.55 g/hp-hr	2.425579 lb/hr
VOC	0.77 g/hp-hr	3.39581 lb/hr
SO <sub>2</sub>		0.000004 lb/HP-hr
FOR	0.0879 g/hp-hr	0.387652 lb/hr

CDS POINTS 8/11/98

ACTUAL EMISSION CALCULATIONS						POTENTIAL EMISSION CALCULATIONS					
Unit	NO <sub>x</sub> (T/yr)	CO (T/yr)	VOC (T/yr)	SO <sub>2</sub> (T/yr)	FOR (T/yr)	Unit	NO <sub>x</sub> (T/yr)	CO (T/yr)	VOC (T/yr)	SO <sub>2</sub> (T/yr)	FOR (T/yr)
	1350 HP Units						1350 HP Units				
7 009	153.72	3.69	7.05	0.01	0.46	7	447.91	10.74	20.55	0.03	1.35
10 006	210.83	5.05	9.68	0.01	0.63	10	447.91	10.74	20.55	0.03	1.35
11 005	151.25	3.63	6.94	0.01	0.46	11	447.91	10.74	20.55	0.03	1.35
	1000 HP Units						1000 HP Units				
8 008	25.41	5.67	3.13	0.01	0.29	8	88.51	19.77	10.91	0.02	1.00
9 007	19.39	4.33	2.39	0.00	0.22	9	88.51	19.77	10.91	0.02	1.00
	2000 HP Units						2000 HP Units				
12 003	113.59	6.22	3.57	0.02	1.16	12	195.21	10.68	6.14	0.04	2.00
13 002	97.40	6.99	5.57	0.02	1.14	13	170.89	12.27	9.77	0.04	2.00
14 001	102.49	7.57	10.59	0.02	1.21	14	169.30	12.50	17.50	0.04	2.00
ACTUAL ALLOWABLE EMISSION CALCULATIONS						POTENTIAL ALLOWABLE EM. CALCULATIONS					
Unit	NO <sub>x</sub> (T/yr)	CO (T/yr)	VOC (T/yr)	SO <sub>2</sub> (T/yr)	FOR (T/yr)	Unit	NO <sub>x</sub> (T/yr)	CO (T/yr)	VOC (T/yr)	SO <sub>2</sub> (T/yr)	FOR (T/yr)
	2000 HP (PERMITTED) UNITS						2000 HP (PERMITTED) UNITS				
12	218.19	n/a	n/a	n/a	n/a	12	318.72	n/a	n/a	n/a	n/a
13	213.72	n/a	n/a	n/a	n/a	13	318.72	n/a	n/a	n/a	n/a
14	227.00	n/a	n/a	n/a	n/a	14	318.72	n/a	n/a	n/a	n/a
Allowable Emissions N/A for non-permitted units.						Allowable emissions N/A for Non-permitted units.					

	SUMMARY (T/yr)			
	2000 HP (PERMITTED) UNITS			
	ACTUAL	POTENTIAL	ACT. ALL.	POT. ALL.
NOX	313.49	535.41	658.91	956.16
CO	20.78	35.45	35.45	35.45
VOC	19.73	33.41	33.41	33.41
SO2	0.07	0.12	0.12	0.12
FOR	3.51	5.99	5.99	5.99
	1000 & 1350 HP UNITS			
	ACTUAL	POTENTIAL	ACT. ALL.	POT. ALL.
NOX	560.61	1520.77	1520.77	1520.77
CO	22.37	71.75	71.75	71.75
VOC	29.19	83.48	83.48	83.48
SO2	0.04	0.12	0.12	0.12
FOR	2.06	6.04	6.04	6.04
	TOTAL FACILITY			
	ACTUAL	POTENTIAL	ACT. ALL.	POT. ALL.
NOX	874	2056	2180	2477
CO	43	107	107	107
VOC	49	117	117	117
SO2	0	0	0	0
FOR	6	12	12	12

<A0105S>

JEFFERSON COUNTY AIR POLLUTION CONTROL PROGRAM  
POINT INQUIRY

<527244566>

ACTION: [ ] (Q,F,B,S,T) PLANT ID/NBR: [000267]  
ALL POINTS: [Y] (Y = ALL POINTS, N = ACTIVE POINTS ONLY)  
PLANT NAME:<SOUTHERN NATURAL GAS CORP. ]

IF ACTION = 'S', ENTER LINE NUMBER: [ ]

POINT	POINT DESCRIPTION	OLD SRC
1:<001>	COMPRESSOR UNIT NO. 3 (#14) <i>Ku</i>	1503
2:<002>	COMPRESSOR UNIT NO. 2 (#13)	1502
3:<003>	COMPRESSOR UNIT NO. 1 (#12)	1501
4:<004>	NON-PERMITTED POINT SOURCES	0000
5:<005>	COMPRESSOR UNIT #11 (1350 HP VERTICAL COMP. ENGINE)	000E
6:<006>	COMPRESSOR UNIT #10 (1350 HP VERTICAL COMP. ENGINE)	000D
7:<007>	COMPRESSOR UNIT #9 (1000 HP VERTICAL COMP. ENGINE)	000C
8:<008>	COMPRESSOR UNIT #8 (1000 HP VERTICAL COMP. ENGINE)	000B
9:<009>	COMPRESSOR UNIT #7 (1350 HP VERTICAL COMP. ENGINE)	000A
10:< [ ]		
11:< [ ]		
12:< [ ]		
13:< [ ]		
14:< [ ]		

*8/11/92*

&lt;527244566&gt;

ACTION: [Q] (Q,N,F,T,?)

PRINTER #: [A206]

3

[illegible]

1997 VALUES  
INCLOS 3/11/98