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Judson H. Turner, Director

NARRATIVE

TO: Dika Kuoh

FROM: Bradley Belflower

DATE: October 13, 2015

Facility Name:	**Sabal Trail Transmission, LLC – Albany Compressor Station**
AIRS No.:	095-00110
Location:	Albany, GA (Dougherty County)
Application No.:	23350
Date of Application:	July 6, 2015

Background Information

Sabal Trail Transmission, LLC (Sabal Trail) plans to construct an interstate natural gas pipeline originating in Tallapoosa County, Alabama, and terminating in Osceola County, Florida. The entire pipeline will be approximately 500 miles long. About 161 miles of the pipeline will be located in nine Georgia counties: Stewart, Webster, Terrell, Lee, Dougherty, Mitchell, Colquitt, Lowndes, and Brooks Counties. In addition to the pipeline, six new meter stations, and five new compressor stations will be constructed. One compressor station will be located in Alabama, three compressor stations will be located in Florida, and one compressor station will be located in Dougherty County, Georgia.

The proposed compressor station has potential greenhouse gas (GHG) emissions greater than 100,000 tons per year CO_2e. The potential emissions of all other regulated pollutants are less than 250 tons per year. Sabal Trail originally submitted Application 22637 on May 30, 2014. At the time that Application 22637 was submitted, it was subject to PSD solely because of GHG emissions. On June 23, 2014, the U.S. Supreme Court issued a decision in the case of Utility Air Regulatory Group v. Environmental Protection Agency. As a result of this decision, the Albany Compressor Station is no longer a major source for PSD.

Purpose of Application

On July 7, 2015, the Division received Application No. 23350 for the construction and operation of the Sabal Trail Transmission, LLC – Albany Compressor Station in Dougherty County, Georgia. This application revises the location for the proposed compressor station from Newton Road to West Oakridge Drive.

For Application No. 22637, the Division issued a thirty-day Public Advisory (PA0614-2) which expired on July 11, 2014. Comments were received from GreenLaw on behalf of the Sierra Club, the Kiokee-Flint Group, the Flint Riverkeeper, and the Chattachoochee Riverkeeper, and from the Law Offices of Davis, Pickren, Seydel, & Sneed on behalf of Nonami Oglethorpe, LLC. For Application No. 23350, the Division issued a thirty-day Public Advisory (PA0715-2) which expired on August 7, 2015. Comments were received from Roger Marietta, Dinorah Hall, Graham Companies, Country Village Mobile Home Park, GreenLaw (on behalf of the Kiokee-Flint Group, the Georgia Chapter of the Sierra Club, the Flint Riverkeeper and the Chattahoochee Riverkeeper), Ron Vargo, Curtis Beaird, Sarah Phillips, Mark Clark, and Jethro Paul Raymer.. These comments are addressed Attachment A to this narrative.

Equipment List

Emission Units			Associated Control Devices	
Source Code	**Description**	**Installation Date**	**Source Code**	**Description**
CT01	Combustion Turbine No. 1 (Solar Titan 130-20502S4 with SoLoNOx)	TBD	OC01	Oxidation Catalyst
CT02	Combustion Turbine No. 2 (Solar Titan 130-20502S4 with SoLoNOx)	TBD	OC02	Oxidation Catalyst
FH01	Fuel Gas Heater No. 1 (Cameron [Eclipse Burner])	TBD	N/A	None
FH02	Fuel Gas Heater No. 2 (Cameron [Eclipse Burner])	TBD	N/A	None
EN01	Emergency Generator (Waukesha VGF36GL)	TBD	N/A	None

Emissions Summary

Combustion Turbines 1 and 2 (Source Codes CT01 and CT02)

Emissions from the compressor turbines were calculated using a combination of emission limits and emission factors from AP-42. The emission factors for SO_2, PM, VOC, and HAPs are found in AP-42, Section 3.1 – "Stationary Gas Turbines". The emission factor for SO_2 is 0.0034 lb/MMBtu, for PM (total) is 0.0066 lb/MMBtu, for VOC is 0.0021 lb/MMBtu, for formaldehyde is 7.1×10^{-4} lb/MMBtu, and for total HAPs is 1.03×10^{-3} lb/MMBtu. All of these AP-42 emission factors are found in Tables 3.1-2a and 3.1-3.

The emission limits for NOx and CO during normal operation are 5.2 lb/hr and 0.50 lb/hr, respectively. These emission limits are consistent with the vendor supplied an emission factors. The turbine's emission factor for NOx concentration is 9 ppm at 15% O_2 and for CO concentration is 25 ppm at 15% O_2. The oxidation catalyst vendor guarantees that CO will be reduced by 95% resulting in a CO emission factor of 1.25 ppm at 15% O_2. The NOx and CO emission factors are converted from the ppm at 15% O_2 basis to lb/MMBtu basis using the equation in the Division's "Procedures for Testing and Monitoring Sources of Air Pollutants," Method 19, Section 12.2.1 as follows:

$$E = C_d F_d \frac{20.9}{(20.9 - \%O_{2d})}$$

Where
E = The emission rate of the pollutant (lb/MMBtu)
C_d = Concentration of pollutant on a dry basis (ppm)
F_d = F factor, the volume of combustion components per unit of heat content (scf/MMBtu)
$\%O_{2d}$ = Concentration of oxygen on a dry basis (%)

The F factors for various fuels are tabulated in Table 19-2 of Method 19. For natural gas, the F factor is 8710 dscf/MMBtu. Additionally, an appropriate conversion factor is needed for each pollutant. These conversion factors, with units of [(lb/scf)/ppm], are 1.194×10^{-7} for NOx and 7.263×10^{-8} for CO. The converted emission factors are:

$$EF_{NOx} = (9\ ppm)\left(\frac{8710\ scf}{MMBtu}\right)\left(\frac{1.194\times10^{-7}\ lb}{scf\times ppm}\right)\left(\frac{20.9}{20.9-15}\right) = 0.033\ lb/MMBtu$$

$$EF_{CO} = (1.25\ ppm)\left(\frac{8710\ scf}{MMBtu}\right)\left(\frac{7.263\times10^{-8}\ lb}{scf\times ppm}\right)\left(\frac{20.9}{20.9-15}\right) = 0.0028\ lb/MMBtu$$

Each turbine is rated at 157.78 MMBtu/hr. The resulting pound per hour emission rate is, therefore:

$$NO_x = \left(\frac{0.033\ lb}{MMBtu}\right)\left(\frac{157.78\ MMBtu}{hr}\right) = 5.2\ lb/hr$$

$$CO = \left(\frac{0.0028\ lb}{MMBtu}\right)\left(\frac{157.78\ MMBtu}{hr}\right) = 0.44\ lb/hr$$

Assuming each turbine operates for 8,760 hours per year, the annual emission from the turbines during normal operation is:

$$NO_x = (2\ Turbines)\left(\frac{5.2\ lb}{hr}\right)\left(\frac{8{,}760\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 45.55\ tpy$$

$$CO = (2\ Turbines)\left(\frac{0.5\ lb}{hr}\right)\left(\frac{8{,}760\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 4.38\ tpy$$

$$VOC = (2\ Turbines)\left(\frac{0.0021\ lb}{MMBtu}\right)\left(\frac{157.78\ MMBtu}{hr}\right)\left(\frac{8{,}760\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 2.90\ tpy$$

$$SO_2 = (2\ Turbines)\left(\frac{0.0034\ lb}{MMBtu}\right)\left(\frac{157.78\ MMBtu}{hr}\right)\left(\frac{8{,}760\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 4.70\ tpy$$

$$PM = (2\ Turbines)\left(\frac{0.0066\ lb}{MMBtu}\right)\left(\frac{157.78\ MMBtu}{hr}\right)\left(\frac{8{,}760\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 9.12\ tpy$$

$$formaldehyde = (2\ Turbines)\left(\frac{7.1\times10^{-4}\ lb}{MMBtu}\right)\left(\frac{157.78\ MMBtu}{hr}\right)\left(\frac{8{,}760\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 0.98\ tpy$$

$$Total\ HAPs = (2\ Turbines)\left(\frac{1.03\times10^{-3}\ lb}{MMBtu}\right)\left(\frac{157.78\ MMBtu}{hr}\right)\left(\frac{8{,}760\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 1.42\ tpy$$

The turbine vendor provided data for additional emissions of NOx, CO, and VOC during startups and shutdowns. During each startup, the turbines will generate 2.04 lb of NOx, 199.09 lb of CO, and 2.49 lb of VOC. During each shutdown, the turbines will generate 2.31 lb of NOx, 211.05 lb of CO, and 2.64 lb of VOC. During shutdowns, the oxidation catalyst will reduce the CO emissions by 95 percent and the VOC emissions by 50 percent. The oxidation catalyst is not expected to provide any control during startups because the catalyst will not be at its normal

operating temperature. Sabal Trail estimates that there will be 156 events per year per turbine. An event is defined as one startup and one shutdown. The vendor supplied emissions and resulting annual emissions are summarized below:

Pollutant	Startup Emissions (pounds)	Shutdown Emissions (pounds)	Annual Emissions from Startup/Shutdown (tons)
NOx	2.04	2.31	0.68
CO	199.09	10.55	32.70
VOC	2.49	1.32	0.60

Emergency Generator (Source Code EN01)

Emissions from the emergency generator were calculated using a combination of vendor supplied emission factors and emission factors from AP-42. The vendor supplied emission factors are 2.0 g/HP-hr for NOx, 4.0 g/HP-hr for CO, and 1.0 g/HP-hr for VOC. Note that these emission factors are the same as the emission limits in 40 CFR 60 Subpart JJJJ. The emission factors for SO_2 and PM are found in AP-42, Section 3.2 – "Natural Gas-fired Reciprocating Engines". The emission factor for SO_2 is 5.88 x 10^{-4} lb/MMBtu, for PM is 9.99 x 10^{-3} lb/MMBtu, for formaldehyde is 2.05 x 10^{-2} lb/MMBtu, and for total HAPs is 3.24 x 10^{-2} lb/MMBtu. All of these AP-42 emission factors are found in Tables 3.2-2 and 3.2-3.

The emergency generator will be rated at 880 horsepower, will have a maximum heat input of 6.96 MMBtu/hr, and is assumed to operate for a maximum of 500 hours per year. The emissions from the emergency generator during normal operation is calculated as follows:

$$NOx = (880\ HP)\left(\frac{2.0\ g}{HP-hr}\right)\left(\frac{500\ hr}{yr}\right)\left(\frac{lb}{453.6\ g}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 0.97\ tpy$$

$$CO = (880\ HP)\left(\frac{4.0\ g}{HP-hr}\right)\left(\frac{500\ hr}{yr}\right)\left(\frac{lb}{453.6\ g}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 1.94\ tpy$$

$$VOC = (880\ HP)\left(\frac{1.0\ g}{HP-hr}\right)\left(\frac{500\ hr}{yr}\right)\left(\frac{lb}{453.6\ g}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 0.49\ tpy$$

$$PM = \left(\frac{9.99\times10^{-3}\ lb}{MMBtu}\right)\left(\frac{6.96\ MMBtu}{hr}\right)\left(\frac{500\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 0.02\ tpy$$

$$SO_2 = \left(\frac{5.88\times10^{-4}\ lb}{MMBtu}\right)\left(\frac{6.96\ MMBtu}{hr}\right)\left(\frac{500\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 0.001\ tpy$$

$$formaldehyde = \left(\frac{2.05\times10^{-2}\ lb}{MMBtu}\right)\left(\frac{6.96\ MMBtu}{hr}\right)\left(\frac{500\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 0.04\ tpy$$

$$Total\ HAPs = \left(\frac{3.24\times10^{-2}\ lb}{MMBtu}\right)\left(\frac{6.96\ MMBtu}{hr}\right)\left(\frac{500\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 0.06\ tpy$$

Fuel Gas Heaters 1 and 2 (Source Codes FH01 and FH02)

Emissions from the fuel gas heaters were calculated using emission factors from AP-42 Section 1.4 – "Natural Gas Combustion." The emission factors are found in Tables 1.4-1, 1.4-2, and 1.4-3 and are listed in units of pounds per million standard cubic feet of natural gas (lb/MMscf). These emission factors are converted to lb/MMBtu by dividing by 1,020 (per footnotes to each table).

Pollutant	Emission Factor (lb/MMscf)	Emission Factor (lb/MMBtu)
NOx	100	0.098
CO	84	0.082
VOC	5.5	0.005
PM	7.6	0.007
SO_2	0.6	0.0006
formaldehyde	7.5×10^{-2}	7.35×10^{-5}
Total HAPs	1.88	1.84×10^{-3}

Each fuel gas heater is rated at 1.00 MMBtu/hr and is assumed to operate for 8,760 hours per year. The emissions from the fuel gas heaters are as follows:

$$NO_x = (2\ Heaters)\left(\frac{0.098\ lb}{MMBtu}\right)\left(\frac{1.00\ MMBtu}{hr}\right)\left(\frac{8{,}760\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 0.86\ tpy$$

$$CO = (2\ Heaters)\left(\frac{0.082\ lb}{MMBtu}\right)\left(\frac{1.00\ MMBtu}{hr}\right)\left(\frac{8{,}760\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 0.72\ tpy$$

$$VOC = (2\ Heaters)\left(\frac{0.005\ lb}{MMBtu}\right)\left(\frac{1.00\ MMBtu}{hr}\right)\left(\frac{8{,}760\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 0.04\ tpy$$

$$PM = (2\ Heaters)\left(\frac{0.007\ lb}{MMBtu}\right)\left(\frac{1.00\ MMBtu}{hr}\right)\left(\frac{8{,}760\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 0.06\ tpy$$

$$SO_2 = (2\ Heaters)\left(\frac{0.0006\ lb}{MMBtu}\right)\left(\frac{1.00\ MMBtu}{hr}\right)\left(\frac{8{,}760\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 0.01\ tpy$$

$$formaldehyde = (2\ Heaters)\left(\frac{7.35\times10^{-5}\ lb}{MMBtu}\right)\left(\frac{1.00\ MMBtu}{hr}\right)\left(\frac{8{,}760\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 0.001\ tpy$$

$$Total\ HAPs = (2\ Heaters)\left(\frac{1.84\times10^{-3}\ lb}{MMBtu}\right)\left(\frac{1.00\ MMBtu}{hr}\right)\left(\frac{8{,}760\ hr}{yr}\right)\left(\frac{ton}{2{,}000\ lb}\right) = 0.02\ tpy$$

Other Emissions

In addition to the turbines, the emergency generator, and the fuel gas heaters, Sabal Trail determined the emissions from other sources planned for the facility. These sources include Flash Emissions, Tanks and Loading Operations, Piping Fugitives, Parts Washer, and Gas Releases. These results can be found in Appendix B of Application 23350. The results of all of the emission calculations are summarized in the following table.

Pollutant	Annual Emissions (tons per year)						
	Turbines (normal operation)	Turbines (Startup/ Shutdown)	Emergency Generator	Fuel Gas Heaters	Gas Releases	All Other Emissions	Total
PM	9.12	N/A	0.02	0.06	N/A	N/A	9.20
NOx	45.55	0.68	0.97	0.86	N/A	N/A	48.06
SO_2	4.70	N/A	0.001	0.01	N/A	N/A	4.71
CO	4.38	32.70	1.94	0.72	N/A	N/A	39.74
VOC	2.90	0.60	0.49	0.04	37.48	13.74	55.21
formaldehyde	0.98	N/A	0.04	0.001	N/A	N/A	1.02
Total HAP	1.42	N/A	0.06	0.02	3.20	1.42	6.12

Facility-Wide Emissions
(in tons per year)

Pollutant	Potential Emissions	Actual Emissions
PM	9.2	9.2
NOx	48.1	48.1
SO_2	4.7	4.7
CO	39.7	39.7
VOC	55.2	55.2
Max. Individual HAP	1.02	1.02
Total HAP	6.12	6.12

Note that, unless specified otherwise, these emission calculations were performed by the Division and the results may differ from those supplied by Sabal Trail in Application No. 23350.

Regulatory Applicability

This permit review is limited to regulations in Georgia Rules for Air Quality Control (Chapter 391-3-1) and the regulations promulgated by the U.S. EPA and delegated to the Georgia Air Protection Branch for enforcement. This permit review does not address regulations from any federal government agency (e.g., FERC or PHMSA) that have not delegated enforcement to the Air Protection Branch of the Georgia Environmental Protection Division.

40 CFR 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Subpart Dc applies to steam generating units which were constructed after June 9, 1989, that have a maximum design heat input rate between 10 and 100 MMBtu/hr. The fuel gas heaters are the emission units at the proposed facility that could possibly be subject to Subpart Dc. These heaters, however, will have heat inputs less than 2 MMBtu/hr, and they are not subject to this rule.

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

Subpart Kb applies to storage vessels containing volatile organic liquids (VOLs) with a capacity greater than 75 m^3 (approximately 19,800 gallons) that are constructed on or after October 3, 1977. The storage vessels at the proposed facility will be 2,000 gallons (ALBA-V05) and 1,200 gallons (ALBA-TK01) which are much less than 19,800 gallons. Subpart Kb, therefore, does not apply.

40 CFR 60 Subpart GG – Standards of Performance for Stationary Gas Turbines

Subpart GG applies to stationary gas turbines constructed after October 3, 1977 with a heat input at peak load equal to or greater than 10 MMBtu/hr. The turbines at the proposed facility will meet this applicability. Subpart KKKK (discussed later) states that turbines subject to Subpart KKKK are exempt from Subpart GG.

40 CFR 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Subpart JJJJ regulates emissions from spark ignition internal combustion engines where construction commences after June 12, 2006, and, for emergency generators, where the engine is manufactured on or after January 1, 2009. The emergency generator is, therefore, subject to this rule. Sabal Trail has indicated that it will comply with Subpart JJJJ for a non-certified engine.

40 CFR 60 Subpart KKKK – Standards of Performance for Stationary Combustion Turbines

Subpart KKKK regulates emissions from combustion turbines constructed after February 18, 2005. The compressor turbine will be rated at approximately 158 MMBtu/hr and will burn natural gas exclusively. For a combustion turbine rated between 50 and 850 MMBtu/hr and burning natural gas, Subpart KKKK limits NOx emissions to 25 ppm corrected to 15% oxygen. Subpart KKKK also establishes an SO_2 emission standard equal to 0.90 lb/MWh or, as an alternative, a fuel-sulfur content equal to 0.060 lb SO_2/MMBtu. This is approximately equivalent to a sulfur concentration in oil of 0.05 wt.% or 500 ppmw. To demonstrate compliance with the SO_2 emission limit specified in 40 CFR 60.4330(a)(2), in lieu of a stack test, the facility may use the fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for natural gas is 20 grains of sulfur or less per 100 standard cubic feet and the fuel has potential sulfur emissions equal to or less than 0.060 lb SO_2/MMBtu. This alternative to fuel sulfur content monitoring described in 40 CFR 60.4365 is addressed in Condition 7.2.

40 CFR 60 Subpart OOOO – Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

Subpart OOOO regulates VOC and SO_2 emissions from onshore crude oil and natural gas facilities involved in production, processing, transportation, and storage that commenced construction after August 23, 2011. The Sabal Trail facility will fall within the natural gas transmission and storage segment. Within this segment, the only type of emission unit that is subject to Subpart OOOO is storage vessels that have potential VOC emissions greater than 6 tons per year. Sabal Trail will not have any such storage vessels at this facility and, therefore, is not subject to this subpart.

40 CFR 63 Subpart HH – National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities

Subpart HH regulates emissions from oil and natural gas facilities located at major or area sources of HAP emissions. This facility will be an area source of HAP emissions. For area sources of HAP emissions at are natural gas or storage facilities, the only affected sources are triethylene glycol (TEG) dehydration units. This facility will not have any TEG dehydration units and, therefore, this rule does not apply.

40 CFR 63 Subpart HHH – National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities

Subpart HHH regulates emissions from natural gas transmission and storage facilities located at major sources of HAP emissions. This facility will not be a major source of HAP emissions, so this rule does not apply.

40 CFR 63 Subpart YYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

Subpart YYYY regulates emissions from stationary combustion turbines at a major source of HAPs for which construction commenced after January 14, 2003. The proposed facility will be an area source for HAPs, so this subpart will not apply.

40 CFR 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Subpart ZZZZ regulates emissions from reciprocating internal combustion engines at major and area sources of HAPs. This facility will be an area source of HAP emissions. In accordance with 40 CFR 63.6590(c), the facility "must meet the requirements of this part [Part 63] by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part [Part 63]." Therefore, compliance with Subpart ZZZZ will be shown by complying with 40 CFR 60 Subpart JJJJ.

40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

Subpart DDDDD (Boiler MACT) regulates emissions from boilers located at a major source of HAP emissions. This facility will not be a major source of HAP emissions, so this rule does not apply.

40 CFR 63 Subpart JJJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

Subpart JJJJJJ (Boiler GACT) regulates emissions from boilers located at an area source of HAP emissions. None of the equipment at the proposed facility meets the definition of boiler in the Boiler GACT. Subpart JJJJJJ, therefore, does not apply.

391-3-1-.02(2)(b) – Visible Emissions

Rule (b) limits the opacity of visible emissions from any air contaminant source that is subject to some other emission limitation under 391-3-1-.02(2). The opacity of visible emissions from regulated sources may not exceed 40 percent under this general visible emission standard. Because all of the equipment at the facility will burn natural gas exclusively, it is expected that the opacity will be well below 40 percent.

391-3-1-.02(2)(d) – Fuel Burning Equipment

Rule (d) limits emission of particulate matter from sources that meet the definition of "fuel-burning equipment". The fuel gas heaters meet this definition and are, therefore, subject to Rule (d). Rule (d) also limits the opacity of emissions from the boilers to 20 percent except for one six minute period per hour of not more than 27 percent opacity. Because the heaters will only combust natural gas, compliance with both the PM and opacity limits will easily be achieved.

391-3-1-.02(2)(g) – Sulfur Dioxide

Rule (g) applies to all "fuel burning" sources. The fuel burning sources at the proposed site are the combustion turbines, an emergency generator, and the fuel gas heaters. The fuel sulfur content limit for fuels burned is 2.5 percent by weight, in accordance with Rule (g)2. The equipment at this facility will burn natural gas exclusively which has a sulfur content much lower than the level allowed by this rule.

391-3-1-.02(2)(n) – Fugitive Dust

This rule requires the facility to minimize fugitive dust from the facility. This includes using water or chemicals for controlling dust on construction operations, grading of roads, and the clearing of land; covering at all times, when in motion, open bodied trucks transporting material likely to give rise to airborne dust; application of suitable material on dirt roads, materials, stockpiles, and other similar surfaces. Also per this rule, a landfill may not discharge fugitive dust, which exhibits opacity equal to or greater than 20 percent.

391-3-1-.02(2)(tt) – VOC Emissions from Major Sources

Rule (tt) regulates VOC emissions from major sources around Atlanta. Dougherty County is not in the area covered by this rule. Rule (tt), therefore, does not apply.

391-3-1-.02(2)(yy) – Emissions of Nitrogen Oxides from Major Sources

Rule (yy) regulates NOx emissions from major sources around Atlanta. Dougherty County is not in the area covered by this rule. Rule (yy), therefore, does not apply.

391-3-1-.02(2)(lll) – NOx Emissions From Fuel-Burning Equipment

Rule (lll) applies to fuel-burning equipment located in the area around Atlanta that are installed or modified after May 1, 1999, and have a maximum design heat input capacity of greater than or equal to 10 MMBtu/hr. Dougherty County is not in the area covered by this rule and the fuel gas heaters are less than 10 MMBtu/hr. Rule (lll), therefore, does not apply.

391-3-1-.02(2)(mmm) – NOx Emissions from Stationary Gas Turbines and Stationary Engines used to Generate Electricity

Rule (mmm) applies to stationary engines used to generate electricity whose nameplate capacity is between 100 kilowatts (kW) and 25 megawatts (MW) located in the area around Atlanta. Dougherty County is not in the area covered by this rule. Rule (mmm), therefore, does not apply.

391-3-1-.02(2)(rrr) – NOx Emissions from Small Fuel-Burning Equipment

Rule (rrr) applies to fuel-burning equipment located in the area around Atlanta Dougherty County is not in the area covered by this rule. Rule (rrr), therefore, does not apply.

Permit Conditions

Condition 2.1 states the general applicability of 40 CFR 60 Subparts A and KKKK to the compressor turbines.

Conditions 2.2 and 2.3 contain the NOx and SO_2 limits that apply to the compressor turbines per NSPS Subpart KKKK.

Condition 2.4 contains NOx and CO limits for the combustion turbines to ensure that the facility is a synthetic minor source for those pollutants.

Conditions 2.5 and 2.6 state the general applicability of 40 CFR 60 Subparts A and JJJJ and 40 CFR 63 Subparts A and ZZZZ to the emergency generator.

Condition 2.7 contains the NOx, CO, and VOC limits that apply to the emergency generator per NSPS Subpart JJJJ.

Conditions 2.8 and 2.9 contains the NSPS Subpart JJJJ limits on non-emergency hours of operation for the emergency generator.

Condition 2.10 contains the Rule (d) limits that apply to the fuel gas heaters and Conditions 2.11 and 2.12 contain the Rule (b) and (g) limits that apply to all of the combustion sources.

Conditions 4.1 and 4.3 contain operational and maintenance requirements for the compressor turbines and emergency generator per NSPS Subparts KKKK and JJJJ, respectively.

Condition 4.2 requires the use of oxidation catalyst systems on Combustion Turbines 1 and 2 to reduce the emissions of CO and VOC.

Condition 4.4 requires that Sabal Trail minimize the amount of natural gas released to the atmosphere during blowdowns and other events.

Condition 5.2 contains the NSPS Subpart KKKK allowance for an alternate means of demonstrating continuous compliance with the NOx limit on the compressor turbine.

Condition 5.3 requires the continuous monitoring of the oxidation catalyst to assure that it is operating properly.

Condition 5.4 requires a non-resettable hours meter on the emergency generator to help ensure that the non-emergency hours of operation limits are met.

Conditions 6.2 through 6.5 contain the NSPS Subpart KKKK requirements for testing the compressor turbines for NOx and SO2. Conditions 6.2 and 6.3 contain the initial and periodic testing requirements for NOx. Condition 6.4 specifies the procedures to use when conducting the NOx test. Condition 6.5 requires that compliance with the SO2 limit be determined in accordance with 40 CFR 60.4415(a).

Condition 6.6 requires a test for CO on the combustion turbines at any time that a NOx test is required.

Conditions 6.7 and 6.8 contains the initial and periodic test requirements for the emergency generator due to NSPS Subpart JJJJ.

Condition 7.2 contains the NSPS Subpart KKKK requirement that will exempt the compressor turbines from monitoring the total sulfur content of the fuel and demonstrate compliance with the SO2 limit in Condition 2.3.

Condition 7.3 requires semiannual reports for the oxidation catalyst temperature monitors. An increase in temperature between the inlet and outlet of the oxidation catalyst installed on the compressor turbines will indicate that the oxidation catalyst is working properly.

Condition 7.4 requires reporting if the emergency generator is operated, in non-emergency situations, for a duration exceeding the limit in Conditions 2.8 and 2.9.

Condition 7.5 requires the Permittee keep records of the information required in 40 CFR 60.4245(a).

Condition 7.6 requires records of blowdowns and other gas release events at the compressor station.

Toxic Impact Assessment

A Toxic Impact Assessment (TIA) was conducted for the ten worst-case toxic air pollutants (TAP) that will be emitted by the proposed compressor stations. For this TIA, the hourly emissions for both compressor turbines was assumed to be emitted by one turbine. The SCREEN3 model was run with stack height, diameter, temperature, and velocity data provided by the Sabal Trail. The one-hour maximum ground level concentration (MGLC) was determined by the model and the annual and 15-minute or 24-hour, as applicable, MGLCs were calculated in accordance with the Division's Toxics Guideline. The MGLCs and acceptable ambient concentrations (AAC) are shown in the following table. As can be seen for this data, the MGLC and much less than the AAC for all pollutants.

Pollutant	Emission Rate (lb/hr)	MGLC (µg/m^3)			AAC (µg/m^3)		
		Annual	24-hour	15-minute	Annual	24-hour	15-minute
Acetaldehyde	0.009	0.0001	0.0007	N/A	4.55	857	N/A
Acrolein	0.004	0.0001	N/A	0.001	0.02	N/A	80
Benzene	0.007	0.0001	N/A	0.002	0.13	N/A	1,595
1,3-Butadiene	0.0002	0.000004	N/A	0.0001	0.33	N/A	1,105
Ethyl benzene	0.018	0.0003	N/A	0.004	1,000	N/A	54,500
Formaldehyde	0.041	0.0006	0.0029	N/A	0.77	35.7	N/A
Naphthalene	0.0007	0.00001	N/A	0.0002	3.00	N/A	7,500
Propylene Oxide	0.017	0.0002	0.0012	N/A	2.70	571	N/A
Toluene	0.074	0.0011	N/A	0.018	5,000	N/A	113,100
Xylenes	0.037	0.0005	N/A	0.0009	100	N/A	65,500

Note that these results were determined by the Division using U.S. EPA's SCREEN3 model. The TIA conducted by Sabal Trail and included in Application No. 23350 was conducted using EPA's ISC3 model. The ISC3 model is a more refined model and, therefore, produces more accurate and lower results than the SCREEN3 model.

Summary & Recommendations

I recommend that Permit No. 4922-095-0110-S-01-0 be issued to Sabal Trail Transmission, LLC – Albany Compressor Station for the construction and operation of a natural gas compressor station located in Albany, Georgia. The facility will be a synthetic minor source. It is assigned to the Stationary Source Compliance Program for compliance responsibility. A 30-day Public Advisory expired on July 11, 2014, for Application No. 22637. Comments were received from GreenLaw and from Nonami Oglethorpe. A 30-day Public Advisory expired on August 7, 2015, for Application No. 23350. Comments were received from Roger Marietta, Dinorah Hall, Graham Companies, Country Village Mobile Home Park, GreenLaw (on behalf of the Kiokee-Flint Group, the Georgia Chapter of the Sierra Club, the Flint Riverkeeper and the Chattahoochee Riverkeeper), Ron Vargo, Curtis Beaird, Sarah Phillips, Mark Clark, and Jethro Paul Raymer.

Attachment A: Public Comments

The following are public comments submitted in response to the Public Advisories for Applications Nos. 23350 and 22637. The Public Advisory for Application No. 23350 expired on August 7, 2015. The Public Advisory for Application No. 22637 expired on July 11, 2014. The comments are included in their entirety when practical and summarized when necessary. The comments are followed by the Division's response.

Note that many of the comments involve regulations that are not enforced by the Air Protection Branch (APB) of Georgia Environmental Protection Division. The Federal Energy Regulatory Commission (FERC) addresses issues such as site suitability of the pipeline and compressor station, need for the pipeline, noise associated with the pipeline and compressor station, safety issues involving the site of the pipeline and compressor station, and Environmental Justice in compliance with the National Environmental Policy Act (NEPA). The Pipeline and Hazardous Material s Safety Administration (PHMSA) regulates the safe operation of the pipeline once it is built. APB is only authorized to enforce regulations published in Georgia Rules for Air Quality Control (Chapter 391-3-1) and the regulations promulgated by the U.S. EPA and delegated to the Georgia APB for enforcement (and incorporated by reference in Chapter 391-3-1). Any comments that fall outside of the regulatory authority of Georgia EPD are answered by "This comment falls outside the scope of this review."

Comments received from multiple individuals

These comments were received from multiple individuals including Dinorah Hall (who included signatures from 143 members of the community), Earnestine Taylor Jones, Joyce Evans, Ron and Evlyn Vargo, and Mark Clark.

Comment:

1) We ask that the Environmental Protection Division Georgia [EPD] organize public informal meetings prior to the public hearing, since we understand that EPD Georgia takes official comments and testimonies at public hearings, however they are not required to answer questions.

2) Request a public hearing.

Division Response:

The Division has scheduled a public meeting followed by a public hearing on November 5, 2015, at Albany Technical College's Kirkland Conference Center. During the public meeting, the Division will answer questions concerning the Air Quality Permit. During the public hearing, the Division will accept written and oral comments on the proposed Air Quality Permit.

Comment:

3) Please provide the Albany Community relevant details concerning Participation and Guidance Material for Public Hearings.

Division Response:

The Division will issue a public notice published in the local newspaper and a press release to notify the community of the date, time, and location for the public meeting and public hearing. During the public meeting, representatives from the Division will be available to answer questions concerning the air quality rules that apply and the permitting process. Note that the Division does not enforce regulations related to pipeline location, operation, safety, or noise. Following the public meeting, the Division will conduct a public hearing during which the Division will accept written and oral comments concerning the air quality permit.

Comment:

4) We respectfully require EPD Georgia to conduct a rigorous review of public participation/interest for Albany, Georgia.

Division Response:

The Division will fully review any comments concerning rules that the Division is authorized to enforce. Note that the Division is not authorized to approve or deny the final routing of the pipeline or noise associated with the pipeline and compressor station.

Comment:

5) We ask EPD Georgia to develop a targeted outreach to the affected neighborhoods and share maps depicting the Environmental Justice areas to give people additional opportunities to highlight their issues.

6) Demand a mailing to certain zip codes to ensure a due diligence notification process. The local paper does not reach all audiences living around the proposed compressor station.

9) There are some serious concerns about Environmental Justice Issues given the socio-economic status of the neighborhood affected by the proposed compressor station.

Division Response:

The Division ran an EJSCREEN Report on a 2-mile radius area centered on the proposed compressor station. The EJSCREEN Report is attached to this narrative. Note that the software does not definitively define Environmental Justice areas. The U.S. EPA defines Environmental Justice as follows:

> "Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across this Nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work."

The primary purpose of Environmental Justice is to ensure that economically disadvantaged individuals are aware of and able to participate in the permitting processes for sources in the areas where they live. The Division has accomplished this activity through a variety of methods including a press release, the Division's web page, and Public Advisories. The affected people of Albany will have at least three separate opportunities to comment on Sabal Trail's proposed compressor stations (thirty-day periods ending 7/11/14, 8/7/15, and 11/12/15). It appears, based on the level of comments received for the proposed compressor station, that the surrounding community is aware of the proposed permit. Additionally, the Division plans to notify by email the individuals who commented on this permit application.

In addition, FERC has responsibility to address Environmental Justice in compliance with the National Environmental Policy Act (NEPA).

Comment:

7) We ask EPD Georgia to evaluate cumulative and secondary impacts to air quality that a compressor station of this size poses to a residential area located within the city limits, including fugitive emissions.

Division Response:

The Division has evaluated the environmental impacts of the proposed compressor station and has determined that it can reasonably be expected to comply with all applicable regulations enforced by the Georgia Air Protection Branch. This evaluation included determining that the proposed compressor station will be a minor source of emissions for all air quality rules enforced by the Division. Additionally, both Sabal Trail and the Division have conducted a Toxic Impact Analysis (TIA) in accordance with Division guidelines and determined that the maximum ground level concentrations of all toxic air pollutants (TAP) will be less than 1% of the acceptable ambient concentrations.

Comment:

8) Families and individuals living at Country Village Mobile Home are truly dismayed by the idea of living next to a massive 41,000 horsepower gas compressor station (which belongs in an industrial and remote area) for the rest of their lives.

Division Response:

This comment concerns the location of the proposed compressor station. As stated earlier, this comment falls outside the scope of this review.

Comment:

10) Does EPD Georgia have the authority to analyze alternatives sources of energy and/or weigh environmental cost and benefits?

Division Response:

The Division does not conduct a cost/benefit analysis as part of its review of a minor permit application such as this application. Requiring alternative energy sources would be redefining the project and falls outside the authority of the Division. The Division has evaluated the environmental impacts of the proposed compressor station and has determined that it can reasonably be expected to comply with all applicable regulations enforced by the Georgia APB.

Comment:

We are concerned about adverse effects on ambient air quality
We are concerned about air pollution sources on humans, plants, soils, and animals.

Division Response:

The Division has evaluated the expected emissions from the proposed compressor station and has determined that it can reasonably be expected to comply with all applicable regulations enforced by the Georgia APB. Therefore, any impact on air quality, human health, plants, soils, and animals is expected to be low.

Comment:

We need to understand how the proposed compressor station can affect air quality

Division Response:

Many objects and human activities can have an impact of the environment. These objects and activities include livestock (which produce methane), trees (which can produce VOC), fueling vehicles (which release VOC), and mowing lawns (which release NO_x and VOC). The net environmental impact from these sources is usually small. In contrast, large industrial source with emissions of NO_x, CO, SO_2, PM, or VOC greater than 250 tons per year can have a large impact of the environment and are subject to regulation under the Prevention of Significant Deterioration (PSD, 40 CFR 52.21) regulations which contains many restrictive requirements. The proposed Sabal Trail compressor station will emit a relatively low amount of emissions, and, therefore, the impact on the environment is expected to be minimal. Additionally, as stated earlier, a Toxics Impact Analysis has been conducted for the proposed compressor station which show impacts of all Toxic Air Pollutants will be extremely low.

Comment:

We trust that EPD Georgia will demand stringent mitigation measurements from the applicant

Division Response:

Sabal Trail has voluntarily accepted stringent NOx and CO limits on the compressor turbines.

Comment:

We ask if applicant is using EPA Natural Gas Star technology improvements and if not, why not?
Please demand that all alternatives be investigated, including not building it at all, electric motors (which eliminate exhaust). Presenting EPA Natural Gas Star program, an EPA-industry partnership, describing the feasibility of electric motors:
InstallElectricCompressors: http://www.epa.gov/gasstar/documents/installelectriccompressors.pdf
We are presenting fact sheet for blowdown gas re-injection that show that there are alternatives that should be considered: Blowdown re-injection: http://www.epa.gov/gasstar/documents/injectblowdowngas.pdf
We request EPD Georgia to review EPA Natural Gas Star technology and require any applicable technology that would reduce air emissions and methane release - http://www.epa.gov/gasstar/tools/recommended.html

Division Response:

The Division does not know whether or not Sabal Trail will utilize any EPA Natural Gas Star technology. EPA Natural Gas Star is a voluntary program, and the Division does not have the legal authority to require its use by Sabal Trail.

Comment:

Blowdowns are vastly unaccounted for; does EPD Georgia consider potential emergency blowdowns in the cumulative impact analysis? Does EPD take into consideration the noise levels for blowdowns which reach anywhere between 90 to 120 decibels?

Division Response:

The Division has reviewed the emissions estimated provided in Application No. 23350. The Division does not see any reason to believe that the emission estimate is inaccurate. The Division, however, does not have any regulations for noise. Noise associated with the pipeline and compressor station are regulated by FERC. Therefore, this comment falls outside the scope of this review.

Comment:

Please include blowdown prevention (Best Management Practices) as a condition in the Air Permit

Division Response:

The Division has included Condition No. 4.4 in the draft permit requiring Sabal Trail make reasonable efforts to reduce gas releases during blowdowns. Note that this condition does not prohibit blowdowns or other activities necessary for the safe operation of a compressor station.

Comment:

Our research shows that the activities of a compressor station have caused the formation of formaldehyde from the action of sunlight on methane.

Division Response:

The Division's research on this subject indicates that although formaldehyde can be produced photochemically from methane, it is not a major source of formaldehyde in the atmosphere.

Comment:

People living near compressor stations have experienced respiratory infections, coughs, headaches, and neurological problems due to the exposure to neurotoxins.

Division Response:

A Toxic Impact Assessment (TIA) has been performed in accordance with Division guidelines. This TIA showed that maximum ground level concentration for all of the Toxic Air Pollutants (TAP) will be significantly less than the acceptable ambient concentrations.

GreenLaw Comments

On August 7, 2015, comments were received from Steven D. Caley, Attorney with GreenLaw on behalf of the Kiokee-Flint Group, the Georgia Chapter of the Sierra Club, the Flint Riverkeeper and the Chattahoochee Riverkeeper (collectively "Conservation Groups").

Comment:

The Conservation Groups Request a Public Hearing.

Division Response:

As stated in the response to an earlier comment, a public hearing has been scheduled for November 5, 2015.

Comment:

Sabal's New Compressor Station Location Will Cause or Contribute to a Violation of the National Ambient Air Quality Standards ("NAAQS"). Commenter claims that Sabal Trail violates the 1-hour NO_2 standard based on a report prepared by AMI Environmental for GreenLaw.

Division Response:

The Division has reviewed this report and has concluded that the report does not show that Sabal Trail will cause or contribute to a NAAQS. For a source to cause or contribute to a modeled NAAQS violation, two things must be true. First, a receptor site must have a modeled violation of the NAAQS, and, second, the source's contribution at that receptor site must be greater than the significant impact level (SIL). For the 1-hour NO_2 standard, U.S. EPA has not yet promulgated a SIL. In *General Guidancefor Implementing the 1-hour NO_2 National Ambient Air Quality Standard in Prevention of Significant Deterioration Permits, Including an Interim 1-hour NO_2 Significant Impact Level* (June 28, 2010, see www3.epa.gov/nsr/documents/20100629no2guidance.pdf), EPA recommends a SIL value of 4 ppb (7.5 $\mu g/m^3$). Until EPA promulgates a final 1-hour NO_2 SIL, Georgia has adopted the recommended interim SIL of 7.5 $\mu g/m^3$. The conclusion of the AMI Environmental report states about the modeled violations of the NAAQS, "Maximum contribution from the Albany CS to these exceedances is 0.014 $\mu g/m^3$." Therefore, because Sabal Trail's maximum contribution to the modeled exceedances is far less than the 7.5 $\mu g/m^3$ SIL, the Division concludes that Sabal Trail will not cause or contribute to a violation of the 1-hour NO_2 NAAQS.

Comment:

Sabal's Emissions Estimates Are Too Low – Similar Facilities Assume Much Higher Emissions Estimates.

Sabal Trail has provided some emissions estimates within its Application. However, these emissions calculations are extremely low. For example, a nearly identical compressor station proposed in 2012 (Cheniere Corpus Christi Pipeline, L.P.) estimated almost triple the NOX and CO emissions as Sabal Trail projected in their calculations.

Division Response:

The Division has calculated potential emissions from the proposed Sabal Trail facility and has determined that the potential emissions of NOx are 48.1 tons per year and of CO are 42.1 tons per year based on limits in the proposed permit. At these emission levels, the facility is not a major source with regard to Title V regulations.

It should also be noted that the Cheniere Corpus Christi Pipeline application proposed higher emission limits for NOx (25 vs. 9 ppm at 15% O_2) and CO (50 vs. 25 ppm at 15% O_2 with 95% reduction due to the oxidation catalyst). These higher emission limits account for the higher emissions from other facility.

Regardless of the agreed-upon limits in the Texas application, the limits proposed in the Sabal Trail application are based on reasonable expectations of compliance and the draft permit limits are paired with requirements to make those limits enforceable as a practical matter.

Comment:

Sabal's Emissions Estimates Are Too Low – Increased Emissions due to Startup and Shutdowns are not Adequately Addressed in the Application.

Division Response:

The Division disagrees. Commenter failed to provide evidence contradicting the applicant's estimate of the quantity of startup/showdown time.

Comment:

Sabal's Emissions Estimates Are Too Low – Emissions from Blowdown Emissions of VOCs and Methane are Unsupported.

Division Response:

The Division disagrees. Commented failed to provide evidence contradicting the applicant's estimate of blowdown emissions. In any case, because gas releases result in lost product, it would behoove the company to minimize loss. Furthermore, gas releases are regulated by the Pipeline and Hazardous Materials Safety Administration (PHMSA).

Comment:

Ozone Impacts Have Not Been, But Should Be, Addressed.

The Application has not addressed the project ozone impacts from its NOx and VOC emissions, which will react under sunlight to form ozone. As a result of these emissions, the proposed project will add to ozone levels in the region and may interfere with the attainment or maintenance of the ozone standard. Indeed, EPA's recently proposed rule to lower the current 8-hour average ozone standard of 75 parts per billion (ppb) to 65-70 ppb will cause many areas to be designated as non-attainment. EPA's proposed rule also emphasizes the important contributions of projects with emissions exceeding the PSD SER such as the proposed Albany compressor station.

Thus, it is important that the Application present a quantitative analysis of project impacts on ozone air quality. This quantitative analysis can be carried out by photochemical modeling that will utilize the modeling databases of recent ozone modeling with the CMAQ model by Georgia EPD for the Georgia State Implementation Plan (SIP). Using existing SIP modeling databases will allow the modeling of ozone impacts of the proposed Albany compressor station to be performed quickly and inexpensively.

Division Response:

The Division disagrees. The new 8-hour ozone standard, announced October 1, 2015, is 70 ppb. Based on current ozone data, Albany is predicted to remain in attainment with the new standard. Impacts on ozone formation are addressed for PSD major sources; while the NOx emission rates are above the significant

emission rate IF the source were PSD major, this is not PSD major thus not a required assessment. Ozone monitoring conducted in nearby and much larger Columbus will provide sufficient ozone data.

Comment:

Plume Blight Has Not Been, But Should Be, Addressed.

Sabal has projected that the compressor station will emit NOx (46.77 tpy), PM2.5 (9.14 tpy), and SO2 (4.66 tpy), which are known to reduce visibility. See Application at p. 1-4. The VISCREEN model developed by the EPA should be used to analyze local visibility effects of project sources (U.S. EPA, 2005).

Division Response:

The Divisions disagrees. Evaluation of visibility impact is only required for PSD permits. Additionally, the quantity of visibility affecting emissions from this project are relatively low.

Comment:

Any Permit that EPD May Issue Must Contain Provisions to Ensure that Sabal's Projected Potential to Emit Is the Same as Actual Operation.

Division Response:

The Division believes that the proposed permit contains sufficient conditions to ensure that the facility operates as a synthetic minor source.

Dinorah Hall Comments

In addition to being one of the submitters of the first set of comments above, Dinorah Hall submitted three separate comment letters by email. Two were dated August 3, 2015, and one was dated August 7, 2015.

August 3, 2015 Comment Letter 1

Comment:

A gas line map and legend were included with these comments.

"FERC's regulations require that any compressor station be located in an unobtrusive location. Placing a noisy, polluting industrial facility inside the Albany city limits in a residential neighborhood is not unobtrusive, is inappropriate, and violates FERC's regulations."

The proposed location is just south of West Oakridge Drive in a residential area within the city limits of Albany, Georgia. The Country Side Village Mobile Home Park is only .3 miles from Sabal's proposed location with over 100 residents. The Winterwood residential subdivision is only 1.6 miles from the proposed location and has approximately 300 homes and 1,000 residents. The Indian Creek residential subdivision is only 1.8 miles from the proposed locations and also has approximately 300 homes.

Additionally, schools and churches are nearby. The Robert Cross Middle School, the Deerfield Windsor High School, the Live Oak Elementary School and the Alice Coachmen Elementary School. The Mt. Zion church with approximately 5,000 African-American members is mere 1.4 miles away.

Recreational and civic facilities are also in the general vicinity of Sabal's proposed location. The Exchange Club Fairgrounds where a variety of public events are held, including musical events and cattle shows, are only 1.6 miles away.

Division Response:

As noted within the comment, this concern involves FERC regulations. The Division is not authorized to enforce FERC regulations. This comment falls outside the scope of this review.

August 3, 2015 Comment Letter 2: "YouTube" letter

Comment:

This letter contain twelve YouTube videos indicating opposition to the compressor station and two YouTube videos recorded near a compressor station during a blowdown event.

Division Response:

The Division has reviewed these videos. They deal primarily with the location and noise of the pipeline and compressor station. As stated earlier, these comments fall outside the scope of this review.

August 7, 2015 Comment Letter

Comment:

1. Ignition at a 50/75% level when flaring, which the applicant claims does reduce raw emissions, however, it creates different kinds of emissions, which are still hazardous?
2. Open flaring (depends on the pressure of the line, so what is the pressure.)
3. How high will the flares be? Could be an aviation concern due to the proximity of proposed compressor station to the Albany airport.
4. Will the flares not be an eyesore and reminder of airborne pollutants and thereby a detriment to Albany Quail Hunting Industry

Division Response:

Application No. 23350 does not include a flare, and the Division is not aware of any other plans to include a flare. The draft permit does not authorize a flare at the proposed compressor station. The Division is, therefore, unable to respond to these comments.

Comment:

5. How many blowdowns do they estimate per year for maintenance?

Division Response:

An estimate of number of blowdowns per year is not available. Sabal Trail does, however, estimate that the maximum amount of natural gas released due to blowdowns from the compressor station and pipeline to be 36.55 million standard cubic feet during any twelve-consecutive month period. This estimate is based on the quantity of natural gas released from other similar natural gas compressor stations.

Comment:

6. Can blowdown gas be vented to a low-pressure main as per the attached PRO Fact Sheet No. 401? The Environmentally friendly option to eliminate exhaust: http://www.epa.gov/gasstar/documents/injectblowdowngas.pdf

Division Response:

Venting gas to a low-pressure main is part of EPA's Natural Gas Star program. EPA Natural Gas Star is a voluntary program and is not required by any regulations enforced by the Division. The Division, therefore, does not have the legal authority to require its use by Sabal Trail.

Comment:

We understand that the applicants do their own testing. What access will EPD and City/County authorities have to that data? We want records of those emissions.
a) What comes out of the facility
b) What comes out of the facility on the residential community
c) Do they record the stack test regularly?

Division Response:

Sabal Trail will be required to conduct emission testing for NO_x and CO on the compressor turbines at least every two years. For the emergency generator, Sabal Trail plans to install an engine not certified in

accordance with 40 CFR 60 Subpart JJJJ (non-certified engine). Because the emergency generator will be a non-certified engine, an initial emission test will be required within 180 of startup of the engine, and period test will be required every three years. The Division must be notified by Sabal Trail prior to conducting each test to enable Division personnel the opportunity to observe the emission tests. After completion of the tests, Sabal Trail is required to submit a test report within 60 days following the test. Once received by the Division, the report is available for review by any member of the public through the Georgia Open Records Act (GORA).

The pollutants expected to be emitted are detailed in the emission summary section of this narrative. The pollutants are dispersed in the atmosphere. It is expected that these emissions will meet all applicable emission regulations enforced by the Division.

Comment:

d) We ask that the applicant perform continuous monitoring at the stack including different emissions, at different dates and that those emissions get recorded publically every 24 hours

Division Response:

Continuous Emissions Monitoring Systems (CEMS) are not required by any regulations for these compressors. The draft permit does, however, require continuous monitoring of temperature for the oxidation catalysts installed on the compressor turbines. An increase in temperature between the inlet and outlet of the catalyst will indicate that the catalyst is working to reduce CO and VOC emissions. Sabal Trail will be required to submit this data to the Division on a semiannual basis. Once the data is received by the Division, it is available to the public using the Georgia Open Records Act (GORA) procedures.

Comment:

a) What is Sabal's Management Plan for refueling construction/zone equipment and vehicle during construction and where they are in relation to the water supply area
b) Management Plan for spills: does Sabal have a storm water system for spills?
c) Does the applicant have proper containment spill clean-up plan and facilities?
d) Regards trucking waste, chemicals: where will they happen, when will they happen; considering that there are schools and hundreds of residents living near the proposed location?
e) What is the applicant's protocol for Emergency Plan, to do evacuations and response to fires?

Division Response:

These comments fall outside the scope of this review.

Comment:

Applicant should provide all weather patterns in their air modeling.

Division Response:

When required, modeling is required to meet 40 CFR 52.21 Appendix W which requires the use of historical meteorological data. In this permit application, modeling to determine compliance with the NAAQS is not required because Sabal Trail is not a major source under the PSD regulations.

Comment:

Requirement for Electric Motors to eliminate exhaust
http://www.epa.gov/gasstar/documents/installelectriccompressors.pdf

Division Response:

This is part of EPA's Natural Gas Star program. EPA Natural Gas Star is a voluntary program, and the Division does not have the legal authority to require its use by Sabal Trail.

Roger Marietta Comments

Comments were submitted by Roger Marietta in four different emails. Roger Marietta is an Albany City Commissioner representing Ward 4. One email was submitted on July 11, 2015, two emails were submitted on July 16, 2015, and the last was submitted on July 29, 2015.

July 11, 2015 Comment email

Comment:

> I am very concerned about the emissions from this proposed compressor station. I read the Sabal Trail Pipeline report and they assume a lot but their track record is filled with explosions, leaks, and other environmental issues. They are planning to run their pipeline through wetlands and this is objectionable by itself but during floods which occur annually, the pipeline will degrade much faster. I challenge whether Sabal Trail has tested pipelines in recurring flood and drought instances. It seems like most of the pipeline impacts black majority areas and certainly the compressor station does. The pipeline will lower property values and displace residents. We need to have a series of public hearings on this application.

Division Response:

Most of these comments including the track record of explosions, leaks, and other environmental issues, the location of the proposed pipeline (i.e., through wetlands), the impacts of floods and drought on the pipeline, the rate at which the pipeline will degrade, the area property values, and the potential displacement of residents fall outside the scope of this review.

Two issues, however, are within the scope of the Division's review. First, you requested a series of public hearings, and, second, you expressed concerns that the compressor station will impact black majority areas.

The Division has scheduled one public meeting and hearing to be held on November 5, 2015, at Albany Technical College's Kirkland Conference Center. During the public meeting, Division personnel will answer questions concerning the air quality rules and Sabal Trail's application. During the public hearing, the Division will take additional comments from the public.

Because of the concern of the impact on black majority areas, The Division ran an EJSCREEN Report on a 2-mile radius area centered on the proposed compressor station. The EJSCREEN Report is attached to this narrative. Note that the software does not definitively define Environmental Justice areas. The U.S. EPA defines Environmental Justice as follows:

> "Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across this Nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work."

The primary purpose of Environmental Justice is to ensure that economically disadvantaged individuals are aware of and able to participate in the permitting processes for sources in the areas where they live. The Division has accomplished this activity through a variety of methods including a press release, the Division's web page, and Public Advisories. The affected people of Albany will have at least three separate opportunities to comment on Sabal Trail's proposed compressor stations (thirty-day periods ending 7/11/14, 8/7/15, and 11/12/15). It appears, based on the level of comments received for the proposed compressor station, that the surrounding community is aware of the proposed permit.

July 16, 2015 Comment email 1

Comment:

2. Such construction will have a devastating impact on the residential areas adjacent to the proposed station. Fifty families live in a Mobile Home Park that is, according to the Sabal Study, only .3 miles away. These families will have to relocate their homes.

Division Response:

See the Division's response to the Environmental Justice comment in the first set of comments above.

Comment:

6. The City renews its prior comment that any station should be electrically powered.

Division Response:

The Division does not redefine the project, which would include requiring alternative sources of energy. The Division has evaluated the environmental impacts of the proposed compressor station and has determined that it meets all applicable regulations enforced by the Georgia APB.

Comment:

7. Sabal Trail's recent statement that it has fully complied with the City's Wellhead Protection Plan ("Plan") may not be true. The inner-management zone of Well Sources 140, 141, 142, 143, 144, 146 and 147 is 500 feet and is breached by Sabal's own admission that their pipeline comes within 250-300' of the wells. These seven wells provide the majority of the City of Albany water supply. The outer management zone of the City's well head protection plan is also violated by the proposed Sabal pipeline. (see page 102 from the City of Albany Well Head Protection Plan). Further, the Compressor Station violates the outer management zone of Well Source 135 which is located at 2613 Oakridge Dr. very near the proposed Compressor Station (see page 98 from the City of Albany Well Head Protection Plan.) An analysis of whether Sabal Trail is in compliance with the Plan should be carried out by an independent body, such as Georgia EPD.

Division Response:

This comment is outside the scope of this review. Please contact the Watershed Protection Branch with any comments or concerns.

Comment:

1. These comments are submitted in response to Sabal Trail Transmission, LLC's ("Sabal Trail") recent proposal to construct a gas compressor station ("station") in an area just south of Oakridge Drive in the municipal limits of Albany, Georgia.

3. The station will forever alter the surrounding neighborhoods which presently enjoy a pastoral setting. The proposed construction would no doubt include unsightly communication towers/flashing lights, very large (tall) intake and exhaust pipes, unattractive structures and obtrusive equipment.

4. The risk to neighboring citizens of loss of sleep and loss of the ability to enjoy the outdoors due to the station's noise cannot be overstated. The noise may well destroy the value of the surrounding homes,

businesses and churches. The Sabal noise study is deficient in that it was not conducted at night or in Winter when sound travels. Noise complaints in the past have been received in the area from as far away as 1.5 to 2.0 miles.

5. A point the City wants to make is that Sabal Trail appears to ignore the effects of the station or the environment. We are concerned about the pipeline traversing wetlands. Specifically, the wetlands areas west of Indian creek which was recently cleared, the wetlands in Brook Hollow Subdivision, and the wetlands at the Northwest corner of Lockett Station Rd and West Oakridge Rd which was also recently cleared.

8. Recommend rerouting the Sabal Trail Pipeline and its Compressor Station outside Dougherty County.

Division Response:

These comments fall outside the scope of this review.

July 16, 2015 Comment email 2

Comment:

4. One of the City Water wells is located almost on top of the proposed compressor station and the station and pipeline violate the well management zones.

Division Response:

This comment is outside the scope of this review. Please contact the Watershed Protection Branch with any comments or concerns.

Comment:

6. Air quality will be adversely affected by pressure releases that typically occur from six to twelve times per year where billions of cubic feet of methane gas will be released.

Division Response:

The Division's review indicates that the proposed compressor station can reasonably be expected to comply with all applicable requirements that are enforced by the Air Protection Branch.

Comment:

7. The tons of carbon dioxide released will violate the new Federal Clean Air rules.

Division Response:

There are no current regulations in Federal Clean Air rules that limit emissions of carbon dioxide (or other greenhouse gases) from a compressor station of this size.

Comment:

1. The new location raises new concerns as 50 families located within .3 miles of the proposed Compressor Station location. All elected officials in this District strongly oppose both the pipeline and the proposed Compressor Station.

2. The Newton Road houses were .2 miles away; this location is .1 mile further away but 50 homes are within the immediate noise/explosion impact area.
3. On two adjoining properties, where the pipeline passes through, the trees have been cleared in possible wetlands.
5. The station site is located only 1 mile plus from 500+ homes and a major church and a school.
8. The pipeline itself still violates the inner management zones of the City of Albany the main well sources.
9. The Compressor Station noise study conducted by Sabal Trail was deficient because it was conducted in a humid month and at 10:00 am; not in drier, colder months and at night when sounds travel further.
10. Studies have shown that property values drop as much as 50% when a Compressor Station is located in a residential area.
11. Canada has cited Spectra/Sabal's parent company for numerous accidents.
12. The pipeline and compressor should be moved outside of Dougherty County and the State of Georgia.

Division Response:

These comments fall outside the scope of this review.

July 29, 2015 email

Comment:

New concerns have popped up since I have learned of Spectra Energy/Sabal Trail's accident history - Canada, Wyoming, Arkansas, to name a few states. The Compressor Station's continuous burning of toxic gases such as Argon and Nitrous Oxide along with Methane will cause gasses to come back down to earth as toxic acid rain and kill wildlife, and plants.

Division Response:

The accident history falls outside the scope of this review.

The Division has no reason to believe that these gases are intentionally injected into the compressor turbines. Additionally, neither argon nor nitrous oxide (N_2O) are considered toxic gases. Argon is a noble gas and, therefore, is almost completely inert. Nitrous oxide (also known as laughing gas) is used in dentistry for is anaesthetic and analgesic (painkilling) effects. Finally, the Division can find no information that the burning of these gases with natural gas will produce the harmful products mentioned in the comment.

Graham Companies

Comments received from Stu Wyllie, President and CEO of The Graham Companies, by letter dated July 31, 2015.

Comment:

> As the owner of a significant parcel of land to the west of the proposed compressor station being considered at 2604 West Oakridge Drive, Albany Georgia (also referred to as the "Albany Compressor Station Alternate E) I would like to express my strong objection to this proposed location. This is based on the adverse effect this location would have on the ambient air quality for the surrounding area. Furthermore these emissions and noise would have a severe impact not only on the current and future residents, but on the wildlife as well.

Division Response:

> The Division's review of Application No. 23350 indicates that the proposed compressor station will meet all applicable air quality rules. With regards to noise, this comment falls outside the scope of this review.

Country Village Mobile Home Park Comments

Comments were received from Joshua D. Marks, Esq. of the Law Offices of Davis, Pickren, Seydel, & Sneed on behalf of Country, GA, LLC, d/b/a Country Village Mobile Home Park ("Company") dated August 7, 2015.

Comment:

Description of Property and Considerations of Environmental Justice

Commenter describes the property and residents of the property. Comment then states, "Given that the Property Residents constitute both a low-income and minority population characteristic of an environmental justice community, it is critical that EPD scrutinize even more thoroughly the impact of the Proposed Facility on the Property Residents as it decides whether or not to issue the Permit."

Division Response:

The Division ran an EJSCREEN Report on a 2-mile radius area centered on the proposed compressor station. The EJSCREEN Report is attached to this narrative. Note that the software does not definitively define Environmental Justice areas. The U.S. EPA defines Environmental Justice as follows:

> "Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across this Nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work."

The primary purpose of Environmental Justice is to ensure that economically disadvantaged individuals are aware of and able to participate in the permitting processes for sources in the areas where they live. The Division has accomplished this activity through a variety of methods including a press release, the Division's web page, and Public Advisories. The affected people of Albany will have at least three separate opportunities to comment on Sabal Trail's proposed compressor stations (thirty-day periods ending 7/11/14, 8/7/15, and 11/12/15). It appears, based on the level of comments received for the proposed compressor station, that the surrounding community is aware of the proposed permit.

Comment:

Proposed Facility Threatens the Property and the Community

The Commenter describes the potential emissions from the proposed compressor station then expresses concerns about the pollutants traveling onto adjacent properties. Commenter states, "In reviewing Sabal's air Permit application for the Proposed Facility on file with EPD, it appears the Proposed Facility is projected to emit a concentration of 208.2 micrograms per cubic meter (μ/m³) of NO2, together with a background level of 32.3 μ/m³, for a total of 240.5 μ/m³ for a one-hour averaging period under National Ambient Air Quality Standards (NAAQS). The emission levels are well above the NAAQS acceptable level of 188 μ/m³. Further, of the 11,000 different receptors used in the projections, 1,281 showed a NAAQS exceedance. This impact was predicted to occur at a distance of 3.1 kilometers from the Proposed Facility, which depending on wind direction would cover the entirety of the Property." Commenter continues, "we are also concerned about volatile organic compounds and CO2 that will be emitted from the Proposed Facility, as well as lesser amounts of several hazardous air pollutants and particulate matter." Commenter expresses concerns about the effects of NOx and VOC emissions.

Division Response:

The description of the project emitting a concentration of 208.2 micrograms per cubic meter of NO2, comparison to the NAAQS, and description of the receptors does not appear in Application No. 23350. This information was included in a report prepared by AMI Environmental and submitted by GreenLaw with their comments. A more complete response to this issue is included in the GreenLaw comments above. The Division, however, disagrees with the conclusion that a shift in wind direction would potentially cause a NAAQS violation on the property. The model results clearly indicate that violations of the NAAQS will not occur on the property.

Comment:

Proposed Facility Threatens the Property and the Community (continued)

Commenter expresses concerns about the noise levels from the proposed compressor station and their potential health affects

Division Response:

This comment falls outside the scope of this review.

Comment:

Commenter states that in lieu of permitting the compressor station detailed in Application No. 23350, EPD should require electric-powered compressors as BACT.

Division Response:

The Division does not redefine the project, which would include requiring alternative sources of energy. Because the proposed compressor station is not subject to PSD regulations, BACT is not required.

Ron and Evelyn Vargo Comments

In addition to being one of the submitters of the first set of comments above, Ron Vargo submitted a comment letter dated August 3, 2015.

Comment:

Background information: As a retired EE and did a career change I went into public health as an Environmental Health Specialist. Per the state health rules like on new restaurants we saw to it that new business met the food service requirements before they could be permitted. Than after permitting we did follow up inspections to see that they continued to meet the rules. If not we had the authority after a reasonable time to pull the permit, and they were shut down until such time they met the rules and then were allowed to reopen.

Comment-question on air quality/emissions/technical compliance issues: Now the compressor station is located within the city limits of Albany, Ga. And they have stated that they will pay city taxes. We now have a major air polluter located south, of the vicinity of about 1000 residents, directly located across from a FEMA mobile home park (with city utilities) from the 1994 flood, and a middle school where the prevailing winds are from the south south/west blowing north over this area where we live. So (like in food service) the question is first what in the world kind of permit would be issued in this situation. Secondly who has the responsibility to issue such a permit, and then who has the responsibility and authority to inspect, and enforce the air pollutant laws to get it back to permitted status over its years of operation to protect our city, and community from toxic emission generated from when the compressor station explodes, or when different types of "…blowdown events" occur.

I asked this very question a year ago in a public forum meeting addressed to any government official in attendance. Not one word was spoken to address this situation of permitting, follow up inspections, and enforcement, and who has the responsibility and authority. So here we are a year plus later looking for answers.

Somebody needs to stop this run away freight train, take a time out and do what is in the best interest of us here and in the state of Ga. A dangerous precedence could be set here. This pipeline and compressor station need NOT come thru Ga. As an Environmental Health Specialist the training words were "Don't mess with the Waters of Ga", and should now include, and the "Air we breathe in Ga". I seriously suggest that someone Google "Wyoming natural gas compressor station explosion". It is a video of a compressor station burning and then exploding. The video runs 1m 30 sec. Watch it a few times, and see the building structure flying through the air. I believe because they moved the location to a more populated area the compressor station is now going to be housed in an acoustical control building, with "…a noise reducer devices". In reading their proposal one easily gets the impression that they have never built a structure like this before.

Division Response:

The Air Protection Branch (APB) of the Georgia Environmental Protection Division (EPD) has the responsibility to review the permit application and draft the Air Quality Permit. The permit is issued under authority of the EPD Director. The APB will be responsible for inspecting the facility and enforcing the permit.

The Division has reviewed Application No. 23350 and determined that the proposed compressor station can reasonably be expected to comply with the applicable air quality regulations enforced by the Division. The concerns about the location and the safe operation of the pipeline and compressor station, however, fall outside the scope of this review.

Curtis Beaird Comments

Comments received from Curtis Beaird by email dated August 3, 2015.

Comment:

Please find attached U.S. Representative Sanford D. Bishop's (Georgia 02) letter to the Federal Regulatory Commission. His material also includes letters from the City of Albany, Georgia and the Board of Commissioners in Dougherty County, Albany, GA.

In addition please find attached a letter from Southern Natural Gas Company, L.L.C. to FERC. SNG is concerned with the number of times Sable Trail pipeline will cross the established lines of SNG. In brief SNG says, "The [SIC] significant number of crossings continues to raise concerns of safety risks during construction and during continued operations of both the Sabal Trail and Southern pipelines."

Division Response:

These comments fall outside the scope of this review.

Comment:

Also, to my knowledge, Spectra Energy plans to use the Solar Titan 130 compressor. Based on my limited research, I find the implication of the name "Solar" to be unrelated to this product.

Division Response:

The turbines that Sabal Trail plans to use at the proposed compressor station are manufactured by Solar Turbines. Solar Turbines is a wholly owned subsidiary of Caterpillar Inc. and is a common manufacturer of turbines in the size needed by Sabal Trail.

Sarah Phillips Comments

Comments received from Sarah Phillips by email dated August 4, 2015.

Comment:

I am a resident of Dougherty County, and we own the land behind our house through which Sabal Trail proposes to clearcut a wide swath to run their natural gas pipeline. These 800 acres are a habitat for several gopher tortoises, a few pileated woodpeckers, wild turkey, ducks and deer. We have wetlands and wet weather ponds. We are good stewards of this land, and we treasure it. We are outraged about a proposed gas pipeline cutting through our property!!

Dougherty County is the only location in the state for a compressor station. Sabal Trail officials have talked of several sites and actually purchased land for a site on Newton Road, but now they have purchased land in what they consider to be a less obtrusive area. However, it is near a trailer park, Winterwood and Indian Creek subdivisions, and not far from a school and a church. I am concerned, as are many other area residents, about the toxic gases leaking or escaping during the pressure releases. I am also concerned for my fellow citizens about the constant noise.

We do not want the compressor station. We do not want the pipeline!! It originates in Tallapoosa County, Alabama, and ends in Florida, servicing two Florida gas companies. Sabal Trail officials have told some people that they "might" put a tap in Albany/Dougherty County, but they will not verify this, nor will they grant our local television an interview. It is my sincere feeling that they are saying this to muddy the water with our local officials who are looking for something of benefit to Dougherty County in this mess. Is there any way to stop this? Can we have a Public Hearing about it and have DNR officials attend?

Division Response:

A public meeting and hearing has been scheduled for November 5, 2015, at Albany Technical College's Kirkland Conference Center. Representatives of the Georgia EPD Air Protection Branch will be in attendance at this hearing.

The other comments and concerns mentioned fall outside the scope of this review.

Mark Clark Comments

In addition to being one of the submitters of the first set of comments above, Mark Clark submitted comments by email on August 6, 2015.

Comment:

> My wife and I have been residents of the Winterwood Neighborhood for 20 years. Both of us are at retirement age and are looking forward to Retiring in our NICE neighborhood. Therefore, we are Extremely OPPOSED to the Proposed location of a Natural Gas Pipeline and Pumping Station. Please take this email as an Endorsement and Signature SUPPORT of the petitions from our Albany community AGAINST this Hazardous System being located in our area!

Division Response:

This comment falls outside the scope of this review.

Jethro Paul Raymer Comments

Comment received from Jethro Paul Raymer by email on July 29, 2015.

Comment:

I am against the gas pipeline it would be a bad deal for the country interest.

Division Response:

This comment falls outside the scope of this review.

GreenLaw Commments (Application No. 22637)

On July 11, 2014, comments were received from Ashten Bailey, Staff Attorney with GreenLaw on behalf of the Sierra Club, the Kiokee-Flint Group, the Flint Riverkeeper and the Chattahoochee Riverkeeper (collectively "Conservation Groups"). These comments were submitted for Application No. 22637 and are included in this permit review in order to have a more complete record.

Comment:

The Conservation Groups request that a public hearing be held in Albany, Georgia to discuss the permitting of this facility and to give the residents of Albany an opportunity to voice their comments and concerns regarding this facility and its environmental impacts.

Division Response:

As stated in the response to an earlier comment, a public hearing has been scheduled for November 5, 2015.

Comment:

The Facility is a Major Stationary Source – The Application Does Not Provide Emissions Information as to the Entirety of the Stationary Source.

The PSD regulation define a stationary source as all "pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person." [40 CFR 52.21(b) (5) & (6)] Under the first criteria, it is clear that this source belongs to the same industrial grouping. The entire length of the pipeline, including the Albany Compressor Station, is classified as SIC Code 4922. Under the third criteria, the entire length of the pipeline, including compressor stations, is clearly owned and operated by the same entity: Sabal Trail.

It is similarly clear that the second criteria of contiguousness or adjacency is met in this case. The Sabal Trail structure is similar to a number of other instances in which EPA has found a single source.

- Letter From Edward E. Reich, EPA to Clyde B. Eller, EPA Region IX (May 16, 1980) – Two facilities connected by pipeline are a single source
- Letter from Richard R. Long, EPA Region VIII to Lynn R. Menlove, Utah Dept. of Envtl. Quality (Aug. 8, 1997) – Parts of a source 21 miles apart were one source because "activities which support the primary activities of a source are considered to be part of the source to which they provide support."
- Letter from Richard Long, EPA Region VIII, to Dennis Myers, Colorado Air Pollution Control Div. (Apr. 20, 1999) – A mine and plant connected by a 44 mile pipeline were considered a single source given "integral connectedness of the facilities."

In this case, the pipeline and associated stations comprise one, long connected major source with all parts of the structure dependent upon each other to achieve its purpose. The pipeline itself will stretch uninterrupted from Alabama to Florida and includes the compressor stations and meter and regulation stations. The Application is incomplete because it does not include emissions estimates for the entire source. Emissions estimates should include, at a minimum, emissions from the five compressor stations, six M&R stations, "pig" launchers and receivers, MLVs, as well as estimates on the pipe itself. However, even reviewing the incomplete data provided by the applicant, it appears that the annual emissions for the entire source are above major source thresholds. For example, assuming similar emissions across all of the five compressor stations, the annual VOC emissions are above 250 tpy.

Division Response:

For PSD and Title V purposes, a single site determination is made only if all three criteria (comment control, adjacency, and industrial grouping) are met. The Division agrees that the first and third criteria in the definition of stationary source referenced above are met. The Division, however, does not agree that the entire length of the pipeline constitute one contiguous or adjacent property. EPA addressed "long line" sources, like pipelines in the preamble to the August 7, 1980 PSD rule:

> EPA has stated in the past and now confirms that it does not intend "source" to encompass activities that would be many miles apart along a long-line operation. For instance, EPA would not treat all of the pumping stations along a multistate pipeline as one "source."

The Division has reviewed the letters cited by GreenLaw. These letters do involve pipelines, but they do not involve pumping or compressor stations like Sabal Trail. Additionally, the Letter from Richard R. Long draws a distinction between the facility subject to Richard R. Long letter and multistate pipelines by stating:

> We have coordinated our response with EPA New Source Review contacts in North Carolina and they agree that our guidance regarding this determination is consistent with statements that EPA has made about long-line operations, such as a pipeline or electrical power lines. EPA would not treat all of the pumping stations along a multi-state pipeline as one source. The distance between those types of operations is typically hundreds of miles. The supply of electrical power to a source has never been used to determine that separate operations are part of the same source. However, the physical relationship between the pump station and the production operations at the Great Salt Lake Minerals plant (i.e., a channel or "pipeline" across the bottom of the lake) is much more similar to conveying operations that transport raw materials to a processing plant. This clearly supports the production operation and is routinely considered to be part of a single stationary source (the production facility plus support operations). This is a rather unique (one of a kind) operation and our guidance is specific for this unique operation.

In addition to clear legal standing, precedent has been set by the Division; natural gas compressor stations along the same pipeline have been historically treated as separate sources.

Summit Petroleum Case
The August 7, 2012 Sixth Circuit Court decision makes it clear that the test for "adjacency" is actually being physically adjacent; a long interstate pipeline does not imply adjacency. The May 30, 2014 D.C. Circuit Court of Appeals further emphasized this on a nationwide basis.

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued January 17, 2014 Decided May 30, 2014

No. 13-1035

NATIONAL ENVIRONMENTAL DEVELOPMENT ASSOCIATION'S
CLEAN AIR PROJECT,
PETITIONER

v.

ENVIRONMENTAL PROTECTION AGENCY,
RESPONDENT

On Petition for Review of Action of the
United States Environmental Protection Agency

Comment:

The Facility is a Major Stationary Source – The Provided Emissions Estimates are Too Low – Similar Facilities Assume Much Higher Emissions Estimates.

Sabal Trail has provided some emissions estimates within its Application. However, these emissions calculations are extremely low. For example, a nearly identical compressor station proposed in 2012 (Cheniere Corpus Christi Pipeline, L.P.) estimated almost triple the NOX and CO emissions as Sabal Trail projected in their calculations.

Division Response:

The Division has calculated potential emissions from the proposed Sabal Trail facility and has determined that the potential emissions of NOx are 48.1 tons per year and of CO are 39.7 tons per year based on limits in the proposed permit. At these emission levels, the facility is not a major source with regard to Title V regulations. It should also be noted that the Cheniere Corpus Christi Pipeline application proposed higher emission limits for NOx (25 vs. 9 ppm at 15% O_2) and CO (50 vs. 1.25 ppm at 15% O_2). These higher emission limits account for the higher emissions from other facility.

Regardless of the agreed-upon limits in the Texas application, the limits proposed in the Sabal Trail application are based on reasonable expectations of compliance and the draft permit limits are paired with requirements to make those limits enforceable as a practical matter.

Comment:

The Facility is a Major Stationary Source – The Provided Emissions Estimates are Too Low – Increased Emissions due to Startup and Shutdowns are not Adequately Addressed in the Application.

Division Response:

The Division disagrees. Commenter failed to provide evidence contradicting the applicant's estimate of the quantity of startup/showdown time.

Comment:

The Facility is a Major Stationary Source – Emissions from Blowdown Emissions of VOCs and Methane are Unsupported.

Division Response:

The Division disagrees. Commented failed to provide evidence contradicting the applicant's estimate of blowdown emissions. In any case, because gas releases result in lost product, it would behoove the company to minimize loss. Furthermore, gas releases are regulated by the Pipeline and Hazardous Materials Safety Administration (PHMSA).

Comment:

The BACT Analysis Is Inadequate and Fails to Include Relevant Emission Control Measures.

Division Response:

As noted earlier in this narrative, the proposed facility will be a minor source with respect to PSD and a synthetic minor source with respect to Title V. BACT is not required for sources that are minor for PSD.

Comment:

The Application Contains Inadequate, Incorrect, and Misleading Modeling.

The following issues were specifically noted as being of issue:

1. The Facility Should Use the Publicly Available Version of Modeling Software.
2. The Facility Relies on an Outdated Version of Meteorological Data.
3. The Receptor Grid is Too Coarse to Capture Maximum Impacts.
4. 1-Hour NO2 Modeling Should Have Modeled the Worst Case Hourly NOX Emission Rates.
5. 1-hour NO2 Impacts are Underestimated by Omitting Heater Emissions.
6. The Startup/Shutdown Modeled NOX Rates Were Not Consistent with the Assumptions in the Application for Worst Case Hourly NOX Emissions During Startup and Shutdown.
7. 1-hour NO2 Impacts are Underestimated by Modeling 75% Turbine Load.
8. Use of the AERMOD Model for PSD Class I Modeling is Incorrect.
9. Ozone Impacts Have Not Been Addressed.
10. Plume Blight Has Not Been Modeled.

Division Response:

As noted earlier in this narrative, the proposed facility will be a minor source with respect to PSD and a synthetic minor source with respect to Title V. This modeling is not required for sources that are minor for PSD, and it has not been evaluated by the Division. The comment is moot because PSD AERMOD is not applicable in this case.

Comment:

EPD Must Ensure that the Source as Designed and Permitted Will Not Cause or Contribute to a Violation of the NAAQS.

Division Response:

The Division believes that the proposed permit contains sufficient conditions to ensure that Sabal Trail does not cause or contribute to a NAAQS violation. Additionally, Georgia operates a network of air emission monitors throughout the state to discover if air quality is being affected. NO2 concentrations in the ambient air in Georgia, as registered by these monitors are much lower than the NAAQS. http://www.georgiaair.org/tmp/today/amp_NOx.html

It should be noted that AERMOD modeling is only prescribed for PSD-subject projects, may overpredict actual ambient concentrations, and includes sources of NOx emissions that are no longer in operation (Plant Mitchell).

Comment:

The Permit Must Contain Provisions to Ensure that Potential to Emit as Projected is the Same as Actual Operation.

Division Response:

The Division believes that the proposed permit contains sufficient conditions to ensure that the facility operates as a synthetic minor source.

Comment:

EPD Must Require the Facility to Obtain a Title V Operating Permit.

Even if a source is not considered a major source for purposes of PSD review, non-major sources subject to NESHAP and NSPS standards must still obtain a Title V Permit. The facility admits that it will be subject to a variety of NESHAP and NSPS standards, such as 40 CFR 60, Subpart KKKK. As a result, the source must obtain a Title V Operating Permit.

Division Response:

This claim is not supported by EPA's or the Division's rules and regulations. Federal regulations do specifically require certain categories or stationary sources subject to some NSPS or MACT to obtain a Title V permit, but turbines subject to Subpart KKKK are not among these categories.

Nonami Oglethorpe Commments (Application No. 22637)

On July 11, 2014, comments were received from Joshua D. Marks, Esq. of the Law Offices of Davis, Pickren, Seydel, & Sneed submitted comments on behalf of Nonami Oglethorpe, LLC, the owner of Nanomi Plantation. These comments were submitted in response to Application No. 22637 and are included in this permit review in order to have a more complete record.

Comment:

The impact of most urgent concern to Nonami relates to the Station's projected emissions of air pollutants and their effect on the natural environment of the Property. The Property features extensive areas of significant conservation value, including over 3,300 acres of natural upland forest (including almost 1,000 acres of rate longleaf pine), over 650 acres of bottomland hardwood forests, nearly 40 acres of depressional wetlands, numerous fresh water springs and seeps, and almost 4.7 miles of frontage along the Flint River. The mosaic of forest types and water resources on the Property provide habitat for a wealth of species of mammals, reptiles, amphibians, resident birds and migratory birds. The superior nature of the Property's conservation values is reflected in their protection via a qualified Conservation Easement held by the Georgia Land Trust. All of these exceptional conservation values are likely to be sensitive to, and thus may be at risk from, the Station's projected emissions.

In reviewing the application, it appears that the Station is projected to emit over 187,000 tons per year of CO2e, 57 tons per year of volatile organic compounds ("VOCs"), 46 tons per year of oxides of nitrogen ("NOX", and lesser amounts of several hazardous air pollutants and particulate matter. The dispersion modeling appears to indicate that these emissions will travel onto the Property, which is less than ¼ mile away to the southeast. It has been well established that NOX in the air can damage the leaves of plants, decrease their photosynthetic capacity, and decrease their growth. In addition, when deposited on land and in estuaries, lakes and streams, NOX can acidify and over-fertilize sensitive ecosystems resulting in a range of harmful deposition-related effects on plants, soils, water quality, and fish and wildlife (e.g., changes in biodiversity and loss of habitat, reduced tree growth, loss of fish species, and harmful algal blooms). VOCs are also known to impact the respiratory and neurological systems of wildlife, particularly birds due to their higher breathing rates and weaker systems. VOCs can also contaminate streams, impacting fish species, and can also impact invertebrates with thin, fleshy outer coverings. Individual or collective impacts such as these on the Property could have a devasting effect on the biological integrity that makes the Property so unique.

In addition to the impacts of these pollutants on the natural environment of the Property, Nonami is also concerned about impacts to human health. It is well established that NOX and VOCs especially have the potential to harm respiratory, cardiological, neurological, or kidney functions. Small levels of NOx can cause nausea, irritated eyes and/or nose, fluid forming in the lungs and shortness of breath. Breathing in higher levels of NOX and VOCs can cause rapid burning spasms, swelling of the throat, reduced oxygen intake and lung damage, dizziness, nausea, fatigue and nosebleeds, and can also be carcinogenic. The combination of VOCs with sunlight can form ground-level ozone, which can cause respiratory problems, chest pain, coughing and congestion.

Division Response:

The U.S. EPA has established National Ambient Air Quality Standards (NAAQS) to ensure that the public health and environment are not damaged. The Division believes that the proposed permit contains sufficient conditions to ensure that the NAAQS are not exceeded due to emissions from this facility.

Comment:

Another pollutant of concern from the Station is noise. Compressor stations are notorious for the amount of noise they emit during operations, and such noise can have a major impact on wildlife and people. Certain species depend heavily on hearing for courtship and mating, prey location, predator detection, and/or homing. Given the abundance of wildlife species on the Property, especially birds (both game and non-game), Nonami is gravely concerned that noise will disrupt the Property's wildlife and especially the quail population, which is a central component of the Property's well known hunting program. With regard to people, according to the World Health Organization, noise can cause permanent medical conditions such as hypertension and heart disease, hearing impairment, communication problems, sleep disturbance, cognitive effects such as memory problems, reduced performance, behavioral symptions, and more. Low-frequency noise, which is caused by compressor stations, can also cause vibro-acoustic disease, leading to cardiovascular symptoms and decreased cognitive skills.

Division Response:

This comments falls outside the scope of this review. As stated earlier, the Federal Energy Regulatory Commission (FERC) has responsibility for regulating noise associated with the pipeline and compressor station.

Comment:

Yet another issue of concern to Nonami is the fragile nature of the geologic underpinning of the general area when the Stations is proposed to be sited. It appears that the Station May sit directly above or adjacent to a compound sinkhole formation, which poses a high risk of collapse, consequential rupture, and explosive emissions. As a close neighbor of the Station, the Property would likely receive the fallout of such an event.

Division Response:

This comment falls outside the scope of this review. As state earlier, FERC and the Pipeline and Hazardous Materials Safety Administration (PHMSA) have regulations for safe location and operating of the pipeline and compressor station.