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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.: R13-2064F
Plant ID No.: 103-00010
Applicant: Columbia Gas Transmission, LLC (Columbia)
Facility Name: Smithfield Compressor Station
Location: Smithfield, Wetzel County
NAICS Code: 486210 (Pipeline Transportation of Natural Gas)
Application Type: Modification
Received Date: August 12, 2013
Engineer Assigned: Jerry Williams, P.E.
Fee Amount: \$2,000.00
Date Received: August 12, 2013
Complete Date: September 10, 2013
Due Date: December 9, 2013
Applicant Ad Date: August 14, 2013
Newspaper: *Wetzel Chronicle*
UTM's: Easting: 539.68 km Northing: 4,370.03 km Zone: 17
Description: Installation of one (1) emergency generator, one (1) heater, and the removal of one (1) emergency generator.

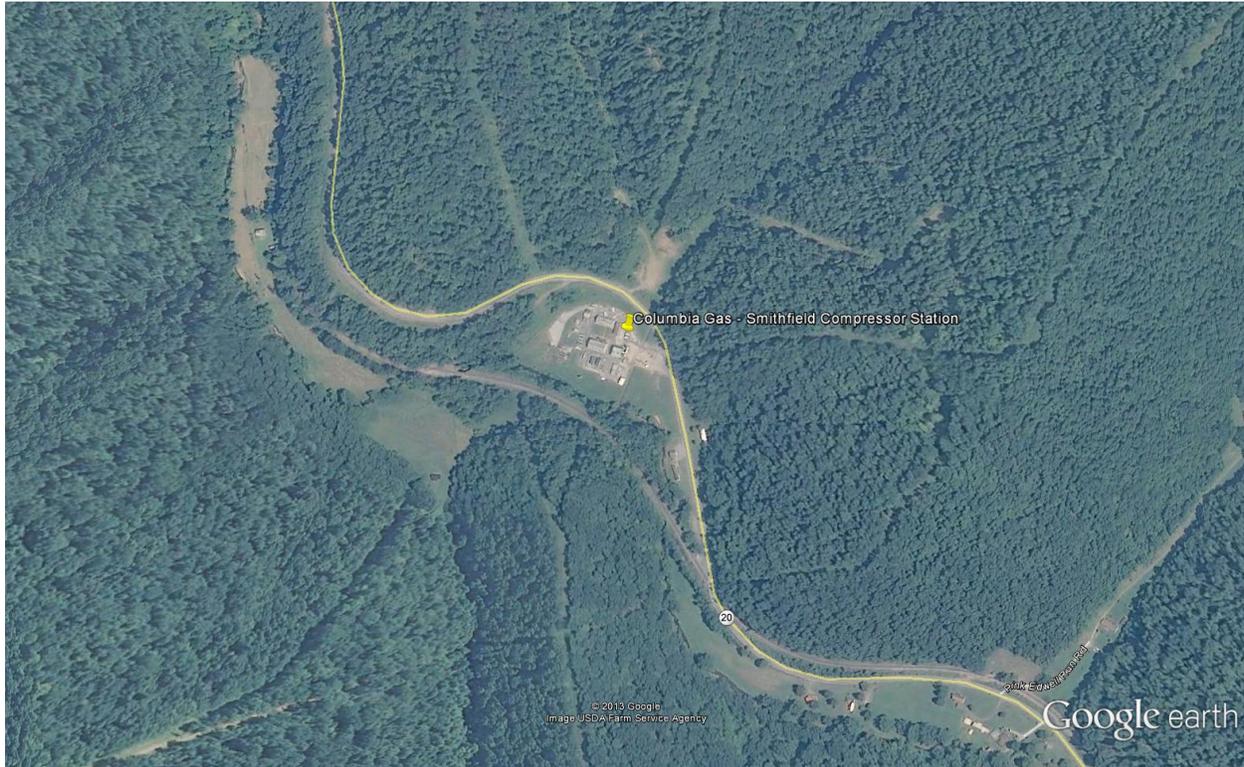
DESCRIPTION OF PROCESS

The following process description was taken from Permit Application R13-2064F:

Pipeline transmission of natural gas requires that the gas be compressed. The Smithfield Compressor Station utilizes two (2) reciprocating internal combustion engines (RICE) and one (1) turbine to drive centrifugal compressors. The facility also has various heaters and tanks. In addition, there is a 250 hp emergency generator which is used to produce power in the event of a power outage. This modification will replace the existing emergency generator with a new 530 hp emergency generator. The installation of a 0.30 MMBTU/hr heater is also proposed.

SITE INSPECTION

A site inspection was conducted on February 6, 2013 by Doug Hammell of the WVDEP DAQ Enforcement Section. The facility was found to be operating in compliance at that time.



ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Emissions associated with this modification application consist of the combustion emissions from one (1) natural gas fired emergency generator (G3) and one (1) heater (H3). The following table indicates which methodology was used in the emissions determination:

Emission Point ID#	Process Equipment	Calculation Methodology
G3	530 hp Waukesha VGF24GL Emergency Generator	Manufacturer's Data, EPA AP-42 Emission Factors
H3	0.30 MMBTU/hr Heater	EPA AP-42 Emission Factors

Maximum detailed controlled point source emissions concerning this modification were calculated by Columbia and checked for accuracy by the writer and are summarized in the table below.

Emission Source	Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (tpy)
G3 - 530 hp Waukesha VGF24GL Emergency Generator	Nitrogen Oxides	2.34	0.58
	Carbon Monoxide	1.52	0.38
	Volatile Organic Compounds	0.30	0.08
	Sulfur Dioxide	0.25	<0.01
	Particulate Matter-10	0.04	0.01
	Carbon Dioxide Equivalent	517	129
	Total HAPs	0.32	0.08
H3 - 0.30 MMBTU/hr Heater	Nitrogen Oxides	0.03	0.13
	Carbon Monoxide	0.02	0.11
	Volatile Organic Compounds	<0.01	0.01
	Sulfur Dioxide	0.02	<0.01
	Particulate Matter-10	<0.01	0.01
	Carbon Dioxide Equivalent	35	154
	Total HAPs	<0.01	<0.01

The following table indicates the existing potential to emit (PTE), emissions reduction for equipment removed, emissions increase for the new equipment, and the net change in PTE in tons/year (tpy):

Pollutant	Current Facility PTE (tpy)	Emissions Reduction from Equipment Removal (tpy)	Emissions Increase from New Equipment (tpy)	Net Change in PTE (tpy)
Carbon Monoxide	71.64	1.93	0.49	-1.44
Nitrogen Oxides	537.06	1.93	0.71	-1.22
Particulate Matter-10	0.50	0.01	0.02	0.01
Sulfur Dioxide	1.55	<0.01	<0.01	<0.01
Volatile Organic Compounds	16.58	0.03	0.08	0.06 ¹
Carbon Dioxide Equivalents	44,426	78	283	206 ¹
Total HAPs	8.16	0.02	0.08	0.06

¹ – Small discrepancies due to rounding may exist.

The total facility PTE for the Smithfield Compressor Station is shown in the following table:

Pollutant	Facility Wide PTE (tons/year)
Nitrogen Oxides	535.32
Carbon Monoxide	70.22
Volatile Organic Compounds	16.38
Particulate Matter-10	2.96
Sulfur Dioxide	0.27
Formaldehyde	6.82
Total HAPs	9.37
Carbon Dioxide Equivalent	44,632

REGULATORY APPLICABILITY

The following rules apply to this modification:

45CSR2 (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers)

The purpose of 45CSR2 is to establish emission limitations for smoke and particulate matter which are discharged from fuel burning units. 45CSR2 states that any fuel burning unit that has a heat input under ten (10) million B.T.U.'s per hour is exempt from sections 4 (weight emission standard), 5 (control of fugitive particulate matter), 6 (registration), 8 (testing, monitoring, recordkeeping, reporting) and 9 (startups, shutdowns, malfunctions). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

The individual heat input of the proposed fuel burning unit (H3) is below 10 MMBTU/hr. Therefore, this unit is exempt from the aforementioned sections of 45CSR2. However, Columbia would be subject to the opacity requirements in 45CSR2, which is 10% opacity based on a six minute block average.

45CSR10 (To Prevent and Control Air Pollution from the Emissions of Sulfur Oxides)

The purpose of 45CSR10 is to establish emission limitations for sulfur dioxide which are discharged from fuel burning units. 45CSR10 states that any fuel burning unit that has a heat input under ten (10) million B.T.U.'s per hour is exempt from sections 3 (weight emission standard), 6 (registration), 7 (permits), and 8 (testing, monitoring, recordkeeping, reporting). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

The individual heat input of the proposed fuel burning unit (H3) is below 10 MMBTU/hr. Therefore, this unit is exempt from the aforementioned sections of 45CSR10.

45CSR13 (Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation)

45CSR13 applies to this source due to the fact that Columbia is subject to a substantive requirement of an emission control rule promulgated by the Secretary (40CFR60 Subparts OOOO and JJJJ).

Columbia paid the appropriate application fee and published the required legal advertisement for a construction permit application.

45CSR16 (Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60)

45CSR16 applies to this source by reference of 40CFR60 Subpart JJJJ. These requirements are discussed under that rule below.

45CSR30 (Requirements for Operating Permits)

Columbia is subject to 45CSR30. The Smithfield Compressor Station has the potential to emit 537.06 tons of Nitrogen Oxides (NOX) per year. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Columbia is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Columbia is required to pay the appropriate annual fees and submit an annual Certified Emissions Statement.

40CFR60 Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (SI ICE))

40CFR60 Subpart JJJJ establishes emission standards for applicable SI ICE.

The 530 hp Waukesha VGF24GL RICE (G3) was manufactured after January 1, 2009 and it is subject to emission standards, operating standards, performance testing, and notification and recordkeeping. The following emission standards must be met:

Pollutant	Emission Standard
Nitrogen Oxides	2 grams per HP-hour
Carbon Monoxide	4 grams per HP-hour
Volatile Organic Compounds	1 grams per HP-hour

According to the manufacturer's data, this engine will meet these standards.

Because this engine will not be certified by the manufacturer, Williams will be required to perform an initial performance test within 180 days from startup, and subsequent testing every 8,760 hours or 3 years, whichever comes first.

40CFR63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines)

Subpart ZZZZ establishes national emission limitations and operating limitations for HAPs emitted from stationary RICE located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations. The existing engines (E01, E02, E05) at the Smithfield Compressor Station are subject to the area source requirements.

The Smithfield Compressor Station has two (2) 1,500 HP reciprocating engines subject to the area source provisions under 40 C.F.R. Part 63 Subpart ZZZZ. The reciprocating engines are existing sources constructed prior to June 12, 2006. The facility shall comply with all applicable requirements of 40 C.F.R. Part 63 Subpart ZZZZ by October 19, 2013 per 40 C.F.R. § 63.6595 (a).

The 1,500 HP engines (E01, E02) are existing non-emergency spark-ignition (SI) four-stroke lean burn (4SLB) Ingersoll-Rand 412 KVGB Reciprocating Engines/Integral Compressors greater than 500 HP that combust pipeline quality natural gas. Engines (E01, E02) are subject to the emission limitations for a non-emergency, non-black start 4SLB stationary RICE as specified in Table 2d, Item 8 (limit concentration of CO in the stationary RICE exhaust to 47 ppmvd at 15 percent O₂; or reduce CO emissions by 93 percent or more) and the operating limitations as specified in Table 2b.

Following, are the applicable RICE MACT requirements according to the “Summary of Requirements” table provided by EPA.

Emission Unit ID	Emission Limitations	Operating Limitations	Performance Testing	Monitoring Requirements	Initial Compliance	Continuous Compliance	Notification Requirements	Record-keeping Requirements	Reporting Requirements
09801 09802	§ 63.6603 Table 2d, Item 8	§ 63.6603 Table 2b	§ 63.6612 § 63.6615 § 63.6620 Table 3 Table 4 Table 5	§§ 63.6625 (a), (b), (h)	§ 63.6630 Table 5	§ 63.6605 § 63.6635 § 63.6640	§ 63.6645	§§ 63.6655 (a), (b), (d)	§§ 63.6650 (a) – (f)
	Table 2d, Item 5								

Emission Unit ID	General Provisions (40 C.F.R. Part 63)
09801 09802	Yes

The applicability requirements for new stationary RICEs (G3) located at area source of HAPs, is the requirement to meet the standards of 40CFR60 Subpart JJJJ. These requirements were outlined above. The proposed engine meets these standards.

Because this engine (G3) will not be certified by the manufacturer, Columbia will be required to perform an initial performance test within 180 days from startup, and subsequent testing every 8,760 hours or 3 years, whichever comes first.

The following rules do not apply to this modification:

40CFR60 Subpart OOOO (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution)

EPA published in the Federal Register new source performance standards (NSPS) and air toxics rules for the oil and gas sector on August 16, 2012. 40CFR60 Subpart OOOO establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO₂) emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011.

The following affected sources which commence construction, modification or reconstruction after August 23, 2011 are subject to the applicable provisions of this subpart:

- a. Each gas well affected facility, which is a single natural gas well.

There are no gas wells at this facility. Therefore, all requirements regarding gas well affected facilities under 40 CFR 60 Subpart OOOO would not apply.

- b. Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals that is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. For the purposes of this subpart, your centrifugal compressor is considered to have commenced construction on the date the compressor is installed (excluding relocation) at the facility. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

The Smithfield Compressor Station is not located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. Therefore, all requirements regarding centrifugal compressors under 40 CFR 60 Subpart OOOO would not apply.

- c. Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. For the purposes of this subpart, your reciprocating compressor is considered to have commenced construction on the date the compressor is installed (excluding relocation) at the facility. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

The Smithfield Compressor Station is not located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. Therefore, all requirements regarding reciprocating compressors under 40 CFR 60 Subpart OOOO would not apply.

d. Pneumatic Controllers

- Each pneumatic controller affected facility, which is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 scfh which commenced construction after August 23, 2011, and is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment and not located at a natural gas processing plant.
- Each pneumatic controller affected facility, which is a single continuous bleed natural gas-driven pneumatic controller which commenced construction after August 23, 2011, and is located at a natural gas processing plant.

The Smithfield Compressor Station is not located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. Therefore, all requirements regarding pneumatic controllers under 40 CFR 60 Subpart OOOO would not apply.

e. Each storage vessel affected facility, which is a single storage vessel, located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment.

40CFR60 Subpart OOOO defines a storage vessel as a unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provides structural support and is designed to contain an accumulation of liquids or other materials. The following are not considered storage vessels:

- Vessels that are skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges or ships), and are intended to be located at a site for less than 180 consecutive days. If the source does not keep or are not able to produce records, as required by §60.5420(c)(5)(iv), showing that the vessel has been located at a site for less than 180 consecutive days, the vessel described herein is considered to be a storage vessel since the original vessel was first located at the site.
- Process vessels such as surge control vessels, bottoms receivers or knockout vessels.
- Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere.

This rule requires that the permittee determine the VOC emission rate for each storage vessel affected facility utilizing a generally accepted model or calculation methodology within 30 days of startup, and minimize emissions to the extent practicable during the 30 day period using good engineering practices. For each storage vessel affected facility that emits more than 6 tpy of VOC, the permittee

must reduce VOC emissions by 95% or greater within 60 days of startup. The compliance date for applicable storage vessels is October 15, 2013.

The storage vessels located at the Smithfield Compressor Station commenced construction, modification, or reconstruction before August 23, 2011. Therefore, Columbia is not required by this section to reduce VOC emissions by 95%.

- f. The group of all equipment, except compressors, within a process unit is an affected facility.
- Addition or replacement of equipment for the purpose of process improvement that is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.
 - Equipment associated with a compressor station, dehydration unit, sweetening unit, underground storage vessel, field gas gathering system, or liquefied natural gas unit is covered by §§60.5400, 60.5401, 60.5402, 60.5421 and 60.5422 of this subpart if it is located at an onshore natural gas processing plant. Equipment not located at the onshore natural gas processing plant site is exempt from the provisions of §§60.5400, 60.5401, 60.5402, 60.5421 and 60.5422 of this subpart.
 - The equipment within a process unit of an affected facility located at onshore natural gas processing plants and described in paragraph (f) of this section are exempt from this subpart if they are subject to and controlled according to subparts VVa, GGG or GGGa of this part.

The Smithfield Compressor Station is not a natural gas processing plant. Therefore, Leak Detection and Repair (LDAR) requirements for onshore natural gas processing plants would not apply.

- g. Sweetening units located at onshore natural gas processing plants that process natural gas produced from either onshore or offshore wells.
- Each sweetening unit that processes natural gas is an affected facility; and
 - Each sweetening unit that processes natural gas followed by a sulfur recovery unit is an affected facility.
 - Facilities that have a design capacity less than 2 long tons per day (LT/D) of hydrogen sulfide (H₂S) in the acid gas (expressed as sulfur) are required to comply with recordkeeping and reporting requirements specified in §60.5423(c) but are not required to comply with §§60.5405 through 60.5407 and paragraphs 60.5410(g) and 60.5415(g) of this subpart.
 - Sweetening facilities producing acid gas that is completely reinjected into oil-or-gas-bearing geologic strata or that is otherwise not released to the

atmosphere are not subject to §§60.5405 through 60.5407, 60.5410(g), 60.5415(g), and 60.5423 of this subpart.

There are no sweetening units at the Smithfield Compressor Station. Therefore, all requirements regarding sweetening units under 40 CFR 60 Subpart OOOO would not apply.

40CFR63 Subpart HH (National Emission Standards for Hazardous Air Pollutants for Oil and Natural Gas Production Facilities)

Subpart HH establishes national emission limitations and operating limitations for HAPs emitted from oil and natural gas production facilities located at major and area sources of HAP emissions. The Smithfield Compressor Station is not subject to Subpart HH since the station is not an oil and gas production facility.

40CFR60 Subpart Kb (Standards of Performance for VOC Liquid Storage Vessels)

40CFR60 Subpart Kb does not apply to storage vessels with a capacity less than 75 cubic meters. The tanks that Columbia has installed are below this size. Therefore, Columbia would not be subject to this rule.

40CFR60 Subpart KKK (Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants)

40CFR60 Subpart KKK applies to onshore natural gas processing plants that commenced construction after January 20, 1984, and on or Before August 23, 2011. The Smithfield Compressor Station is not a natural gas processing facility, therefore, Columbia is not subject to this rule.

40CFR60 Subpart KKKK (Standards of Performance for Stationary Combustion Turbines)

40CFR60 Subpart KKKK applies to combustion turbines that were installed before February 18, 2005. The combustion turbine at the Smithfield Compressor Station was installed prior to this date, therefore, Columbia is not subject to this rule.

40CFR63 Subpart YYYY (National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines)

40CFR60 Subpart YYYY applies to combustion turbines that are major source of HAP emissions. The Smithfield Compressor Station is not a major source of HAP emissions, therefore, Columbia is not subject to this rule.

45CSR14 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollutants)

45CSR19 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution which Cause or Contribute to Nonattainment)

The Smithfield Compressor Station is located in Wetzel County, which is an attainment county for all criteria pollutants, therefore the Smithfield Compressor Station is not applicable to 45CSR19.

As shown in the table below, Columbia is not subject to 45CSR14 or 45CSR19 review.

Pollutant	PSD (45CSR14) Threshold (tpy)	NANSR (45CSR19) Threshold (tpy)	Smithfield PTE (tpy)	45CSR14 or 45CSR19 Review Required?
Carbon Monoxide	250	NA	70.22	No
Nitrogen Oxides	250	NA	535.32	No, See Explanation Below
Sulfur Dioxide	250	NA	0.27	No
Particulate Matter 2.5	250	NA	2.96	No
Ozone (VOC)	250	NA	16.38	No
Greenhouse Gas (CO ₂ e)	100,000	NA	44,632	No

PSD Applicability Determination

The Smithfield Compressor Station is an existing Major Stationary Source with respect to PSD because they have actual emissions of nitrogen oxides in excess of 250 tons per year. The Smithfield Compressor Station is not one of the listed 28 major stationary sources whose emissions threshold is 100 tpy as defined in 40CFR52.21(b)(1)(i) and 45CSR14 Section 2.43. In order for a project to become subject to PSD review, the major stationary source must have a significant emissions increase from the project **and** a significant net emissions increase as calculated over the 5 year contemporaneous period. The first step is to determine if the proposed project results in a significant emissions increase utilizing the calculation procedures in 45CSR14 (Permits for Construction and Major Modification of Major Stationary Sources for the Prevention of Significant Deterioration of Air Quality) Section 3.4. The procedure for calculating whether a significant emissions increase will occur depends on the type of emissions units being modified. The procedure for calculating whether a significant net emissions increase will occur at the major stationary source, which is the second step in the process, is contained in 45CSR14 Section 2.46. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

In determining whether a significant emissions increase occurs, 45CSR14 provides two (2) ways to make that determination. These calculations are based on whether or not it is an existing emissions unit or a new emissions unit.

45CSR14 Section 2.27 defines an ‘emissions unit’ as any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric utility steam generating unit as defined in subsection 2.25. For the purposes of this rule, there are two types of emissions units as described in subdivisions 2.27.a and 2.27.b.

2.27.a. A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated.

2.27.b. An existing emissions unit is any emissions unit that does not meet the requirements in subdivision 2.27.a. A replacement unit, as defined in subsection 2.68, is an existing emissions unit.

Because the emergency generator and heater proposed at the Smithfield Compressor Station would be new emissions unit, they would fall under 2.27.a.

Therefore, since emissions units at Smithfield Compressor Station would be considered new units, 45CSR14 Section 3.4.d states that an Actual-to-Potential test would be utilized. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in subsection 2.58) and the baseline actual emissions (as defined in subdivisions 2.8.a and 2.8.b), for each existing emissions unit, equals or exceeds the significant amount of that pollutant (as defined in subsection 2.74).

The first step is to determine whether or not the proposed project results in a significant emissions increase utilizing the Actual-to-Potential test. The result of that test will be compared to PSD Significant Emission Rates (SER) to determine PSD applicability. If the resultant emissions are below the PSD SER then the project is not subject to PSD review. If the project’s emissions are greater than the PSD SER then all contemporaneous increases and decreases must be examined to determine if the project is subject to PSD Review. The potential to emit from the emissions units associated with this project were based on the proposed engines.

The following table indicates what Smithfield Compressor Station’s potential emissions increase would be with the installation of the emergency generator and heater:

Pollutant	Emissions increase associated with this modification (tpy)	PSD SER (tpy)	Subject to PSD Review (Y or N)
NO _x	0.71	40	N
CO	0.49	100	N
SO ₂	<0.01	40	N
PM ₁₀	0.02	15	N
VOC	0.08	100	N
CO ₂ e	283	75,000	N

As shown in the table above, no pollutant exceeds the SER. Therefore, it is not necessary to calculate the net emissions increase over a 5 year contemporaneous period.

Final Conclusion

Because there was not an emissions increase above the PSD SER, PSD review is not required.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

There will be small amounts of various non-criteria regulated pollutants emitted from the combustion of natural gas. However, due to the concentrations emitted, detailed toxicological information is not included in this evaluation.

AIR QUALITY IMPACT ANALYSIS

Modeling was not required of this source due to the fact that the facility is not subject to 45CSR14 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollutants) as seen in the table listed in the Regulatory Discussion Section.

SOURCE AGGREGATION

“Building, structure, facility, or installation” is defined as all the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous and adjacent properties, and are under the control of the same person.

The Smithfield Compressor Station is located in Wetzel County and will be operated by Columbia.

1. The Smithfield Compressor Station will operate under SIC code 4922 (Pipeline Transportation of Natural Gas). There are other compressor stations operated by Columbia that share the same two-digit major SIC code of 49 for natural gas transmission. Therefore, the Smithfield Compressor Station does share the same SIC code as other Columbia compressor stations.
2. “Contiguous or Adjacent” determinations are made on a case by case basis. These determinations are proximity based, and it is important to focus on this and whether or not it meets the common sense notion of a plant. The terms “contiguous” or “adjacent” are not defined by USEPA. Contiguous has a dictionary definition of being in actual contact; touching along a boundary or at a point. Adjacent has a dictionary definition of not distant; nearby; having a common endpoint or border.

There are no Columbia properties in question that are considered to be on contiguous or adjacent property with the Smithfield Compressor Station.

3. The proposed Smithfield Compressor Station is not under common control with any facilities in question.

Because the facilities are not considered to be on contiguous or adjacent properties and not under common control, the emissions from the Smithfield Compressor Station should not be aggregated with other facilities in determining major source or PSD status.

MONITORING OF OPERATIONS FOR PROPOSED MODIFICATION

Columbia will be required to perform the following monitoring:

1. Monitor and record quantity of natural gas consumed for all fuel combustion sources.
2. Monitor all applicable requirements of 40CFR60 Subpart JJJJ.

Columbia will be required to perform the following recordkeeping:

1. Maintain records of the amount of natural gas consumed and hours of operation for all fuel combustion sources.
2. Maintain records of testing conducted in accordance with the permit. Said records shall be maintained on-site or in a readily accessible off-site location
3. Maintain the corresponding records specified by the on-going monitoring requirements of and testing requirements of the permit.
4. Maintain a record of all potential to emit (PTE) HAP calculations for the entire facility. These records shall include the natural gas compressor engines and ancillary equipment.
5. Maintain records of all applicable requirements of 40CFR60 Subpart JJJJ.
6. The records shall be maintained on site or in a readily available off-site location maintained by Columbia for a period of five (5) years.

RECOMMENDATION TO DIRECTOR

The information provided in the permit application indicates that Columbia meets all the requirements of applicable regulations. Therefore, impact on the surrounding area should be minimized and it is recommended that the Smithfield Compressor Station should be granted a 45CSR13 modification permit for their facility.

Jerry Williams, P.E.
Engineer

Date