

west virginia department of environmental protection

Division of Air Quality 601 57th Street SE Charleston, WV 25304 Phone (304) 926-0475 • FAX: (304) 926-0479 Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.: R13-3099
Plant ID No.: 021-00022

Applicant: CONE Gathering LLC

Facility Name: Normantown Compressor Station

Location: Gilmer County
NAICS Code: 211112, 486210
Application Type: Construction
Received Date: June 28, 2013

Engineer Assigned: Jill Harris
Fee Amount: \$4,500.00
Date Received: July 1, 2013
Complete Date: August 2, 2013
Due Date: October 31, 2013
Applicant Ad Date: July 11, 2013

Newspaper: The Glenville Democrat

UTM's: Easting: 502.8442 km Northing: 4,300.3474 km

Zone: 17

Description: A new natural gas compressor station with (3) three natural gas

fired compressor engines, (1) one diesel fired generator, (1) one TEG dehydration unit, (1) one vapor recovery unit, (1) one vapor recovery natural gas fired engine, multiple storage tanks and

loadout operations.

DESCRIPTION OF PROCESS

The Normantown Compressor Station will provide gathering, compression, and dehydration of nearby-produced natural gas. Free water will be removed via a in-line separator, while additional water will be removed via a triethylene glycol (TEG) dehydration system.

The purpose of this application is to permit one natural gas dehydration unit/reboiler (DEHY-1/RBLR-1), three compressor engines (E-1 through E-3), one generator diesel engine (G-1), one truck loading rack (LOAD-1) for off-site shipment of pipeline liquids, three aboveground storage tank (T-4) containing dehydrator glycol. There will also be a few very small lube oil and compressor oil tanks located on the facility.

The three storage tanks containing condensate/produced water (T-1 through T-3) and the truck loading rack (LOAD-1) will have their volatile organic chemical (VOC) emissions controlled by a vapor recovery unit control device (VRU-1). Two of the three compressor engines (E-2 and E-3) will have Non-Selective Catalytic Reduction (NSCR) control systems.

For the storage tanks at the site, only the produced water, condensate storage, and mixed liquids tanks (T-1 through T-3) will have any calculable emissions of regulated air pollutants. The other liquids storage tanks (glycol and engine oils) will have negligible emissions of regulated air pollutants due to the extremely low vapor pressures and insignificant annual material throughputs.

Source Aggregation Statement

- CONE Gathering has included all emission sources within this permit application that
 will comprise its proposed new Normantown Compressor Station, and that are under
 the ownership or operational control of CONE Gathering and that are within adjacent
 or contiguous proximity (within one mile) to the proposed Normantown Compressor
 Station and meet the common sense notion of a plant.
- There are no downstream emission sources which would have operation dependence upon the CONE Gathering Normantown Compressor Station, and that would get within the ordinary meaning of a "Building, Structure, Facility, or Installation."
- The natural gas well site/wellpad that supply the incoming natural gas stream to the CONE Gathering Normantown Compressor Station is not under common control, it is owned/operated by Noble Energy (a business partner and co-owner of CONE Gathering), and is located approximately 1.25 miles from the Normantown Compressor Station.

Noble Energy is proposes to install a gas well site in the area, but they are not contiguous or adjacent properties and they are not under common control. Therefore, the sources will not be aggregated.

SITE INSPECTION

On July 11, 2013, Doug Hammell from DAQ's Enforcement Section conducted a site inspection of the proposed location of the facility. The closest residence and buildings are ~175 ft from the proposed site. The Dominion Jones Compressor Station (DAQ Facility ID No. 021-00002) is located near the same area of the site. Site work was underway, no pads have been poured nor any equipment delivered.

Fact Sheet R13-3099 CONE Gathering LLC Normantown Compressor Station Promoting a healthy environment. Page 2 of 17 Latitude: 38.851944 Longitude: -80.967222



ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Emissions associated with this construction application consist of the combustion emissions from three (3) natural gas fired compressor engine (E-1 - E-3), one TEG dehydrator reboiler (RBLR-1), one (1) TEG dehydrator still vent (DEHY-1), one (1) diesel fueled generator (G-1), one (1) natural gas fired vapor recovery unit engine (VRU-1), one (1) emergency flare (FL-1), one (1) flare controlling the dehydration still vent unit (FL-2), multiple tanks (T-1, T-2, T-3, T-4), loadout rack (LOAD-1). Fugitive emissions for the facility are based on calculation methodologies presented in EPA Protocol for Equipment Leak Emission Estimates. The following table indicates which methodology was used in the emissions determination:

Emission	Process Equipment	Calculation Methodology
Point ID#		
RBLR-1E	1.5 MMBtu/hr TEG Dehydrator Reboiler (RBLR-1)	EPA AP-42 Emission Factors
FL-2	50 mmscfd TEG Dehydrator Still Vent (Controlled by	GRI-GlyCalc 4.0
	Flare) (DEHY-1)	
E-1E, E-2E,	Natural Gas Compressor Engines	Manufacturing Data
E-3E	(2E & 3E Controlled by NSCR) (E-1, E-2, E-3)	EPA AP-42 Emission Factors
VRUE-1E	Truck Loadout Rack (LOAD-1)	EPA AP-42 Emission Factors
	Tanks (T-1, T-2, T-3, T-4)	Manufacturing Data
	Natural Gas Fired Vapor Recovery Unit Engine	Tanks 4.0.9.d
	(VRUE-1)	
G-1E	Emergency Generator (G-1)	Manufacturing Data
		EPA AP-42 Emission
		Factors
7E	Process Piping Fugitive Emissions	EPA AP-42 Emission Factors

The following table indicates the control device efficiencies that are required for this facility:

Control Device Unit	Pollutant	Emission Unit	Control Efficiency
EMIT Technologies	Carbon Monoxide	E-2 & E-3	93%
Model No. ELX-4200Z- 1616F-31CE0-36P	Volatile Organic Compounds		50%
NSCR	Formaldehyde		76%
Jordan Technologies Model No. JV-	Volatile Organic Compounds	Storage Tanks (T-1, T-2, T-3)	100%
SCG10G2.50-350C VRU-1	Hazardous Air Pollutants		
Jordan Technologies Model No. JV-	Volatile Organic Compounds	Loading Rack (LOAD- 1)	95%
SCG10G2.50-350C VRU-1	Hazardous Air Pollutants		
Enviro-Therm	Volatile Organic Compounds	Glycol Dehydration Unit	98%
Model No. TVO-36 FL-2	Hazardous Air Pollutants	(DEHY-1)	
Zeeco Model No. MJ-8 FL-1	Volatile Organic Compounds	Emergency Flare (Evacuated Natural Gas from Normantown	98.5%
	Hazardous Air Pollutants	Station Equipment and Pipelines)	

CONE Gathering, LLC – Normantown Compressor Station (R13-3099)

Emission	Source	N	NO , CO			,	VOC PM 10/2.5			so,		CO₂e	
Point ID#		pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy
E-1E	Compressor Engine #1	5.91	25.88	5.49	24.07	0.77	3.36	0.10	0.44	0.01	0.03	1,645.10	7,205.70
E-2E	Compressor Engine #2	1.52	6.66	0.64	2.81	1.73	7.56	0.11	0.49	0.01	0.03	1,694.80	7,423.30
E-3E	Compressor Engine #3	1.52	6.66	0.64	2.81	1.73	7.56	0.11	0.49	0.01	0.03	1,694.80	7,423.30
G-1E	Generator Engine	2.02	0.51	1.96	0.49	0.04	0.01	0.11	0.03	0.70	0.18	393.90	98.50
VRUE-1E	Vapor Recovery Unit Engine	0.07	0.32	0.11	0.50	0.01	0.03	0.01	0.04	0.001	0.002	139.70	611.70
RBLR-1E	Reboiler #1	0.14	0.62	0.12	0.52	0.01	0.03	0.01	0.05	0.001	0.004	169.6	742.7
FL-1	Emergency Flare	0.02	0.11	0.02	0.09	0.001	0.01	0.002	0.01	0.001	0.001	30.0	131.2
FL-2E	Dehydrator/Dehy drator Flare	0.19	0.82	0.16	0.69	1.94	8.51	0.014	0.06	0.001	0.005	228.5	1214.9
None	Loadout Rack	_	-	_		20.10	12.06	-	-	-	-	-	_
None	Tanks (Produced Water, Condensate, Mixed Liquids) Fugitive	-	-	-			-		-	-			-
	Emissions						2.01						204.81
	, , , , , , , , , , , , , , , , , , , 			1	<u> </u>	<u> </u>	ı			ı	ı	1	
Total	Total Facility PTE	11.39	41.58	9.14	31.98	26.331	41.14	0.466	1.61	0.734	0.282	5,996.40	25,056.11

Compressor Engine #1	pph	tpy	pph	_						Toluene		
Engine #1				tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy
Engine #1							, , , , , , , , , , , , , , , , , , ,		, , , , , , , , , , , , , , , , , , , 		1-1-	
	0.004	0.019	0.000	0.002	0.53	2.34	0.011	0.049	0.004	0.018	0.002	0.008
Compressor												
Engine #2	0.005	0.022	0.000	0.002	0.28	1.22	0.013	0.055	0.005	0.020	0.002	0.009
Compressor												
Engine #3	0.005	0.022	0.000	0.002	0.28	1.22	0.013	0.055	0.005	0.020	0.002	0.009
Generator Engine					0.003	0.001						
Vapor Recovery												
Unit Engine	0.000	0.002	0.000	0.000	0.01	0.02	0.001	0.005	0.000	0.002	0.000	0.001
Reboiler #1												
Emergency Flare												
Dehydrator/Dehy												
drator Flare	0.003	0.01	0.001	0.003			0.20	0.90	0.001	0.004	0.003	0.013
Loadout Rack							0.15	0.089	0.02	0.013	0.02	0.013
Tanks (Produced												
Water,												
Condensate,												
	-	-	-	-	-	-	-	-	-	-	-	-
								0.07				
Emissions								0.07				
T-1-15	-		1		1	ı					ı	
	0.017	0.075	0.001	0.000	1 102	4 901	0.366	1 222	0.025	0.077	0.020	0.053
	Compressor Engine #3 Generator Engine Vapor Recovery Unit Engine Reboiler #1 Emergency Flare Dehydrator/Dehydrator Flare Loadout Rack Tanks (Produced Water,	Compressor Engine #3 Generator Engine Vapor Recovery Unit Engine Vapor Recovery Unit Engine Reboiler #1 Emergency Flare Dehydrator/Dehy drator Flare Loadout Rack Tanks (Produced Water, Condensate, Mixed Liquids) Fugitive Emissions Total Facility HAP	Compressor Engine #3 O.005 Generator Engine Vapor Recovery Unit Engine Vapor Recovery Unit Engine Dehydrator/Dehy drator Flare Dehydrator/Dehy drator Flare Loadout Rack Tanks (Produced Water, Condensate, Mixed Liquids) Fugitive Emissions Total Facility HAP	Compressor Engine #3 0.005 0.022 0.000 Generator Engine Vapor Recovery Unit Engine 0.000 Reboiler #1 Emergency Flare Dehydrator/Dehy drator Flare Dehydrator Flare Undout Rack Tanks (Produced Water, Condensate, Mixed Liquids) Fugitive Emissions Total Facility HAP	Compressor Engine #3	Compressor Engine #3	Compressor Engine #3	Compressor Engine #3	Compressor Engine #3	Compressor Engine #3	Compressor Engine #3 0.005 0.022 0.000 0.002 0.28 1.22 0.013 0.055 0.005 0.020	Compressor Engine #3

REGULATORY APPLICABILITY

The following rules apply to the facility:

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

The purpose of 45CSR2 (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers) 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 (RBLR-1) is below 10 MMBTU/hr. Therefore, these units are exempt from the aforementioned sections of 45CSR2. However, CONE Gathering would be subject to the opacity requirements in 45CSR2, which is 10% opacity based on a six minute block average.

The permittee will demonstrate compliance with this rule by maintaining monthly and yearly records of the amount of natural gas consumed in the reboiler and conducting opacity checks upon request of the Director.

<u>45CSR4 (To Prevent and Control the Discharge of Air Pollutants Into the Open Air</u> which Cause or Contributes to an Objectionable Odor or Odors)

This rule is designed to prevent and control the discharge of pollutants in to the open air which causes or contributes to an objectionable odor or odors.

This rule states that an objectionable odor is an odor that is deemed objectionable when in the opinion of a duly authorized representative of the Air Pollution Control Commission (Division of Air Quality), based upon their investigations and complaints, such odor is objectionable. No odors have been deemed objectionable.

45CSR6 (To Prevent and Control Air Pollution from the Combustion of Refuse)

The purpose of this rule is to prevent and control air pollution from combustion of refuse.

Normantown Compressor Station is proposing to install two flares at the facility. The facility will demonstrate compliance by maintaining the amount of natural gas consumed by the flare and the hours of operation. The facility will also monitor the

flame of the flare and record any malfunctions that may cause no flame to be present during operation. In addition, the facility will also monitor visible emissions from the flare on a monthly basis.

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

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 (RBLR-1) is below 10 MMBTU/hr. Therefore, these units are 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 the proposed Normantown Compressor Station is defined as a "stationary source" under 45CSR13 Section 2.24.b, which states that an owner or operator discharges or has the potential to discharge more than six (6) pounds per hour and ten (10) tons per year, or has the potential to discharge more than 144 pounds per calendar day of any regulated air pollutant. Normantown Compressor Station has published the required Class I legal advertisement notifying the public of their permit application, and paid the appropriate application fee (construction).

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

45CSR16 applies to this source by reference of 40CFR60, Subparts Kb, IIII, JJJJ, and OOOO. Normantown Compressor Station is subject to the standards, recordkeeping, monitoring, and testing required by 40CFR60 Subparts Kb, IIII, JJJJ, and OOOO.

45CSR22 (Air Quality Management Fee Program)

This facility is a minor source and not subject to 45CSR30. Normantown Compressor Station is required to keep their Certificate to Operate current.

<u>40CFR60 Subpart Kb (Standards of Performance for Volatile Organic Liquid</u> Storage Vessels

The affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m3) (19,813 gallons) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984. This subpart does not apply to storage vessels with a capacity greater than or equal to 151 m3 (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m3 (19,813 gallons) but less than 151 m3 (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 15.0 kPa (2.2 psia). This subpart also does not apply to pressure vessels designed to operate in excess of 204.9 kPa (29.7 psia) and without emissions to the atmosphere.

T-1, T-2 (16,920 gallons) and T-4 (1,000 gallons) are proposed storage tanks that have a volume less than 75 cubic meters (m3) (19,813 gallons). T-3 (21,150 gallons) proposed volume is greater than 75 cubic meters (m3) (19,813 gallons). T-3 is a mixed liquids tank to will contain water, compressor oil and condensate. The average vapor pressure of the liquids in the tank is 5.56 psia. This is greater than 15.0 kPa (2.2 psia). Also, the tank is operated at the set pressure of the conservation vent on the tank, which is 0.03 psig or 14.73 psia. This is not considered a pressure vessel per this regulation. Therefore, T-3 will be subject to the requirements of this regulation.

The owner and operator must comply with this subpart through sections §60.112b(a)(3). Monitoring/Testing: §60.116b(a)-(b), §60.485(b). Recordkeeping: §60.115b (c), §60.116b(a)-(b). Reporting: §60.115b (c).

<u>40CFR60 Subpart IIII (Standards of Performance for Station Compression Ignition Internal Combustion Engines</u>

The facility's generator is subject to the requirement of §60.4200. The generator will be considered an emergency generator, since the facility is proposing to operate it less than 500 hours per year. The facility must meet the emission standards of §60.4205. & §60.4206.

The 342 hp (257 kW) engine (G-1) with a displacement of 8.9 liters is subject to the following emission standards.

NOx: 6.9 g/hp-hr (9.2 g/kW-hr) HC: 0.98 g/hp-hr (1.3 g/kW-hr)

NMHC + NOx: 3.0 g/hp-hr (4.0 g/kW-hr)

CO: 2.6 g/hp-hr (3.5 g/kW-hr) PM: 0.15 g/hp-hr (0.20 g/kW-hr)

The engine will meet the emission standards above as stated in the manufacturing literature for this engine.

The facility must meet the fuel requirements §60.4207. The facility must meet the monitoring requirements of §60.4209. The testing, recording keeping and reporting requirements are set forth in section §60.4212, §60.4214.

40CFR60 Subpart JJJJ (Standards of Performance for Stationary Spark Internal Combustion Engines

The four natural gas fired engines proposed for the site are subject to the requirements set forth in Section §60.4230.

The 1,340 hp engine (E-1) is subject to the following emission standards.

NOx: 2.0 g/HP-hr CO: 4.0 g/HP-hr VOC: 1.0 g/HP-hr

The engine will meet the emission standards above as stated in the manufacturing literature for this engine.

The two (2) 1,380 hp engine (E-2 & E-3) is subject to the following emission standards.

NOx: 1.0 g/HP-hr CO: 2.0 g/HP-hr VOC: 0.7 g/HP-hr

The 120 hp engine (VRUE-1) is subject to the following emission standards.

NOx: 1.0 g/HP-hr CO: 2.0 g/HP-hr VOC: 0.7 g/HP-hr

The engines will meet the emission standards above as stated from the manufacturing and control device literature provided in the permit application.

Engines E-1, E-2 and E-3 will demonstrate compliance by keeping a maintenance plan and records of conducted maintenance, maintain, and operate the engine to minimize emissions, perform an initial performance test, and conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first. It is expected that air-to fuel ratio controllers will be used with three-way catalyst/nonselective catalytic reduction. The AFR controller must be maintained and operated in order to ensure proper operation of th engine and control device to minimize emissions.

Engines E-1, E-2 and E-3 will conduct performance testing in accordance with §60.4244, comply with the notification requirements of §60.4245, comply with the

general provisions of §60.4246.

<u>40CFR60 Subpart OOOO (Standards of Performance for Crude Oil and Natural</u> 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.

There are no centrifugal compressors at the proposed site. 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.

There are four (4) reciprocating internal combustion engines located at the proposed site that was constructed after August 23, 2011. Therefore, the requirements regarding reciprocating compressors under 40 CFR 60 Subpart OOOO would apply. The proposed site would be required to perform the following:

• Replace the reciprocating compressor rod packing at least every 26,000 hours of operation or 36 months.

- Demonstrate initial compliance by continuously monitoring the number of hours of operation or track the number of months since the last rod packing replacement.
- Submit the appropriate start up notifications.
- Submit the initial annual report for the reciprocating compressors.
- Maintain records of hours of operation since last rod packing replacement, records of the date and time of each rod packing replacement, and records of deviations in cases where the reciprocating compressor was not operated in compliance.

d. Pneumatic Controllers

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.

There are no gas-driven pneumatic controllers at the proposed site. Therefore, there are no applicable requirements regarding pneumatic controllers under 40 CFR 60 Subpart OOOO that would 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 tanks have the potential to emit less than 6 tpy of VOC and are not subject to the requirements of this rule.

- 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 proposed facility is not a natural gas processing plant that was modified after August 23, 2011. Therefore, Leak Detection and Repair (LDAR) requirements for onshore natural gas processing plants would not apply to the proposed site.

- 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 oilor-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 sweetening plant. Therefore, all requirements regarding sweetening units under 40 CFR 60 Subpart OOOO would not apply.

h. The following provisions apply to gas well facilities that are hydraulically refractured.

There are no gas wells at the facility.

The following rules do not apply to the facility:

45CSR30 (Requirements for Operating Permits)

The proposed site is not subject to 45CSR30. The source is subject to 40CFR60 Subparts A, IIII, JJJJ, and OOOO, however they are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided they are not required to obtain a permit for a reason other than their status as an area source.

40CFR63 Subpart HH (National Emission Standards for Hazardous Air Pollutants From 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 glycol dehydration unit at the Normantown Compressor Station is subject to the area source requirements for glycol dehydration units.

Area Source Applicability - Specific:

Sources with throughput less than 3,000,000 <u>or</u> with benzene emissions less than 1.0 tpy are subject to limited requirements. The 1.0 tpy limit for benzene emission may be evaluated prior controls <u>or</u> after federally enforceable controls for purposes of this exemption. EPA determined that GACT for these sources is no control <u>or</u>, if benzene emissions are evaluated after federally enforceable controls, no additional control.

These sources are subject to the following requirements under the rule.

- §63.764(e)(1) exemption from control requirements for either throughput (§63.764(e)(1)(i)) or benzene concentration (§63.764(e)(1)(ii)).
- §63.772(b) determination of natural gas flowrate (§63.72(b)(1)) and/or determination of benzene emissions (§63.772(b)(2))
- §63.774(d)(1) maintenance of records to support the determination of exemption. §63.774(d)(1)(i), for the throughput exemption, and §63.774(d)(1)(ii), for the actual average benzene emissions exemption.

<u>40CFR63 Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants</u> for Stationary Reciprocating Internal Combustion Engines)

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (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.

§63.6590 Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part 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.

The facility would be defined under this requirement by (c)(1) of §63.6590, which is for new or reconstructed stationary RICE located at an area source.

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

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 proposed site is not defined as a natural gas processing plant. Therefore, they are not subject to the requirements of this regulation.

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 proposed facility is located in Gilmer County, which is attainment for all regulated air pollutants. Therefore, the facility is not subject to 45CSR19. In addition, the facility is not proposing to exceed to 250 tpy PSD thershold limit for any regulated air pollutant.

45CSR27 (To Prevent and Control the Emissions of Toxic Air Pollutants)

The purpose of 45CSR27 is to prevent and control the discharge of toxic air pollutants requiring the application of best available technology.

The facility has installed compressor engines and a generator that have the potential to emit more than 1,000 pounds per year. However, the engines are not defined as a chemical processing units. Therefore, this rule doesn't apply.

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.

MONITORING OF OPERATIONS

- The amount of natural gas consumed and the hours of operation of the natural gas compressor engines (E-1 - E-3).
- Maintain records of all catalytic reduction device maintenance (NSCR).
- Maintain records of periods which the pilot flame was absent on the flares (FL-1 and FL-2)
- Maintain records of the amount of wet natural gas throughput through the dehydration system (DEHY-1).
- Maintain records of the amount and type of fuel consumed in the generator engine (G-1) and the hours of operation.
- Maintain records of the amount of natural gas consumed and the hours of operation of the reboiler (RBLR-1)
- Maintain the vapor recovery unit in accordance with §60.482-10
- Maintain daily and yearly throughput records of the amount and type of material loaded into each tank.
- Maintain records of all applicable requirements of 40CFR60 Subparts Kb, IIII, JJJJ and OOOO.

RECOMMENDATION TO DIRECTOR

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

Jill Harris	
Permit Writer	
August 6, 2013	