



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.: R13-3238
Plant ID No.: 051-00213
Applicant: Rover Pipeline LLC (Rover)
Facility Name: Majorsville Compressor Station
Location: Dallas, Marshall County
NAICS Code: 486210 (Natural Gas Transmission)
Application Type: Construction
Received Date: March 2, 2015
Engineer Assigned: Jerry Williams, P.E.
Fee Amount: \$2,000.00
Date Received: March 2, 2015
Complete Date: March 24, 2015
Due Date: June 22, 2015
Applicant Ad Date: March 13, 2015
Newspaper: *Moundsville Daily Echo*
UTM's: Easting: 538.294 km Northing: 4,424.061 km Zone: 17
Description: Natural gas transmission station.

Promoting a healthy environment.

DESCRIPTION OF PROCESS

The following process description was taken from Permit Application R13-3238:

The proposed natural gas transmission station consists of two (2) compressor engines and associated blowdowns and start-ups, one (1) emergency diesel generator, one (1) atmospheric above ground storage tank, two (2) waste water tanks, four (4) miscellaneous storage tanks, one (1) line heater, truck loading operations, pigging operations and fugitive emissions from piping components.

The new compressor engines (CE-1S, CE-2S) will be used to increase pressure of the natural gas to the transmission pipeline's pressure. The compressors are natural gas fired and have associated engine blowdowns (BD) and start-ups (SV). Pigging operations (PIG) of the pipeline are conducted periodically to clean the pipeline. Liquids from the pipeline are purged into the slop tank (TK-1). The slop tank contents are loaded via trucks (LOAD-1) for off-site disposal.

The two (2) waste water tanks (TK-2, TK-3) operate in series. TK-3 is an underground storage tank (UST) which collects cleanup and sump water. TK-3 is pumped to TK-2. TK-2 contents are loaded via trucks (LOAD-2) for off-site disposal.

The station also has a small natural gas heater (HTR-1), an emergency generator (GE-1), and miscellaneous tanks (TK-4, TK-5, TK-6, TK-7). There are also emissions from equipment component leaks (FUG) as well as fugitive emissions from unpaved roads (R1).

SITE INSPECTION

A site inspection was conducted on March 25, 2015 by Al Carducci of the DAQ Enforcement Section. According to Mr. Carducci, the site location is appropriate for the proposed facility.

Latitude: 39.965831
Longitude: -80.551605

Directions to the facility are as follows:

From Elm Grove, WV. Take I-70 East for 5.4 miles and turn left onto Dallas Pike. Continue on Dallas Pike for 5.3 miles. Turn right onto Number 2 Ridge Road and travel 2.7 miles. Turn right onto Golden Ridge Road and travel 0.7 miles. Take a slight left on Ruth Hill Road for 0.7 miles. Ruth Hill Road dead ends at the facility.



ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Emissions associated with this application consist of the combustion emissions from two (2) natural gas fired compressor engines (CE-1E, CE-2E), one (1) emergency generator (GE-1) one (1) 300 bbl (12,600 gal) slop tank (TK-1), one (1) 300 bbl waste water tank (TK-2), one (1) 2,500 gallon underground waste water tank (TK-3), four (4) 100 bbl (4,200 gal) miscellaneous storage tanks (new oil, coolant, used coolant, used oil), two (2) product loadout racks (LOAD-1, LOAD-2), one (1) infrared heater (HTR-1), compressor blowdowns (BD), engine starter vents (SV), pigging operations (PIG), unpaved road emissions (R1) and fugitive piping emissions. Fugitive emissions for the facility are based on calculation methodologies presented in TCEQ Technical Guidance Document for Equipment Leak Fugitives. The following table indicates which methodology was used in the emissions determination:

Emission Unit ID#	Process Equipment	Calculation Methodology
CE-1S, CE-2S	3,550 hp Caterpillar G3612 4SLB Reciprocating Internal Combustion Engine (RICE) w/ oxidation catalyst	Manufacturer's Data, EPA AP-42 Emission Factors
GE-1	766 hp Caterpillar C15 ACERT diesel fired emergency generator	Manufacturer's Data, EPA AP-42 Emission Factors
BD	Compressor Engine Blowdowns	Engineering Estimate
SV	Engine Starter Vents	Engineering Estimate
PIG	Pigging Operations	Engineering Estimate
FUG	Piping Fugitives	TCEQ Guidance Document

HTR-1	0.51 MMBTU/hr CIG Flameless Gas Infrared Catalytic Heater	EPA AP-42 Emission Factors
TK-1 – TK-7	Storage Tanks	EPA Tanks 4.09d
LOAD-1, LOAD-2	Slop Truck Loading, Waste Water Truck Loading	EPA AP-42 Emission Factors
R1	Unpaved Haul Roads	EPA AP-42 Emission Factors

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

Emission Unit	Pollutant	Control Device	Control Efficiency
3,550 hp Caterpillar G3612 4SLB RICE w/ Oxidation Catalyst (CE-1S, CE-2S)	Carbon Monoxide	Oxidation Catalyst	80 %
	Volatile Organic Compounds		50 %
	Formaldehyde		50 %

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

Pollutant	R13-3238 PTE (tons/year)
Nitrogen Oxides	35.97
Carbon Monoxide	38.04
Volatile Organic Compounds	32.62
Particulate Matter-10/2.5	2.58
Sulfur Dioxide	0.22
Formaldehyde	8.92
Total HAPs	12.00
Carbon Dioxide Equivalent	28,150

Maximum detailed controlled point source emissions were calculated by Rover and checked for accuracy by the writer and are summarized in the table on the next page.

Rover Pipeline LLC – Majorsville Compressor Station (R13-3238)

Emission Point ID#	Source	NO _x		CO		VOC		PM-10/2.5		SO ₂		Formaldehyde		Total HAPs		CO ₂ e
		lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	ton/year
CE-1E	Compressor Engine #1	4.30	17.14	4.74	18.85	3.92	15.60	0.27	1.17	0.02	0.07	1.12	4.46	1.37	5.98	13680
CE-2E	Compressor Engine #2	4.30	17.14	4.74	18.85	3.92	15.60	0.27	1.17	0.02	0.07	1.12	4.46	1.37	5.98	13680
GE-1	Emergency Generator	6.48	1.47	0.65	0.15	0.07	0.02	0.06	0.01	0.34	0.08	<0.01	<0.01	<0.01	<0.01	128
HTR-1	Catalytic Heater	0.05	0.22	0.04	0.19	<0.01	0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	263
TK-1	Slop Storage Tank	-	-	-	-	0.32	<0.01	-	-	-	-	-	-	<0.01	<0.01	205
TK-2	Waste Water Tank	-	-	-	-	0.31	<0.01	-	-	-	-	-	-	<0.01	<0.01	-
TK-3	Waste Water Tank	-	-	-	-	0.07	<0.01	-	-	-	-	-	-	<0.01	<0.01	-
LOAD-1	Slop Truck Loading	-	-	-	-	0.67	<0.01	-	-	-	-	-	-	<0.01	<0.01	-
LOAD-2	Waste Water Loading	-	-	-	-	0.67	<0.01	-	-	-	-	-	-	<0.01	<0.01	-
Total Point Source		15.13	35.97	10.17	38.04	9.95	31.23	0.60	2.37	0.38	0.22	2.24	8.92	2.74	11.96	27956
FUG	Pipeline Fugitive Emissions	-	-	-	-	0.28	1.24	-	-	-	-	-	-	<0.01	<0.01	<0.01
R1	Unpaved Haulroads	-	-	-	-	-	-	0.46	0.21	-	-	-	-	-	-	-
BD	Compressor Engine Blowdowns	-	-	-	-	4.89	0.03	-	-	-	-	-	-	0.12	<0.01	66
SV	Engine Starter Vents	-	-	-	-	2.20	0.08	-	-	-	-	-	-	0.06	<0.01	87
PIG	Pigging Operations	-	-	-	-	24.58	0.04	-	-	-	-	-	-	0.61	0.04	41
Total Fugitive		0.00	0.00	0.00	0.00	31.95	1.39	0.46	0.21	0.00	0.00	0.00	0.00	0.79	0.04	194
Total Sitewide		15.13	35.97	10.17	38.04	41.90	32.62	1.06	2.58	0.38	0.22	2.24	8.92	3.53	12.00	28150

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 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 catalytic heater (HTR-1) is below 10 MMBTU/hr. Therefore, this unit is exempt from the aforementioned sections of 45CSR2.

Rover would also 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 catalytic heater (HTR-1) 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)

A 45CSR13 modification permit applies to this source due to the fact that Rover exceeds the regulatory emission threshold for criteria pollutants of 6 lbs/hr and 10 tons/year of nitrogen oxides, carbon monoxide and volatile organic compounds.

Rover paid the appropriate application fee and published the required legal advertisement for a modification 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, Subparts IIII, JJJJ and OOOO. These requirements are discussed under those rules below.

45CSR22 (Air Quality Management Fee Program)

Rover is not subject to 45CSR30. The Majorsville Compressor Station is subject to 40CFR60 Subparts 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.

Rover is required to pay the appropriate annual fees and keep their Certificate to Operate current.

40CFR60 Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE))

Subpart IIII sets forth non-methane hydrocarbon (NMHC), hydrocarbon (HC), nitrogen oxides (NO_x), carbon monoxide (CO), and particulate matter (PM) emission limits, fuel requirements, installation requirements, and monitoring requirements based on the year of installation of the subject internal combustion engine. The 400 kW diesel fired emergency generator (GE-1) is subject to this subpart. The emission standards for this unit are listed in 40 CFR 89.112. The Tier 3 standards are 4.0 g/kw-hr for NMHC+NO_x, 3.5 g/kw-hr for CO and 0.20 g/kw-hr for PM. The Caterpillar specification sheet provided by Rover indicates that these emission standards should be met. Because this engine will exceed 500 HP, Rover must conduct an initial performance test to demonstrate compliance with the emission standards within one (1) year of startup. Subsequent performance testing must be performed every 8,760 hours of engine operation or 3 years, whichever comes first.

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 3,550 hp Caterpillar G3612 RICEs (CE-1E, CE-2E) were manufactured after the July 1, 2007 date for engines with a maximum rated power capacity greater than or equal to 500 hp.

The 3,550 hp Caterpillar G3612 RICEs (CE-1E, CE-2E) will be subject to the following emission limits: NO_x – 1.0 g/hp-hr (7.83 lb/hr); CO – 2.0 g/hp-hr (15.65 lb/hr); and VOC – 0.7 g/hp-hr (5.48 lb/hr). Based on the manufacturer's specifications for these engines, the emission standards will be met.

The 3,550 hp Caterpillar G3612 RICEs (CE-1E, CE-2E) are not certified by the manufacturer to meet the emission standards listed in 40CFR60 Subpart JJJJ. Therefore, Rover will be required to conduct an initial performance test and conduct subsequent

performance testing every 8,760 hours or three (3) years, whichever comes first, to demonstrate compliance.

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 Majorsville Compressor Station is located after 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 Majorsville Compressor Station is located after 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 Majorsville Compressor Station is located after 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 non-earthen 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 Majorsville Compressor Station emit less than 6 tpy of VOC. Therefore, Rover is not required by this section to further 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 Majorsville 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 Majorsville Compressor Station. Therefore, all requirements regarding sweetening units under 40 CFR 60 Subpart OOOO would not apply.

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 engines (CE-1E, CE-2E, GE-1) at the Majorsville Compressor Station are subject to the area source requirements for spark and compression ignition engines.

The applicability requirements for new stationary RICEs located at an area source of HAPs, is the requirement to meet the standards of 40CFR60 Subparts IIII and JJJJ. These requirements were outlined above. The proposed engines meet these standards.

Because these engines are not certified by the manufacturer, Rover 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 the facility:

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)

On September 30, 2013, EPA approved a redesignation request and State Implementation Plan (SIP) revision submitted by the State of West Virginia. The West Virginia Department of Environmental Protection (WVDEP) requested that the West Virginia portion of the Wheeling, WV–OH fine particulate matter (PM_{2.5}) nonattainment area (“Wheeling Area” or “Area”) be redesignated as attainment for the 1997 annual PM_{2.5} national ambient air quality standard (NAAQS).

The Majorsville Compressor Station is located in Marshall County, which is located in this metropolitan statistical area and is an attainment county for all pollutants. Therefore the Majorsville Compressor Station is not subject to 45CSR19.

As shown in the following table, Rover is not subject to 45CSR14 or 45CSR19 review. According to 45CSR14 Section 2.43.e, fugitive emissions are not included in the major source determination because it is not listed as one of the source categories in Table 1. Therefore, the fugitive emissions are not included in the PTE below.

Pollutant	PSD (45CSR14) Threshold (tpy)	NANSR (45CSR19) Threshold (tpy)	Majorsville PTE (tpy)	45CSR14 or 45CSR19 Review Required?
Carbon Monoxide	250	NA	38.04	No
Nitrogen Oxides	250	NA	35.97	No
Sulfur Dioxide	250	NA	0.22	No
Particulate Matter 2.5	250	NA	2.37	No
Ozone (VOC)	250	NA	31.23	No
Greenhouse Gas (CO ₂ e)	100,000	NA	27,956	No

45CSR30 (Requirements for Operating Permits)

Rover is not subject to 45CSR30. The Majorsville Compressor Station is subject to 40CFR60 Subparts 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.

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 largest tanks that Rover has installed are 47.70 cubic meters each. Therefore, Rover 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 Majorsville Compressor Station is not a natural gas processing facility, therefore, Rover is not subject to this rule.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

The majority of non-criteria regulated pollutants fall under the definition of HAPs which, with some revision since, were 188 compounds identified under Section 112(b) of the Clean Air Act (CAA) as pollutants or groups of pollutants that EPA knows or suspects may cause cancer or other serious human health effects. The following HAPs are common to this industry. The following table lists each HAP's carcinogenic risk (as based on analysis provided in the Integrated Risk Information System (IRIS)):

HAPs	Type	Known/Suspected Carcinogen	Classification
Formaldehyde	VOC	Yes	Category B1 - Probable Human Carcinogen
Benzene	VOC	Yes	Category A - Known Human Carcinogen
Ethylbenzene	VOC	No	Inadequate Data
Toluene	VOC	No	Inadequate Data
Xylenes	VOC	No	Inadequate Data

All HAPs have other non-carcinogenic chronic and acute effects. These adverse health effects may be associated with a wide range of ambient concentrations and exposure times and are influenced by source-specific characteristics such as emission rates and local meteorological conditions. Health impacts are also dependent on multiple factors that affect variability in humans such as genetics, age, health status (e.g., the presence of pre-existing disease) and lifestyle. As stated previously, *there are no federal or state ambient air quality standards for these specific chemicals*. For a complete discussion of the known health effects of each compound refer to the IRIS database located at www.epa.gov/iris.

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) or 45CSR19 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution which Cause or Contribute to Nonattainment) as shown in the table listed in the Regulatory Discussion section under 45CSR14/45CSR19.

SOURCE AGGREGATION

Classifying multiple facilities as one “stationary source” under 45CSR13, 45CSR14, and 45CSR19 is based on the definition of "Building, structure, facility, or installation" as given in §45-14-2.13 and §45-19-2.12. The definition states:

“Building, Structure, Facility, or Installation” means all of the 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 (or persons under common control). Pollutant-emitting activities are a part of the same industrial grouping if they belong to the same “Major Group” (i.e., which have the same two (2)-digit code) as described in the Standard Industrial Classification Manual, 1987 (United States Government Printing Office stock number GPO 1987 0-185-718:QL 3).

The Majorsville Compressor Station is located in Marshall County and will be operated by Rover.

1. The Majorsville Compressor Station will operate under SIC code 4923 (Natural Gas Distribution). There is one other compressor station operated by Rover that shares the same two-digit major SIC code of 49 for natural gas transmission. The Sherwood Compressor Station is located in Doddridge County is approximately 50 miles away. These compressor stations operate on different lateral pipelines.
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 Rover properties in question that are considered to be on contiguous or adjacent property with the Majorsville Compressor Station. The closest Rover property is located approximately 50 miles from the proposed facility. The land between these sites is not owned or managed by Rover. Operations separated by these distances do not meet the common sense notion of a plant. Therefore, the properties in question are not considered to be on contiguous or adjacent property. The Majorsville Compressor Station is located approximately one (1) mile from the existing Columbia Gas Transmission compressor station. MarkWest also operates a natural gas processing plant nearby.

3. Common control. The natural gas well sites that supply the incoming natural gas streams to the Majorsville Compressor Station are not owned and operated by Rover. Furthermore, the nearby Columbia and MarkWest facilities are owned by separate companies.

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

MONITORING OF OPERATIONS

Rover will be required to perform the following monitoring:

- Monitor and record quantity of natural gas consumed for all engines and combustion sources.
- Monitor all applicable requirements of 40CFR60 Subparts IIII, JJJJ and OOOO.

Rover will be required to perform the following recordkeeping:

- Maintain records of the amount of natural gas consumed and hours of operation for all engines and combustion sources.
- 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
- Maintain the corresponding records specified by the on-going monitoring requirements of and testing requirements of the permit.
- Maintain records of the visible emission opacity tests conducted per the permit.
- 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.
- Maintain records of all applicable requirements of 40CFR60 Subparts IIII, JJJJ and OOOO.
- The records shall be maintained on site or in a readily available off-site location maintained by Rover for a period of five (5) years.

RECOMMENDATION TO DIRECTOR

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

Jerry Williams, P.E.
Engineer

Date