west virginia department of environmental protection

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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:	R13-2829
Plant ID No.:	051-00128
Applicant:	Appalachia Midstream Services, L.L.C. (AMS)
Facility Name:	Pleasants Compressor Station
Location:	Howard, Marshall County
SIC Code:	1311
Application Type:	Construction
Received Date:	February 8, 2010
Engineer Assigned:	Jerry Williams II, P.E.
Fee Amount:	$2,000.00
Date Received:	February 8, 2010
Complete Date:	April 29, 2010
Due Date:	July 28, 2010
Applicant Ad Date:	April 1, 2010
Newspaper:	*Moundsville Daily Echo*
UTM's:	Easting: 527.64 km Northing: 4397.98 km Zone: 17
Description:	Construction of a new natural gas compressor station with twelve (12) natural gas compressor engines, one (1) diesel fired auxiliary generator, one (1) natural gas fired emergency generator, three (3) triethylene glycol (TEG) dehydration units, three (3) 400-bbl pipeline fluids storage tanks, and miscellaneous associated equipment.

DESCRIPTION OF PROCESS

The following process description was taken from Permit Application R13-2829:

The natural gas inlet stream from surrounding area wells enters the facility through an inlet suction separator prior to the gas being compressed. After the inlet gas passes through a compressor, it goes through the dehydration process before exiting the facility. Dehydration units are used to remove water from the gas. In the dehydration process, gas passes through a contactor vessel where water is absorbed by the glycol. The "rich" glycol containing water goes to the glycol reboiler where heat is used to boil off the water. The heat is supplied by a natural gas-fired reboiler that exhausts to the atmosphere. Overhead still column emissions will be

controlled by an air-cooled condenser. The non-condensables from the still column emissions overheads will be routed to the reboiler and burned as fuel with 95% destruction efficiency. Any excess flash gas vapors not burned as fuel will be routed to the suction side of the compressor so that they are not vented to the atmosphere. In the unlikely event that both the electric pumps and the compressor are not operating, excess flash gas will be vented to the atmospheric storage tanks. Produced condensate from the site will be transported via pipeline to another site for stabilization. Condensate dropout from liquids dumps, produced water and other pipeline fluids are stored in storage tanks and transported offsite via truck. A Joule-Thomson (JT) system with a capacity of less than 10 mmscfd will be used to lower the heat content of the fuel gas. A diesel-fired auxiliary generator will be present on site for temporary use only, to be used for lighting, electric glycol pumps, etc. if utility power is not available upon station startup. A natural gas fired emergency generator will provide back-up electric power to the entire station. Emissions from fugitive components also occur.

SITE INSPECTION

A site inspection was conducted in April 2010 by Steven Sobutka of the DAQ NPRO. The facility had not been constructed at that time. The inspector did not see any problems with the proposed site.

Directions as given in the permit application are as follows:

From Howard, WV, head south on Greenfield Ridge toward Co. Rd. 6/Macedonia Ridge for 1 mile. Continue onto Co. Rd. 6/Macedonia Ridge for 0.2 miles. Continue onto Pleasant Ridge for 1.3 miles. Turn left at Robinson Ridge and go approximately 1 mile.

BACKGROUND INFORMATION

On May 12, 2010, pursuant to §45-13-8, the West Virginia Division of Air Quality (DAQ) provided notice to the public of a preliminary determination to issue Permit Numbers R13-2829 and R13-2831 to AMS for the construction of two (2) natural gas compressor stations proposed to be located near Howard and Bannen, Marshall County, WV. At that time, the draft permit and Engineering Evaluation/Fact Sheet were made available to the public for review. The permit application had previously been available for public review and remained so during the public comment period.

The public notice was followed by a public comment period (required to be a minimum of 30 days under §45-13-8) scheduled to end at 5:00 P.M. on June 11, 2010. During the public comment period, the DAQ accepted comments on our preliminary determination to issue permits R13-22829 and R13-2831 to AMS and on all documents related thereto. To provide information on the permitting action and to facilitate the submission of comments, the DAQ held, on July 1, 2010, and pursuant to §45-13-9, a public meeting concerning R13-2829 and R13-2831 at the Silver Hill Fire Department located in Wetzel County, WV.

Draft Permit R13-2829 states that AMS shall comply with all provisions of 45CSR4 (To Prevent and Control the Discharge of Air Pollutants into the Open Air which Causes or Contributes to an Objectionable Odor or Odors). Upon receiving comments on this issue, and the concern for air quality in this area due to the level of activity, the DAQ has decided to require control systems on the storage tanks.

The control efficiency that will be required on the tanks will be a control device that can achieve a 98% Volatile Organic Compound (VOC) emission reduction. For the Pleasants Station, AMS proposed their VOC tanks emissions to be 13.17 tons/year. Requiring a control efficiency of 98% reduces the tank emissions to 0.27 tons/year. This represents a VOC emission reduction of 12.90 tons/year.

This would reduce the total VOC emissions from the Pleasants Station from 94.43 tons/year in the Draft Permit to 81.53 tons/year in the Final Permit.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Maximum controlled point source emissions from AMS's Pleasants Compressor Station are summarized in the table below.

Emission Point ID	Emission Unit ID	Process Unit	Pollutant	Maximum Controlled Emission Rate	
				Hourly (lb/hr)	Annual (ton/year)
EPCE-1	EUCE-1	1,380 hp Waukesha L5794 GSI Compressor Engine	Nitrogen Oxides	1.48	6.48
			Carbon Monoxide	1.81	7.92
			Sulfur Dioxide	0.03	0.13
			Particulate Matter-10	0.10	0.43
			Volatile Organic Compounds	0.14	0.62
			Formaldehyde	0.08	0.34
EPCE-2	EUCE-2	1,380 hp Waukesha L5794 GSI Compressor Engine	Nitrogen Oxides	1.48	6.48
			Carbon Monoxide	1.81	7.92
			Sulfur Dioxide	0.03	0.13
			Particulate Matter-10	0.10	0.43
			Volatile Organic Compounds	0.14	0.62
			Formaldehyde	0.08	0.34

EPCE-3	EUCE-3	1,380 hp Waukesha L5794 GSI Compressor Engine	Nitrogen Oxides	1.48	6.48
			Carbon Monoxide	1.81	7.92
			Sulfur Dioxide	0.03	0.13
			Particulate Matter-10	0.10	0.43
			Volatile Organic Compounds	0.14	0.62
			Formaldehyde	0.08	0.34
EPCE-4	EUCE-4	1,380 hp Waukesha L5794 GSI Compressor Engine	Nitrogen Oxides	1.48	6.48
			Carbon Monoxide	1.81	7.92
			Sulfur Dioxide	0.03	0.13
			Particulate Matter-10	0.10	0.43
			Volatile Organic Compounds	0.14	0.62
			Formaldehyde	0.08	0.34
EPCE-5	EUCE-5	1,380 hp Waukesha L5794 GSI Compressor Engine	Nitrogen Oxides	1.48	6.48
			Carbon Monoxide	1.81	7.92
			Sulfur Dioxide	0.03	0.13
			Particulate Matter-10	0.10	0.43
			Volatile Organic Compounds	0.14	0.62
			Formaldehyde	0.08	0.34
EPCE-6	EUCE-6	1,380 hp Waukesha L5794 GSI Compressor Engine	Nitrogen Oxides	1.48	6.48
			Carbon Monoxide	1.81	7.92
			Sulfur Dioxide	0.03	0.13
			Particulate Matter-10	0.10	0.43
			Volatile Organic Compounds	0.14	0.62
			Formaldehyde	0.08	0.34
EPCE-7	EUCE-7	1,380 hp Waukesha L5794 GSI Compressor	Nitrogen Oxides	1.48	6.48
			Carbon Monoxide	1.81	7.92
			Sulfur Dioxide	0.03	0.13
			Particulate Matter-10	0.10	0.43
			Volatile Organic Compounds	0.14	0.62

		Engine	Formaldehyde	0.08	0.34
EPCE-8	EUCE-8	1,380 hp Waukesha L5794 GSI Compressor Engine	Nitrogen Oxides	1.48	6.48
			Carbon Monoxide	1.81	7.92
			Sulfur Dioxide	0.03	0.13
			Particulate Matter-10	0.10	0.43
			Volatile Organic Compounds	0.14	0.62
			Formaldehyde	0.08	0.34
EPCE-9	EUCE-9	1,380 hp Waukesha L5794 GSI Compressor Engine	Nitrogen Oxides	1.48	6.48
			Carbon Monoxide	1.81	7.92
			Sulfur Dioxide	0.03	0.13
			Particulate Matter-10	0.10	0.43
			Volatile Organic Compounds	0.14	0.62
			Formaldehyde	0.08	0.34
EPCE-10	EUCE-10	1,380 hp Waukesha L5794 GSI Compressor Engine	Nitrogen Oxides	1.48	6.48
			Carbon Monoxide	1.81	7.92
			Sulfur Dioxide	0.03	0.13
			Particulate Matter-10	0.10	0.43
			Volatile Organic Compounds	0.14	0.62
			Formaldehyde	0.08	0.34
EPCE-11	EUCE-11	1,380 hp Waukesha L5794 GSI Compressor Engine	Nitrogen Oxides	1.48	6.48
			Carbon Monoxide	1.81	7.92
			Sulfur Dioxide	0.03	0.13
			Particulate Matter-10	0.10	0.43
			Volatile Organic Compounds	0.14	0.62
			Formaldehyde	0.08	0.34
EPCE-12	EUCE-12	1,380 hp Waukesha L5794 GSI	Nitrogen Oxides	1.48	6.48
			Carbon Monoxide	1.81	7.92
			Sulfur Dioxide	0.03	0.13
			Particulate Matter-10	0.10	0.43

		Compressor Engine	Volatile Organic Compounds	0.14	0.62
			Formaldehyde	0.08	0.34
EPGEN-1	EUGEN-1	402 hp Baldor IDLC300-3J Diesel-Fired Generator	Nitrogen Oxides	2.66	0.27
			Carbon Monoxide	2.30	0.23
			Sulfur Dioxide	0.01	0.01
			Particulate Matter	0.13	0.01
			Volatile Organic Compounds	0.10	0.01
			Formaldehyde	0.01	0.01
EPGEN-2	EUGEN-2	322 hp Caterpillar G3406TA Diesel-Fired Generator	Nitrogen Oxides	12.64	3.16
			Carbon Monoxide	0.78	0.20
			Sulfur Dioxide	0.01	0.01
			Particulate Matter	0.06	0.02
			Volatile Organic Compounds	0.42	0.11
			Formaldehyde	0.06	0.02
EPSTL-1	EUSTL-1	53.8 MMscfd Glycol Dehydrator Still Column	Volatile Organic Compounds	4.30	18.83
			Benzene	0.03	0.13
			Ethylbenzene	0.01	0.01
			Toluene	0.04	0.18
			Xylenes	0.01	0.01
EPRBL-1	EURBL-1	1.00 mmBTU/hr Glycol Dehydrator Reboiler	Nitrogen Oxides	0.10	0.44
			Carbon Monoxide	0.08	0.35
			Sulfur Dioxide	0.01	0.01
			Particulate Matter-10	0.01	0.04
			Volatile Organic Compounds	0.01	0.04
EPSTL-2	EUSTL-2	53.8 MMscfd Glycol Dehydrator Still Column	Volatile Organic Compounds	4.30	18.83
			Benzene	0.03	0.13
			Ethylbenzene	0.01	0.01
			Toluene	0.04	0.18
			Xylenes	0.01	0.01

EPRBL-2	EURBL-2	1.00 mmBTU/hr Glycol Dehydrator Reboiler	Nitrogen Oxides	0.10	0.44
			Carbon Monoxide	0.08	0.35
			Sulfur Dioxide	0.01	0.01
			Particulate Matter-10	0.01	0.04
			Volatile Organic Compounds	0.01	0.04
EPSTL-3	EUSTL-3	53.8 MMscfd Glycol Dehydrator Still Column	Volatile Organic Compounds	4.30	18.83
			Benzene	0.03	0.13
			Ethylbenzene	0.01	0.01
			Toluene	0.04	0.18
			Xylenes	0.01	0.01
EPRBL-3	EURBL-3	1.00 mmBTU/hr Glycol Dehydrator Reboiler	Nitrogen Oxides	0.10	0.44
			Carbon Monoxide	0.08	0.35
			Sulfur Dioxide	0.01	0.01
			Particulate Matter-10	0.01	0.04
			Volatile Organic Compounds	0.01	0.04
EPTK-1	EUTK-1	400 bbl Pipeline Fluids Storage Tank	Volatile Organic Compounds	0.02	0.09
EPTK-2	EUTK-2	400 bbl Pipeline Fluids Storage Tank	Volatile Organic Compounds	0.02	0.09
EPTK-3	EUTK-3	400 bbl Pipeline Fluids Storage Tank	Volatile Organic Compounds	0.02	0.09
NA	NA	Fugitive Emissions	Volatile Organic Compounds	3.91	17.09

The following table represents the total facility emissions:

Pollutant	Maximum Annual Facility Wide Emissions (tons/year)
Nitrogen Oxides	82.54
Carbon Monoxide	96.46
Volatile Organic Compounds	81.53
Particulate Matter-10	10.69
Sulfur Dioxide	1.59
Formaldehyde	4.01

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

Emission Unit	**Pollutant**	**Control Device**	**Control Efficiency**
EPCE-1 – EPCE-12 Compressor Engines	Nitrogen Oxides	Non Selective Catalytic Reduction (NSCR)	96.50 %
	Carbon Dioxide		93.25 %
	Volatile Organic Compounds		84.50 %
	Hazardous Air Pollutants		50.00 %
EUDHY-1 – EUDHY-3 Glycol Dehydration Units	BTEX (Benzene, Toluene, Ethylbenzene, Xylene)	Condenser/Combustion	99.70 %
	Volatile Organic Compounds		99.70 %
EPTK-1 – EPTK-3 Storage Tanks	Volatile Organic Compounds	DAQ approved control system	85.00 %
EPLOR Loadout Rack	Volatile Organic Compounds	Closed System	100.00 %

REGULATORY APPLICABILITY

Unless otherwise stated WVDEP DAQ did not determine whether the permittee is subject to an area source air toxics standard requiring Generally Achievable Control Technology (GACT) promulgated after January 1, 2007 pursuant to 40 CFR 63, including the area source air toxics provisions of 40 CFR 63, Subpart HH and 40 CFR 63, Subpart ZZZZ.

The following rules apply to the facility:

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

AMS would be subject to the opacity requirements in 45CSR2, which is 10% opacity based on a sixe minute block average.

45CSR4 (To Prevent and Control the Discharge of Air Pollutants into the Open Air which Causes or Contributes to an Objectionable Odor or Odors)

45CSR4 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.

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 AMS exceeds the regulatory emission threshold for criteria pollutants of 6 lb/hr and 10 ton/year, and AMS is subject to a substantive requirement of an emission control promulgated by the Secretary.

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

45CSR16 applies to this source by reference of, 40CFR60, Subpart KKK, 40CFR60, Subpart IIII, and 40CFR60, Subpart JJJJ. AMS is subject to the recordkeeping, monitoring, and testing required by 40CFR60, Subpart KKK, 40CFR60, Subpart VV, 40CFR60, Subpart IIII, and 40CFR60, Subpart JJJJ.

45CSR30 (Requirements for Operating Permits)

This permit does not affect 45CSR30 applicability. The source is a nonmajor source subject to 45CSR30.

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

AMS's auxiliary diesel generator (EUGEN-1) is subject to 40CFR60 Subpart IIII. Section 60.4205b details the emission standards for emergency engines with a displacement less than 30 liters per cylinder. AMS' proposed engine is a certified EPA Tier 3 engine under the provisions of 40CFR89 as tested per ISO 8178 D2.

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

AMS's compressor engines are subject to 40CFR60 Subpart JJJJ, which sets forth emission limits, fuel requirements, installation requirements, and monitoring requirements based on the year of installation of the subject internal combustion engine. 40CFR60 Subpart JJJJ is applicable to owners and operators of new stationary spark ignition internal combustion engines manufactured after July 1, 2007, for engines with a maximum rated power capacity greater than 500 hp. The twelve (12) new proposed 1,380 hp engines (EPCE-1 – EPCE-12) will be subject to this rule. The emission limits for these engines are the following: NOx – 2.0 g/hp-hr (6.08 lb/hr); CO – 4.0 g/hp-hr (12.16 lb/hr); and VOC – 1.0 g/hp-hr (3.04 lb/hr). Based on the manufacturer's specifications for these engines, the emission standards will be met. Because the engines will not be certified by the manufacturer, AMS 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 proposed 322 hp engine (EPGEN-2) was manufactured in February 1993, and therefore will 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. The facility is subject to this rule due to the JT Plant. AMS must meet the LDAR requirements of Subpart KKK, which includes the provisions referenced in 40CFR60 Subpart VV.

The following rules do not apply to the 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 AMS has proposed to install are 63.84 cubic meters each. Therefore, they would not be subject to this rule.

40CFR63 Subpart ZZZZ (National Emission Standards for Reciprocating Ignition Internal Combustion Engines)

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

40CFR63 Subpart HHH (National Emission Standards for Hazardous Air Pollutants: Natural Gas Transmission and Storage)

WVDEP DAQ did not determine whether the permittee is subject to an area source air toxics standard requiring Generally Achievable Control Technology (GACT) promulgated after January 1, 2007 pursuant to 40 CFR 63, including the area source air toxics provisions of 40 CFR 63, Subpart HH and 40 CFR 63, Subpart ZZZZ.

These promulgated national emission standards for hazardous air pollutants (NESHAP) limit emissions of hazardous air pollutants (HAP) from oil and natural gas production and natural gas transmission and storage facilities. These final rules implement section 112 of the Clean Air Act (Act) and are based on the Administrator's determination that oil and natural gas production and natural gas transmission and storage facilities emit HAP identified on the EPA's list of 188 HAPs.

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.

The following information was obtained from USEPA's Air Toxic Website.

Formaldehyde
Formaldehyde is used mainly to produce resins used in particleboard products and as an intermediate in the synthesis of other chemicals. Exposure to formaldehyde may occur by breathing contaminated indoor air, tobacco smoke, or ambient urban air. Acute (short-term) and chronic (long-term) inhalation exposure to formaldehyde in humans can result in respiratory symptoms, and eye, nose, and throat irritation. Limited human studies have reported an association between formaldehyde exposure and lung and nasopharyngeal cancer. Animal inhalation studies have reported an increased incidence of nasal squamous cell cancer. EPA considers formaldehyde a probable human carcinogen (Group B1).

Acrolein
Acrolein is primarily used as an intermediate in the synthesis of acrylic acid and as a biocide. It may be formed from the breakdown of certain pollutants in outdoor air or from the burning of organic matter including tobacco, or fuels such as gasoline or oil. It is toxic to humans following inhalation, oral or dermal exposures. Acute (short-term) inhalation exposure may result in upper respiratory tract irritation and congestion. No information is available on its reproductive,

developmental, or carcinogenic effects in humans, and the existing animal cancer data are considered inadequate to make a determination that acrolein is carcinogenic to humans.

Acetaldehyde
Acetaldehyde is mainly used as an intermediate in the synthesis of other chemicals. It is ubiquitous in the environment and may be formed in the body from the breakdown of ethanol. Acute (short-term) exposure to acetaldehyde results in effects including irritation of the eyes, skin, and respiratory tract. Symptoms of chronic (long-term) intoxication of acetaldehyde resemble those of alcoholism. Acetaldehyde is considered a probable human carcinogen (Group B2) based on inadequate human cancer studies and animal studies that have shown nasal tumors in rats and laryngeal tumors in hamsters.

Hexane
Hexane is used to extract edible oils from seeds and vegetables, as a special-use solvent, and as a cleaning agent. Acute (short-term) inhalation exposure of humans to high levels of hexane causes mild central nervous system (CNS) effects, including dizziness, giddiness, slight nausea, and headache. Chronic (long-term) exposure to hexane in air is associated with polyneuropathy in humans, with numbness in the extremities, muscular weakness, blurred vision, headache, and fatigue observed. Neurotoxic effects have also been exhibited in rats. No information is available on the carcinogenic effects of hexane in humans or animals. EPA has classified hexane as a Group D, not classifiable as to human carcinogenicity.

Ethylbenzene
Ethylbenzene is mainly used in the manufacture of styrene. Acute (short-term) exposure to ethylbenzene in humans results in respiratory effects, such as throat irritation and chest constriction, irritation of the eyes, and neurological effects such as dizziness. Chronic (long-term) exposure to ethylbenzene by inhalation in humans has shown conflicting results regarding its effects on the blood. Animal studies have reported effects on the blood, liver, and kidneys from chronic inhalation exposure to ethylbenzene. Limited information is available on the carcinogenic effects of ethylbenzene in humans. In a study by the National Toxicology Program (NTP), exposure to ethylbenzene by inhalation resulted in an increased incidence of kidney and testicular tumors in rats, and lung and liver tumors in mice. EPA has classified ethylbenzene as a Group D, not classifiable as to human carcinogenicity.

Toluene
Toluene is added to gasoline, used to produce benzene, and used as a solvent. Exposed to toluene may occur from breathing ambient or indoor air. The central nervous system (CNS) is the primary target organ for toluene toxicity in both humans and animals for acute (short-term) and chronic (long-term) exposures. CNS dysfunction and narcosis have been frequently observed in humans acutely exposed to toluene by inhalation; symptoms include fatigue, sleepiness, headaches, and nausea. CNS depression has been reported to occur in chronic abusers exposed to high levels of toluene. Chronic inhalation exposure of humans to toluene also causes irritation of the upper respiratory tract and eyes, sore throat, dizziness, and headache. Human studies have reported developmental effects, such as CNS dysfunction, attention deficits, and minor craniofacial and limb anomalies, in the children of pregnant women exposed to toluene or mixed solvents by inhalation. Reproductive effects, including an association between exposure to toluene and an increased incidence of spontaneous abortions, have also been noted. However,

these studies are not conclusive due to many confounding variables. EPA has classified toluene as a Group D, not classifiable as to human carcinogenicity.

Methanol
Methanol is released to the environment during industrial uses and naturally from volcanic gases, vegetation, and microbes. Exposure may occur from ambient air and during the use of solvents. Acute (short-term) or chronic (long-term) exposure of humans to methanol by inhalation or ingestion may result in blurred vision, headache, dizziness, and nausea. No information is available on the reproductive, developmental, or carcinogenic effects of methanol in humans. Birth defects have been observed in the offspring of rats and mice exposed to methanol by inhalation. EPA has not classified methanol with respect to carcinogenicity.

AIR QUALITY IMPACT ANALYSIS

The facility will not be a major source of HAP's as defined by 45CSR14. Based on the nature of the emissions and the annual emission rate, no air quality impact analysis was performed.

MONITORING OF OPERATIONS

AMS will be required to perform the following monitoring:

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

AMS will be required to perform the following recordkeeping:

1. Maintain records of the amount of natural gas consumed in each combustion source.
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 records of the visible emission opacity tests conducted per the permit.
5. 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.
6. The records shall be maintained on site or in a readily available off-site location maintained by AMS for a period of five (5) years.
7. Maintain records of all applicable requirements of 40CFR60 Subparts IIII, JJJJ, and KKK.

RECOMMENDATION TO DIRECTOR

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

Jerry Williams II, P.E.
Engineer

9/9/2010
Date