### West Virginia Department of Environmental Protection

Earl Ray Tomblin Governor

Division of Air Quality

Randy C. Huffman Cabinet Secretary

# Modification to a G35-A General Permit Registration



### for the

Prevention and Control of Air Pollution in regard to the Construction, Modification, Relocation, Administrative Update and Operation of Natural Gas Compressor Stations
With Glycol Dehydration Units, Flares, or Other Specified Control Devices Herein

The permittee identified at the facility listed below is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of General Permit G35-A.

G35-A064D

Issued to:

M3 Appalachia Gathering, LLC Daybrook Compressor Station 049-00138

William F. Durham

Director

Issued: November 18, 2014 • Effective: November 18, 2014

This registration will supersede and replace G35-A064C.

Facility Location:

Fairview, Marion County, West Virginia

Mailing Address:

1099 Main Avenue, Suite 210, Durango, CO 81301

Facility Description:

Natural gas compressor station

SIC Codes:

1311

**UTM Coordinates:** 

568.433 km Easting • 4381.149 km Northing • Zone 17

Lat/Long 39.620542/-80.254792

Registration Type:

Modification

Description of Change:

Modification revising the brake horsepower of two permitted engines [C-203 (Emission Unit ID No.: CE-4) and C-207 (Emission Unit ID No.: CE-5)] to 5,000 hp (from 4,735)

hp).

Also, transparent to this permit:

The control equipment manufacturer's specifications changed slightly from what was proposed in the initial general permit registration. A copy of the specification sheet for the revised air control equipment was included in the permit modification application under Attachment H.

Subject to 40CFR60 Subpart IIII? No Subject to 40CFR60 Subpart JJJJ? Yes; Certified? Yes

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit or registration issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

The source is not subject to 45CSR30.

# All registered facilities under Class II General Permit G35-A are subject to Sections 1.0, 1.1, 2.0, 3.0, and 4.0.

The following sections of Class II General Permit G35-A apply to the registrant:

Section 5	Reciprocating Internal Combustion Engines (R.I.C.E.)	$\boxtimes$
Section 6	Boilers, Reboilers, and Line Heaters	$\boxtimes$
Section 7	Tanks	$\boxtimes$
Section 8	Emergency Generators	$\boxtimes$
Section 9	Dehydration Units Not Subject to MACT Standards	
Section 10	Dehydration Units Not Subject to MACT Standards and being controlled by a flare control device	
Section 11	Dehydration Units Not Subject to MACT Standards being controlled by recycling the dehydration unit back to the flame zone of the reboiler	$\boxtimes$
Section 12	Dehydration Units Not Subject to MACT Standards and being controlled by a thermal oxidizer	
Section 13	Permit Exemption (Less than 1 ton/year of benzene exemption)	$\boxtimes$
Section 14	Permit Exemption (40CFR63 Subpart HH – Annual average flow of gas exemption (3 mmscf/day))	
Section 15	Permit Exemption (40CFR63 Subpart HHH – Annual average flow of gas exemption (10 mmscf/day))	
Section 16	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40CFR60 Subpart JJJJ)	$\boxtimes$

## **Emission Units**

Emission Unit ID	Emission Unit Description	Year	Design Capacity
	(Make, Model, Serial No.)	Installed	
CE-1 (C-201)	Caterpillar G3516LE Compressor Engine	2012	1,380 hp / 1,400 rpm
CE-2 (C-202)	Caterpillar G3516LE Compressor Engine	2012	1,380 hp / 1,400 rpm
CE-3 (C-206)	Caterpillar G3612LE Compressor Engine	2012	3,550 hp / 1,000 rpm
CE-4 (C-203)	Caterpillar G3616LE Compressor Engine	2014	5,000 hp / 1,000 rpm
CE-5 (C-207)	Caterpillar G3616LE Compressor Engine	2014	5,000 hp / 1,000 rpm
CE-6 (C-205)	Caterpillar G3608LE Compressor Engine	2014	2,370 hp / 1,000 rpm
RBV-1	Reboiler	2012	2.0 mmBtu/hr
RSV-1	Dehydration Unit Still Vent	2012	125 mmscf/day
T01	Waste Water / Oil	2012	4,200 gallons
T02	Methanol	2012	4,200 gallons
T03	Produced Water	2012	16,800 gallons
T04	Produced Water	2012	16,800 gallons
T05	Produced Water	2012	16,800 gallons
T06	Produced Water	2012	16,800 gallons
T07	Lean Ethylene Glycol	2012	16,800 gallons
GE-1	Baldor GN0250GASCAN, G79	2014	335 hp / 1,800 rpm
GE-4	Baldor GN0150GASCAN, G48	2014	200 hp / 1,800 rpm

# Reciprocating Internal Combustion Engines (R.I.C.E.) Information

Emission Unit ID	Subject to 40CFR60	Subject to 40CFR60	Subject to Sections 5.1.4/5.2.1
	Subpart IIII?	Subpart JJJJ?	(Catalytic Reduction Device)
CE-1 (C-201)	No	Yes	Yes
CE-2 (C-202)	No	Yes	Yes
CE-3 (C-206)	No	Yes	Yes
CE-4 (C-203)	No	Yes	Yes
CE-5 (C-207)	No	Yes	Yes
CE-6 (C-205)	No	Yes	Yes
GE-1	No	Yes	Yes
GE-4	No	Yes	Yes

# **Emission Limitations**

Emission Unit ID	Emission Source	Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annua Emissions (tpy)
	Caterpillar	Nitrogen Oxides	1.52	6.70
CE-1	G3516LE	Carbon Monoxide	0.22	1.00
	Compressor	Volatile Organic Compounds	0.59	2.60
(C-201)	Engine	Formaldehyde	0.04	0.20
	Caterpillar	Nitrogen Oxides	1.52	6.70
CE-2 (C-202)	G3516LE	Carbon Monoxide	0.22	1.00
	Compressor	Volatile Organic Compounds	0.59	2.60
	Engine	Formaldehyde	0.04	0.20
	Caterpillar	Nitrogen Oxides	3.92	17.20
CE-3	G3612LE	Carbon Monoxide	1.08	4.70
(C-206)	Compressor	Volatile Organic Compounds	2.51	11.00
	Engine	Formaldehyde	0.20	0.90
	Caterpillar	Nitrogen Oxides	5.51	24.14
CE-4	G3616LE	Carbon Monoxide	1.65	7.24
(C-203)	Compressor	Volatile Organic Compounds	3.52	15.45
	Engine	Formaldehyde	0.66	2.89
	Caterpillar	Nitrogen Oxides	5.51	24.14
CE-5	G3616LE	Carbon Monoxide	1.65	7.24
(C-207)	Compressor	Volatile Organic Compounds	3.52	15.45
(0 201)	Engine	Formaldehyde	0.66	2.89
	Caterpillar	Nitrogen Oxides	2.61	11.44
CE-6	G3608LE	Carbon Monoxide	0.99	4.35
(C-205)	Compressor	Volatile Organic Compounds	1.67	7.32
` /	Engine	Formaldehyde	0.31	1.37
		Nitrogen Oxides	0.20	0.86
	Glycol	Carbon Monoxide	0.17	0.72
RBV-1	Dehydrator	Volatile Organic Compounds	0.01	0.05
	Reboiler	Particulate Matter - 10	0.02	0.07
		Volatile Organic Compounds	0.06	0.27
	Glycol	Benzene	0.02	0.10
	Dehydrator	Ethylbenzene	< 0.01	0.01
RSV-1	Regenerator	Toluene	0.02	0.10
	Still Vent	Xylenes	0.01	0.05
		n-Hexane	0.02	0.10
	Baldor	Nitrogen Oxides	0.06	0.24
CP 1	GN0250GASCAN,	Carbon Monoxide	0.04	0.19
GE-1	G79 Generator	Volatile Organic Compounds	0.03	0.15
	Baldor	Nitrogen Oxides	0.01	0.04
CE 4	GN0150GASCAN,	Carbon Monoxide	0.12	0.51
GE-4	G48 Generator	Volatile Organic Compounds	0.11	0.49