West Virginia Department of Environmental Protection Division of Air Quality

Earl Ray Tomblin Governor Randy C. Huffman Cabinet Secretary

Class II General Permit G70-A Registration to Modify



for the

Prevention and Control of Air Pollution in regard to the Construction, Modification, Relocation, Administrative Update and Operation of Oil and Natural Gas Production Facilities

Located at the Well Site

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 G70-A.

G70-A039A

Issued to:

Antero Resources Corporation Pennington North Pad 017-00095

William F. Durham

Director

Issued: November 26, 2014 • Effective: November 26, 2014

Facility Location:

New Milton, Doddridge County, West Virginia

Mailing Address:

1625 17th Street, Denver, CO 80202

Facility Description:

Natural Gas Production

NAICS Code: SIC Code:

211111

UTM Coordinates:

1311

522.518 km Easting • 4,340.118 km Northing • Zone 17

Longitude Coordinates: Lattitude Coordinatees: -80.739021 39.210430

Directions to Facility:

At the intersection of C/R 25/2 and C/R 25 / Meathouse Fork Road, head north to C/R 25 Meathouse Fork Road for 1.2 miles. Turn left to WV-18S and go for 3 miles. Turn right to C/R 18 / Maxwell Ridge Road for 2.3 miles. Turn right to C/R 40 Grouse Run Road

and go for 0.4 miles. The entrance to the facility is on the right.

Registration Type:

Modification

Description of Change:

Application to modify a natural gas well pad by increasing condensate production, adding

four wells, four GPUs, two produced water tanks, one sales gas compressor and to

remove vapor recovery lines used during loading.

Subject to 40CFR60, Subpart OOOO? Yes

Subject to 40CFR60, Subpart JJJJ? Yes, Certified

Subject to 40CFR63, Subpart ZZZZ? Yes, JJJJ Reg's

Subject to 40CFR63, Subpart HH? No

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.

Permit Section Applicability for the Registrant

All registered facilities under General Permit G70-A are subject to Sections 1.0, 2.0, 3.0, and 4.0 of General Permit G70-A.

The following additional sections of General Permit G70-A apply to the registrant:

Section 5	Natural Gas Well Affected Facility	\boxtimes
Section 6	Storage Vessels*	\boxtimes
Section 7	Gas Production Units, In-Line Heaters, Heater Treaters, and Glycol Dehydration Reboilers	\boxtimes
Section 8	Pneumatic Controllers Affected Facility (NSPS, Subpart OOOO)	
Section 9	Reserved	
Section 10	Natural Gas-Fired Compressor Engine (s) (RICE)**	\boxtimes
Section 11	Tank Truck Loading Facility***	\boxtimes
Section 12	Standards of Performance for Storage Vessel Affected Facilities (NSPS, Subpart OOOO)	
Section 13	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (NSPS, Subpart JJJJ)	\boxtimes
Section 14	Control Devices not subject to NSPS, Subpart OOOO	\boxtimes
Section 15	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40CFR63, Subpart ZZZZ)	\boxtimes
Section 16	Glycol Dehydration Units	
Section 17	Dehydration Units With Exemption from NESHAP Standard, Subpart HH § 63.764(d) (40CFR63, Subpart HH)	
Section 18	Dehydration Units Subject to NESHAP Standard, Subpart HH and Not Located Within an UA/UC (40CFR63, Subpart HH)	
Section 19	Dehydration Units Subject to NESHAP Standard, Subpart HH and Located Within an UA/UC (40CFR63, Subpart HH)	
	y also be subject to the applicable control device requirements of Section 12 if the registrant is subject to the NSPS, Subpart OOOO cornay be subject to the control device requirements of Section 14.	ntrol

^{**} The registrant may also be subject to the applicable RICE requirements of Section 13 and/or Section 15.

^{***} The registrant may also be subject to the applicable control device requirements of Section 14.

1.0 Emission Units Table

Emission Unit	Emission	Emission Unit	Control	Year	Max.	Design	G70-A
ID	Point ID	Description	Device ID	Installe	Design	Capacity	Applicable
		(Mfg., Model,		d /	Capacity	Unit of	Sections
		Serial No.,		Modifi		Measure	
		Engine type		ed			
		2SLB, 4SLB,				1	
		4SRB, etc.)					
H001	EP-H001	Heater Treater		2014	1.5	mmBtu/hr	7
H002	EP-H002	Heater Treater		2014	1.5	mmBtu/hr	7
H003	EP-H003	Heater Treater		2014	1.5	mmBtu/hr	7
H004	EP-H004	Heater Treater		2014	1.5	mmBtu/hr	7
H005	EP-H005	Heater Treater		2014	1.5	mmBtu/hr	7
H006	EP-H006	Heater Treater		2014	1.5	mmBtu/hr	7
H007	EP-H007	Heater Treater		2014	1.5	mmBtu/hr	7
TANKCOND001	FL-001	Cond. Tank	FL-001	2014	400	Bbl	6 & 14
TANKCOND002	FL-001	Cond. Tank	FL-001	2014	400	Bbl	6 & 14
TANKCOND003	FL-001	Cond. Tank	FL-001	2014	400	Bbl	6 & 14
TANKCOND004	FL-001	Cond. Tank	FL-001	2014	400	Bbl	6 & 14
TANKPW001	FL-001	P. Water Tank	FL-001	2014	400	Bbl	6 & 14
TANKPW002	FL-001	P. Water Tank	FL-001	2014	400	Bbl	6 & 14
ENG001	EP-ENG001	Kubota DG972		2014	23.6	Нр	10,13,15
		Sales Gas	[
		Compressor					
L001	EP-L001	Cond./Water	N/A	2014	2,146,200	Gal/year	11
		Loading					

Control	Devices	(If ann	licable)

	Control Devices (if applicable)							
Control	Control Control Control Device Description Year Max.				Design	G-70A		
Device	Efficiency	(Mfg, Model) Installed Design			Capacity	Applicable		
ID	%	/ Capacity			Unit of	Sections		
			Modified		Measure			
FL001	98	Cimmaron Model 48" HV ECD Flare	2014	90	Scfm	14		
	Yes or No	G-70A Applicable Sections						
Was a vapor recovery system (VRU) used to determine emission limits?								
Was a low pressure tower(s) used to determine emission limits?								

2.0 Oil and Natural Gas Wells Table

API number	API number	API number	
047-017-06313-00			
047-017-06321-00			
047-017-06320-00			
047-017-06322-00			

3.0 Emission Limitations

	mission Eini				
Emission	Emission	Emission Unit Description	Regulated Pollutant	Max	imum
Unit ID	Point ID			Potential	
				Emis	ssions
				Hourly	Annual
				(lb/hr)	(tpy)
H001-	EP-H001-	(7) 1.5mmBtu/hr GPU Heaters	Nitrogen Oxides	0.87	3.80
H007	H007		Carbon Monoxide	0.73	3.20
TANKC	FL-001	(4) 400 BBL Condensate Tanks &	Volatile Organic Compounds	1.11	4.87
OND001		Flare	Total HAPs	0.13	0.55
-004					
ENG001	EP-ENG001	Kubota DG972 Compressor	Nitrogen Oxides	0.32	1.38
			Carbon Monoxide	5.64	24.72
			Volatile Organic Compounds	0.01	0.03
L001	EP-L001	Cond./Prod. Water Truck Loading	Volatile Organic Compounds	29.49	3.14
			Total HAPs	0.25	0.03

4.0 Throughput Limitations

Throughput limits are on a 12-month rolling total basis.

Emission ID	Unit	Emission Point ID	Emission Unit Description	Annual Throughput Limit
L001		EP-L001	Condensate Truck Loading	2,146,200 gal/yr

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

Emission	Engine	Subject to 40CFR60,	Subject to 40CFR63,	Subject to Sections 10.1.4 /
Unit ID	Manufacturing Date	Subpart JJJJ?	Subpart ZZZZ?	10.2.1 (Catalytic Reduction
				Device)
ENG001	2013	Yes	Yes	No