

# 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 Construct



#### 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-A105

Issued to:

Antero Resources Corporation Red Lick Well Pad 017-00134

William F. Durham

Director

Issued: December 8, 2014 • Effective: December 8, 2014

Facility Location: New Milton, Doddridge County, West Virginia Mailing Address: 1615 Wynkoop Street, Denver, CO 80202

Facility Description: Natural Gas Production NAICS Code: 211111

NAICS Code: 211111 SIC Code: 1311

UTM Coordinates: 529.917 km Easting • 4,341.595 km Northing • Zone 17

Lattitude Coordinates: -80.653420 Lattitude Coordinatees: 39.223125

Directions to Facility: Go 1.0 mile northeast of the intersection of Redlick Run Road and C/R 25/2. Entrance to

the facility will be on the right.

Registration Type: Construction

Description of Change: New construction of natural gas facility.

Subject to 40CFR60, Subpart OOOO? Yes

Subject to 40CFR60, Subpart JJJJ? No

Subject to 40CFR63, Subpart ZZZZ? No

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)**	
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)	
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)	
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)	

<sup>\*</sup> The registrant may also be subject to the applicable control device requirements of Section 12 if the registrant is subject to the NSPS, Subpart OOOO control requirements or may be subject to the control device requirements of Section 14.

<sup>\*\*</sup> The registrant may also be subject to the applicable RICE requirements of Section 13 and/or Section 15.

<sup>\*\*\*</sup> 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,					
		4SRB, etc.)					
H001	EP-H001	Heater Treater		TBD	1.0	mmBtu/hr	7
H002	EP-H002	Heater Treater		TBD	1.0	mmBtu/hr	7
H003	EP-H003	Heater Treater		TBD	1.0	mmBtu/hr	7
H004	EP-H004	Heater Treater		TBD	1.0	mmBtu/hr	7
H005	EP-H005	Heater Treater		TBD	1.0	mmBtu/hr	7
H006	EP-H006	Heater Treater		TBD	1.0	mmBtu/hr	7
TANK001	FL-001	Cond. Tank	FL-001	TBD	400	Bbl	6 & 14
TANK002	FL-001	Cond. Tank	FL-001	TBD	400	Bbl	6 & 14
TANK003	FL-001	Cond. Tank	FL-001	TBD	400	Bbl	6 & 14
TANK004	FL-001	Cond. Tank	FL-001	TBD	400	Bbl	6 & 14
TANK005	FL-001	Cond. Tank	FL-001	TBD	400	Bbl	6 & 14
TANK006	FL-001	Cond. Tank	FL-001	TBD	400	Bbl	6 & 14
L001	EP-L001	Truck Loading	N/A	TBD	3,587,220	Gal/year	11

0 1	Devices	/IC	1. 11	

	Control Device Description	Year	Max.	Design	G-70A	
Efficiency	(Mfg, Model)	Installed	Design	Capacity	Applicable	
%		/	Capacity	Unit of	Sections	
		Modified		Measure		
98	Abutec-200	TBD	139	Scfm	14	
Emission Reduction Systems						
•						
Was a vapor recovery system (VRU) used to determine emission limits?						
Was a low pressure tower(s) used to determine emission limits?						
]	% 98 recovery sy	%  98 Abutec-200  Emission Reduction Systems  recovery system (VRU) used to determine emission	% Modified  98 Abutec-200 TBD  Emission Reduction Systems  recovery system (VRU) used to determine emission limits?	% / Capacity  98 Abutec-200 TBD 139  Emission Reduction Systems  recovery system (VRU) used to determine emission limits?	% / Capacity Unit of Measure  98 Abutec-200 TBD 139 Scfm  Emission Reduction Systems Yes or No recovery system (VRU) used to determine emission limits? No	

#### 2.0 Oil and Natural Gas Wells Table

API number	API number	API number	
TBD			
	-		

### 3.0 Emission Limitations

Emission	Emission	Emission Unit Description	Regulated Pollutant	Max	imum
Unit ID	Point ID			Pote	ential
				Emi	ssions
				Hourly	Annual
				(lb/hr)	(tpy)
H001-	EP-H001-	(6) 1.0mmBtu/hr GPU Heaters	Nitrogen Oxides	0.48	2.11
H006	H006		Carbon Monoxide	0.40	1.77
TANK00	FL-001	(6) 400 BBL Tanks & Flare	Volatile Organic Compounds	0.10	0.44
1-006			Total HAPs	0.01	0.02
L001	EP-L001	Truck Loading	Volatile Organic Compounds	0.96	0.17
			Total HAPs		

## 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	Truck Loading	3,587,220 gal/yr

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

Emission Unit ID	Engine Manufacturing Date	Subject to 40CFR60, Subpart JJJJ?	Subject to 40CFR63, Subpart ZZZZ?	Subject to Sections 10.1.4 / 10.2.1 (Catalytic Reduction
				Device)