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-A141

Issued to:
Antero Resources Corporation
Lick Run Pad
017-00147

William F. Durham
Director

Issued: March 17, 2015

Facility Location:	New Milton, Doddridge County, West Virginia
Mailing Address:	1615 Wynkoop Street, Denver, CO 80202
Facility Description:	Natural Gas Production
NAICS Code:	211111
SIC Code:	1311
UTM Coordinates:	523.772 km Easting • 4,342.714 km Northing • Zone 17
Longitude Coordinates:	-80.724569
Lattitude Coordinatees:	39.233397
Directions to Facility:	To access the pad from US-50W, turn left onto WV-18S. Follow for 4.3 miles and turn right onto Lick Run and continue for 2.75 miles. In 0.1 miles, turn right onto an unnamed oil field road. The entrance to the pad will be 0.8 miles on the right.
Registration Type:	Construction
Description of Change:	Construction of a new Natural Gas Production Facility.

Subject to 40CFR60, Subpart OOOO? Yes

Subject to 40CFR60, Subpart JJJJ? Yes

Subject to 40CFR63, Subpart ZZZZ? Yes, JJJJ Req'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	☒
Section 6	Storage Vessels*	☒
Section 7	Gas Production Units, In-Line Heaters, Heater Treaters, and Glycol Dehydration Reboilers	☒
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***	☒
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	☒
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)	☐

* 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.

** 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 ID	Emission Point ID	Emission Unit Description (Mfg., Model, Serial No., Engine type 2SLB, 4SLB, 4SRB, etc.)	Control Device ID	Year Installed / Modified	Max. Design Capacity	Design Capacity Unit of Measure	G70-A Applicable Sections
H001	EP-H001	Heater Treater	--	TBD	1.5	mmBtu/hr	7
H002	EP-H002	Heater Treater	--	TBD	1.5	mmBtu/hr	7
H003	EP-H003	Heater Treater	--	TBD	1.5	mmBtu/hr	7
H004	EP-H004	Heater Treater	--	TBD	1.5	mmBtu/hr	7
H005	EP-H005	Heater Treater	--	TBD	1.5	mmBtu/hr	7
H006	EP-H006	Heater Treater	--	TBD	1.5	mmBtu/hr	7
H007	EP-H007	Heater Treater	--	TBD	1.5	mmBtu/hr	7
H008	EP-H008	Heater Treater	--	TBD	1.5	mmBtu/hr	7
H009	EP-H009	Heater Treater	--	TBD	1.5	mmBtu/hr	7
H010	EP-H010	Heater Treater	--	TBD	1.5	mmBtu/hr	7
TANKCOND001	FL-001	Condensate Tank	FL-001	TBD	400	Bbl	6 & 14
TANKCOND002	FL-001	Condensate Tank	FL-001	TBD	400	Bbl	6 & 14
TANKCOND003	FL-001	Condensate Tank	FL-001	TBD	400	Bbl	6 & 14
TANKCOND004	FL-001	Condensate Tank	FL-001	TBD	400	Bbl	6 & 14
TANKCOND005	FL-001	Condensate Tank	FL-001	TBD	400	Bbl	6 & 14
TANKCOND006	FL-001	Condensate Tank	FL-001	TBD	400	Bbl	6 & 14
TANKCOND007	FL-001	Condensate Tank	FL-001	TBD	400	Bbl	6 & 14
TANKCOND008	FL-001	Condensate Tank	FL-001	TBD	400	Bbl	6 & 14
TANKCOND009	FL-001	Condensate Tank	FL-001	TBD	400	Bbl	6 & 14
TANKCOND010	FL-001	Condensate Tank	FL-001	TBD	400	Bbl	6 & 14
TANKPW001	FL-001	Produced Water Tank	FL-001	TBD	400	Bbl	6 & 14
TANKPW002	FL-0001	Produced WaterTank	FL-001	TBD	400	Bbl	6 & 14
ENG001	EP-ENG001	Kubota DG972-E2	--	TBD	23.6	hp	10, 13 & 15
L001	EP-L001	Cond. Loading	N/A	TBD	766,500	Gal/year	11

Control Devices (If applicable)						
Control Device ID	Control Efficiency %	Control Device Description (Mfg, Model)	Year Installed / Modified	Max. Design Capacity	Design Capacity Unit of Measure	G-70A Applicable Sections
FL001	98	Abutec Model 200	TBD	90	Scfm	14

Emission Reduction Systems	Yes or No	G-70A Applicable Sections
Was a vapor recovery system (VRU) used to determine emission limits?	No	
Was a low pressure tower(s) used to determine emission limits?	No	

2.0 Oil and Natural Gas Wells Table

API number	API number	API number
(10) Wells Not Yet Permitted		

3.0 Emission Limitations

Emission Unit ID	Emission Point ID	Emission Unit Description	Regulated Pollutant	Maximum Potential Emissions	
				Hourly (lb/hr)	Annual (tpy)
H001-H010	EP-H001-H010	(10) 1.5 mmBtu/hr Heater Treaters	Nitrogen Oxides	1.20	5.27
			Carbon Monoxide	1.01	4.43
TANKCO ND1-10	FL-001	(10) 400 BBL Condensate Tanks & Flare	Volatile Organic Compounds	0.36	1.58
			Total HAPs	0.01	0.05
ENG001	EP-ENG001	Kubota DG972-E2 Compressor Engine	Nitrogen Oxides	0.32	1.38
			Carbon Monoxide	5.64	24.72
			Volatile Organic Compounds	0.01	0.03
			Formaldehyde	--	0.02
L001	EP-L001	Condensate Truck Loading	Volatile Organic Compounds	4.72	0.18
			Total HAPs	0.01	--

4.0 Throughput Limitations

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

Emission Unit ID	Emission Point ID	Emission Unit Description	Annual Throughput Limit
L001	EP-L001	Condensate Truck Loading	766,500 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)
ENG001	2013	Yes	Yes (JJJJ Only)	No