

*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 Modification



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-A036B

Issued to:

**Antero Resources Corporation
Cline Well Pad
017-00101**

A blue ink signature of William F. Durham, written in a cursive style, is positioned above a horizontal line.

*William F. Durham
Director*

Issued: April 10, 2015

This Class II General Permit Registration will supersede and replace G70-A036A.

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: 525.944 km Easting • 4,337.441 km Northing • Zone 17
Longitude Coordinate: -80.69959
Latitude Coordinate: 39.18584
Directions to Facility: From New Milton, at the intersection of C/R 25/2 and C/R 25, head north on C/R 25 / Meathouse Fork Road for 1.2 miles. Turn left to WV-18S and go for 5.1 miles. Turn right to unnamed road for 0.1 miles. Facility entrance will be on the left.
Registration Type: Modification
Description of Change: Installation and operation of one (1) 1.5 mmBtu/hr GPU heater and one 24-bhp flash gas compressor engine. Increase in produced liquids production. Truck loading will be uncontrolled. Removal of one (1) 1.0 mmBtu/hr GPU heater.

Subject to 40CFR60, Subpart OOOO? Yes

Subject to 40CFR60, Subpart JJJJ? Yes, engine ENG001 is subject to this regulation and ENG001 is certified.

Subject to 40CFR63, Subpart ZZZZ? Yes, engine ENG001 is subject to this regulation, but all engines will demonstrate compliance through subpart JJJJ requirements.

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	<input checked="" type="checkbox"/>
Section 6	Storage Vessels*	<input checked="" type="checkbox"/>
Section 7	Gas Production Units, In-Line Heaters, Heater Treaters, and Glycol Dehydration Reboilers	<input checked="" type="checkbox"/>
Section 8	Pneumatic Controllers Affected Facility (NSPS, Subpart OOOO)	<input type="checkbox"/>
Section 9	<i>Reserved</i>	<input type="checkbox"/>
Section 10	Natural Gas-Fired Compressor Engine (s) (RICE)**	<input checked="" type="checkbox"/>
Section 11	Tank Truck Loading Facility***	<input checked="" type="checkbox"/>
Section 12	Standards of Performance for Storage Vessel Affected Facilities (NSPS, Subpart OOOO)	<input type="checkbox"/>
Section 13	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (NSPS, Subpart JJJJ)	<input checked="" type="checkbox"/>
Section 14	Control Devices not subject to NSPS, Subpart OOOO	<input checked="" type="checkbox"/>
Section 15	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40CFR63, Subpart ZZZZ)	<input checked="" type="checkbox"/>
Section 16	Glycol Dehydration Units	<input type="checkbox"/>
Section 17	Dehydration Units With Exemption from NESHAP Standard, Subpart HH § 63.764(d) (40CFR63, Subpart HH)	<input type="checkbox"/>
Section 18	Dehydration Units Subject to NESHAP Standard, Subpart HH and Not Located Within an UA/UC (40CFR63, Subpart HH)	<input type="checkbox"/>
Section 19	Dehydration Units Subject to NESHAP Standard, Subpart HH and Located Within an UA/UC (40CFR63, Subpart HH)	<input type="checkbox"/>

* 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	GPU Heater	--	2014	1.0	mmBtu/hr	7
H002	EP-H002	GPU Heater	--	2014	1.0	mmBtu/hr	7
H003	EP-H003	GPU Heater	--	2014	1.0	mmBtu/hr	7
H004	EP-H004	GPU Heater	--	2014	1.0	mmBtu/hr	7
H005	EP-H005	GPU Heater	--	2014	1.0	mmBtu/hr	7
H006	EP-H006	GPU Heater	--	2014	1.5	mmBtu/hr	7
TANK001	FL-001	Produced Liquids Tank	FL-001	2014	400	Bbl	6 & 14
TANK002	FL-001	Produced Liquids Tank	FL-001	2014	400	Bbl	6 & 14
TANK003	FL-001	Produced Liquids Tank	FL-001	2014	400	Bbl	6 & 14
TANK004	FL-001	Produced Liquids Tank	FL-001	2014	400	Bbl	6 & 14
TANK005	FL-001	Produced Liquids Tank	FL-001	2014	400	Bbl	6 & 14
TANK006	FL-001	Produced Liquids Tank	FL-001	2014	400	Bbl	6 & 14
TANK007	FL-001	Produced Liquids Tank	FL-001	2014	400	Bbl	6 & 14
TANK008	FL-001	Produced Liquids Tank	FL-001	2014	400	Bbl	6 & 14
L001	EP-L001	Produced Liquids Loading	N/A	2014	11,947,400	gallons/year	11
ENG001	EP-ENG001	Flash Gas Compressor Engine Kubota DG972-E2	None	2015	24	bhp	10, 13, 15

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	Cimmaron Model 48" HV ECD Combustor	2014	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
047-017-06362-00	047-017-06333-00	047-017-06266-00
047-017-06453-00	047-017-06334-00	047-017-06311-00

3.0 Emission Limitations

Emission Unit ID	Emission Point ID	Emission Unit Description	Regulated Pollutant	Maximum Potential Emissions	
				Hourly (lb/hr)	Annual (tpy)
ENG001	EP-ENG001	Compressor Engine Kubota DG972-E2	Nitrogen Oxides	0.32	1.39
			Carbon Monoxide	5.65	24.73
			Volatile Organic Compounds	0.01	0.03
H001-H006	EP-H001-H006	Six (6) GPU Heaters	Nitrogen Oxides	0.54	2.36
			Carbon Monoxide	0.46	1.98
TANK001-008	FL-001	Eight (8) Produced Liquids Tanks (Controlled by Combustor)	Volatile Organic Compounds	0.34	1.47
			Carbon Monoxide	0.04	0.18
			Nitrogen Oxides	0.05	0.21
			Hexane	0.02	0.06
L001	EP-L001	Produced Liquids Truck Loading	Volatile Organic Compounds	5.40	3.20
			Hexane	0.02	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	Produced Liquids Truck Loading	11,947,400 gallons/year
TANK001-004	FL001	Produced Liquids Tanks (Total)	11,947,400 gallons/year

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	No