



west virginia department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone 304/926-0475

Earl Ray Tomblin, Governor
Randy C. Huffinan, Cabinet Secretary
www.dep.wv.gov

December 3, 2015

CERTIFIED MAIL
91 7199 9991 7035 6613 6199

Kenneth Kirk
625 Liberty Avenue, Suite 1700
Pittsburgh, PA 15222

RE: Approved Registration G70-A082A
EQT Production Company
Big 192 Pad
Facility ID No. 103-00073

Dear Mr. Kirk:

The Director has determined that the submitted Registration Application and proposed modification and operation of an oil and natural gas production facility demonstrates eligibility and compliance with the requirements, provisions, standards and conditions of General Permit G70-A and hereby grants General Permit registration authorizing the proposed activity.

General Permit G70-A can be accessed electronically at www.dep.wv.gov/daq/permitting/Pages/airgeneralpermit.aspx. Hard copies are available upon request by contacting Danielle Wentz at (304)926-0499 ext. 1193.

Please be aware of the actions required in Monitoring Requirements, Testing Requirements, Recordkeeping Requirements, and the Reporting Requirements.

Should you have any questions, please contact the undersigned engineer at (304)926-0499 ext. 1222 or Roy.F.Kees@wv.gov.

Sincerely,

Roy F. Kees, P.E.
Engineer - NSR Permitting

Enclosures: Registration G70-A082A
c. Alex Bosiljevac

*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-A082A

Issued to:
EQT Production Company
Big 192 Wellpad
103-00073

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

*William F. Durham
Director*

Issued: December 3, 2015

This permitting action will supersede and replace G70-A082.

Facility Location: Jacksonburg, Wetzel County, West Virginia
Mailing Address: 625 Liberty Avenue, Suite 1700, Pittsburgh, PA 15222
Facility Description: Natural Gas Production
NAICS Code: 211111
SIC Code: 1311
UTM Coordinates: 535.8 km Easting • 4,375.4 km Northing • Zone 17
Longitude Coordinates: -80.58259
Latitude Coordinates: 39.52757
Directions to Facility: From Jacksonburg, WV, head south on WV-20S to Co. Rd. 7/6/Richwood Run Road and travel 0.3 miles. Turn left onto Co. Rd. 7/6/Richwood Run Road and travel 1.9 miles. Make a slight right to stay on Co. Rd. 7/6/Richwood Run Road and travel approximately 1.4 miles. The facility will road will be on the right.
Registration Type: Modification
Description of Change: Modification of natural gas production facility.

Subject to 40CFR60, Subpart OOOO? Yes

Subject to 40CFR60, Subpart JJJJ? No

Subject to 40CFR63, Subpart ZZZZ? No

Subject to 40CFR63, Subpart HH? 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.

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 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 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 type="checkbox"/>
Section 16	Glycol Dehydration Units	<input checked="" type="checkbox"/>
Section 17	Dehydration Units With Exemption from NESHAP Standard, Subpart HH § 63.764(d) (40CFR63, Subpart HH)	<input checked="" 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
S013	E013	Line Heater	None	2013	1.54	mmBtu/hr	7
S014	E014	Line Heater	None	2013	1.54	mmBtu/hr	7
S015	E015	Line Heater	None	2013	1.54	mmBtu/hr	7
S016	E016	Line Heater	None	2013	1.54	mmBtu/hr	7
S017	E017	Line Heater	None	2013	1.54	mmBtu/hr	7
S018	E018	Line Heater	None	2013	1.54	mmBtu/hr	7
S019	E019	Line Heater	None	2013	1.54	mmBtu/hr	7
S020	E020	Line Heater	None	2013	1.54	mmBtu/hr	7
S021	E021	Line Heater	None	2013	1.54	mmBtu/hr	7
S022	E022	Line Heater	None	2013	1.54	mmBtu/hr	7
S023	E023	Line Heater	None	2013	1.54	mmBtu/hr	7
S030	E030	Line Heater	None	2013	1.54	mmBtu/hr	7
S031	E031	Line Heater	None	2013	1.54	mmBtu/hr	7
S032	E032	Line Heater	None	2013	1.54	mmBtu/hr	7
S033	E033	Line Heater	None	2013	1.54	mmBtu/hr	7
S034	E034	Line Heater	None	2013	1.54	mmBtu/hr	7
S001	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	2013	400	bbl	6 & 14
S002	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	2013	400	bbl	6 & 14
S003	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	2013	400	bbl	6 & 14
S004	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	2013	400	bbl	6 & 14
S005	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	2013	400	bbl	6 & 14
S006	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	2013	400	bbl	6 & 14
S007	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	2013	400	bbl	6 & 14
S008	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	2013	400	bbl	6 & 14
S009	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	2013	400	bbl	6 & 14
S010	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	2013	400	bbl	6 & 14
S011	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	2013	400	bbl	6 & 14
S012	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	2013	400	bbl	6 & 14
S026	C001/C002,	Condensate	C001/C002	2014	400	bbl	6 & 14

	C004	Storage Tank	, C004				
S027	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	2014	400	bbl	6 & 14
S028	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	2014	400	bbl	6 & 14
S029	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	2014	400	bbl	6 & 14
S024	E024	Thermoelectric Generator	None	2013	0.029	mmBtu/hr	7
S025	E025	Thermoelectric Generator	None	2013	0.029	mmBtu/hr	7
L001	L001	Cond. Loading	N/A	2013	60,871,000	gal/year	11
S036	E036	Glycol Dehydration Unit Reboiler	NA	2014	2.31	mmBtu/hr	7
S035	C003	Glycol Dehydration Unit Still Vent	C003	2014	130	Mmscfd	16 & 17
S038	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	TBD	400	bbl	6 & 14
S039	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	TBD	400	bbl	6 & 14
S040	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	TBD	400	bbl	6 & 14
S041	C001/C002, C004	Condensate Storage Tank	C001/C002, C004	TBD	400	bbl	6 & 14
S042	E042	Sand Separator Tank	None	TBD	140	Bbl	6
S043	E043	Line Heater	None	TBD	1.54	mmBtu/hr	7
S044	E044	Line Heater	None	TBD	1.54	mmBtu/hr	7
S045	E045	Thermoelectric Generator	None	TBD	0.013	mmBtu/hr	7
S046	E046	Thermoelectric Generator	None	TBD	0.013	mmBtu/hr	7
S047	E047	Thermoelectric Generator	None	TBD	0.013	mmBtu/hr	7
S048	C001/C002, C004	Dehydrator Drip Tank	C001/C002, C004	TBD	100	Bbl	6 & 14

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
C001	98	Leed Fabrication Enclosed Combustor (48")	2013	11.66	MMBTU/hr	14
C002	98	Leed Fabrication Enclosed Combustor (48")	2014	11.66	MMBTU/hr	14
C003	98	Leed Fabrication Enclosed Combustor (36")	2014	8.33	MMBTU/hr	14
C004	98	Leed Fabrication Enclosed Combustor (60")	TBD	18.75	MMBTU/hr	14
Emission Reduction Systems					Yes or No	G-70A Applicable Sections
Was a vapor recovery system (VRU) used to determine emission limits?					No	NA
Was a low pressure tower(s) used to determine emission limits?					No	NA

2.0 Oil and Natural Gas Wells Table

API number	API number	API number
047-103-02819	047-103-02820	047-103-02827
047-103-02825	047-103-02823	047-103-02828
047-103-02826	047-103-02822	047-103-02855
047-103-02824	047-103-02821	047-103-02900
047-103-03040	047-103-03041	047-103-03042
047-103-03043		

3.0 Emission Limitations

Emission Unit	Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (tpy)
S001-S012, S026-S029, S038-S041, S048 (20) 400 bbl Storage Tanks, Dehy Drip Tank and Loading with Combustors (C001, C002, C004) (Combined)	Nitrogen Oxides	3.64	15.93
	Carbon Monoxide	3.05	13.37
	Volatile Organic Compounds	1.88	8.24
	Sulfur Dioxide	0.02	0.10
	Particulate Matter-10	0.28	1.22

S042 Sand Separator Tank	Volatile Organic Compounds	0.12	0.53
	Total HAPs	0.01	0.06
S013-S023, S030-S034, S043-S044 (18) 1.54 MMBTU/hr Line Heaters	Nitrogen Oxides	2.38	10.43
	Carbon Monoxide	2.00	8.76
	Volatile Organic Compounds	0.13	0.57
	Sulfur Dioxide	0.01	0.06
	Particulate Matter - 10	0.18	0.79
S024-S025, S045-S047 (2) 0.029 & (3) 0.013 MMBTU/hr Thermoelectric Generators	Nitrogen Oxides	0.01	0.04
	Carbon Monoxide	0.01	0.03
	Volatile Organic Compounds	<0.01	<0.01
	Sulfur Dioxide	<0.01	<0.01
	Particulate Matter - 10	<0.01	<0.01
S027 Liquids Loading (Uncaptured)	Volatile Organic Compounds	0.29	1.26
	Total HAPs	0.01	0.03
S035 130 MMSCF/Day Dehydrator with Combustor C003	Nitrogen Oxides	0.72	3.16
	Carbon Monoxide	0.61	2.66
	Volatile Organic Compounds	3.48	15.25
	Sulfur Dioxide	<0.01	0.02
	Particulate Matter - 10	0.09	0.24
	CO _{2e}	1,058	4,634
	Benzene	0.11	0.47
	Toluene	0.37	1.61
	Ethylbenzene	0.27	1.20
	Xylenes	0.39	1.72
	n-Hexane	0.01	0.05
	Total HAPs	1.16	5.06
S036 2.31 MMBTU/hr Reboiler	Nitrogen Oxides	0.20	0.87
	Carbon Monoxide	0.17	0.73
	Volatile Organic Compounds	0.01	0.05
	Sulfur Dioxide	<0.01	0.01
	Particulate Matter - 10	0.02	0.07
	CO _{2e}	271	1,184

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	L001	Liquids Loading	60,871,000 gal/yr

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

N/A