



west virginia department of environmental protection

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

Joe Manchin, III, Governor
Randy C. Huffman, Cabinet Secretary
www.wvdep.org

January 14, 2016

CERTIFIED MAIL
91 7199 9991 7035 6693 6096

Mr. Paul Geiger
SWN Production Company, LLC
10000 Energy Drive
Spring, TX 77389

RE: Approved Registration G70-A081A
SWN Production Company, LLC
Fork Ridge Pad
051-00205

Dear Mr. Geiger:

The Director has determined that the submitted Registration Application and proposed modification and operation of a natural gas compressor station demonstrates eligibility and compliance with the requirements, provisions, standards and conditions of General Permit G70-A and hereby grants General Permit registration G70-A091A authorizing the proposed activity.

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. 1258.

Sincerely,

Caraline Griffith
Permit Engineer

Enclosures: Registration G70-A091A
General Permit G70-A

c: Kristi Evans - Contact
SWN Production Company

*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-A091A

Issued to:

SWN Production Company, LLC

Fork Ridge Pad

051-00205

A handwritten signature in blue ink, appearing to read 'William F. Durham', is written over a horizontal line.

William F. Durham

Director

Issued: January 14, 2016

This Class II General Permit Registration supersedes and replaces G70-A091.

Facility Location: Moundsville, Marshall County, West Virginia
Mailing Address: 10000EnergyDrive
Spring, TX 77389
Facility Description: Natural gas production facility
NAICS Code: 211111
SIC Code: 1311
UTM Coordinates: 530.914 km Easting • 4,413.589 km Northing • Zone 17
Longitude Coordinates: -80.63851
Latitude Coordinates: 39.87151
Directions to Facility: From the intersection of SR 250 and CR 2 in Moundsville, travel south on SR 250 for approximately 14.2 miles to the intersection of SR 250 and CR 17 (Fork Ridge Road). Turn right onto CR 17 and travel 3.6 miles to the well pad entrance on the right.
Registration Type: Modification
Description of Change: Install three (3) 1,380 hp Caterpillar G3516B compressor engines, revise storage tank emissions, and update combustor emissions.

Subject to 40CFR60, Subpart OOOO? Yes.

Subject to 40CFR60, Subpart JJJJ? Yes.

Subject to 40CFR63, Subpart ZZZZ? Yes. Compliance is demonstrated by complying with 40CFR60 Subpart JJJJ.

Subject to 40CFR63, Subpart HH? Yes. Actual average emissions of benzene from the glycol dehydration unit are less than 1.0 ton per year. Exempt from the requirements of §63.764(d).

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 checked="" 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 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
EU-ENG1	EP-ENG1	Caterpillar G3516B 4SLB	CAT	2016	1,380	HP	10, 15, 15
EU-ENG2	EP-ENG2	Caterpillar G3516B 4SLB	CAT	2016	1,380	HP	10, 13, 15
EU-ENG3	EP-ENG3	Caterpillar G3406 NA 4SRB	NSCR	2014	215	HP	10, 13, 15
EU-ENG4	EP-ENG4	Caterpillar G3516B 4SLB	CAT	2016	1,380	HP	10, 13, 15
EU-GPU1	EP-GPU1	GPU Burner	None	2014	1.0	MMBTU/hr	7
EU-GPU2	EP-GPU2	GPU Burner	None	2014	1.0	MMBTU/hr	7
EU-GPU3	EP-GPU3	GPU Burner	None	2014	1.0	MMBTU/hr	7
EU-GPU4	EP-GPU4	GPU Burner	None	2014	1.0	MMBTU/hr	7
EU-GPU5	EP-GPU5	GPU Burner	None	2014	1.0	MMBTU/hr	7
EU-GPU6	EP-GPU6	GPU Burner	None	2014	1.0	MMBTU/hr	7
EU-GPU7	EP-GPU7	GPU Burner	None	2014	1.0	MMBTU/hr	7
EU-GPU8	EP-GPU8	GPU Burner	None	2014	1.0	MMBTU/hr	7
EU-HT1	EP-HT1	Heater Treater	None	2014	0.5	MMBTU/hr	7
EU-HT2	EP-HT2	Heater Treater	None	2014	0.5	MMBTU/hr	7
EU-DEHY1	EP-DEHY1	TEG Dehydration Unit	APC-COND and APC-COMB-TKLD	2014	35.0	Mmscfd	16, 17, 14
EU-RB1	EP-RB1	TEG Reboiler	None	2014	0.75	MMBTU/hr	7
EU-TANKS-COND	EP-TANKS-COND	Five (5) Condensate Tanks	APC-COMB-TKLD	2014	400	bbl each	6, 14
EU-TANKS-PW	EP-TANKS-PW	Five (5) Produced Water Tanks	APC-COMB-TKLD	2014	400	bbl each	6, 14
EU-LOAD-COND	EP-LOAD-COND	Condensate Truck Loading	APC-COMB-TKLD	2014	12,264,000	gal/yr	11, 14
EU-LOAD-PW	EP-LOAD-PW	Produced Water Truck Loading	APC-COMB-TKLD	2014	15,330,000	gal/yr	11, 14
APC-COMB-TKLD	APC-COMB-TKLD	Vapor Combustor	NA	2014	30.0	MMBTU/hr	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
CAT EU-ENG1	CO – 70.00% %	CAT	2016	NA	NA	10
CAT EU-ENG2	CO – 70.00 %	CAT	2016	NA	NA	10
NSCR EU-ENG3	NO _x – 93.71 % CO – 87.43 %	NSCR	2014	NA	NA	10
CAT EU-ENG4	CO – 70.00%	CAT	2016	NA	NA	10
APC-COND	Varies	JATCO Condenser	2014	NA	NA	14
APC-COMB-TKLD	98 % (combustion efficiency)	Vapor Combustor	2014	30.0	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?					Yes	6

2.0 Oil and Natural Gas Wells Table

API number	API number	API number
047-051-01457	047-051-01611	047-051-01606
047-051-01608	047-051-01607	047-051-01458
047-051-01584	047-051-01580	

3.0 Emission Limitations

Emission Unit ID	Emission Point ID	Emission Unit Description	Regulated Pollutant	Maximum Potential Emissions	
				Hourly (lb/hr)	Annual (tpy)
EU-ENG1	EP-ENG1	1,380 HP Caterpillar G3516B RICE	Nitrogen Oxides	3.04	13.32
			Carbon Monoxide	2.68	11.74
			Volatile Organic Compounds	2.08	9.11
EU-ENG2	EP-ENG2	215 HP Caterpillar G3406NA RICE	Nitrogen Oxides	3.04	13.32
			Carbon Monoxide	2.68	11.74
			Volatile Organic Compounds	2.08	9.11
EU-ENG3	EP-ENG3	1,380 HP Caterpillar G3516B RICE	Nitrogen Oxides	0.47	2.06
			Carbon Monoxide	0.95	4.16
			Volatile Organic Compounds	0.36	1.58
EU-ENG4	EP-ENG4	1,380 HP Caterpillar G3516B RICE	Nitrogen Oxides	3.04	13.32
			Carbon Monoxide	2.68	11.74
			Volatile Organic Compounds	2.08	9.11
EU-DEHY1	EP-DEHY1	35.0 mmscfd TEG Dehydration Unit	Volatile Organic Compounds	2.09	9.15
			Benzene	0.10	0.45
			Toluene	0.12	0.51
			Ethylbenzene	0.03	0.11
			Xylenes	0.06	0.28
APC-COMB	APC-COMB	30.0 MMBTU/hr Vapor Combustor	Nitrogen Oxides	4.14	18.13
			Carbon Monoxide	8.27	36.22
			Volatile Organic Compounds	6.79	29.70

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
EU-TANKS-COND	EP-TANKS-COND	Five (5) 400 bbl Condensate Tanks	12,264,000 gal/yr (All tanks combined)
EU-TANKS-PW	EP-TANKS-PW	Five (5) 400 bbl Produced Water Tanks	15,330,000 gal/yr (All tanks combined)
EU-LOAD-COND	EP-LOAD-COND	Condensate Truck Loading	12,264,000 gal/yr
EU-LOAD-PW	EP-LOAD-PW	Produced Water Truck Loading	15,330,000 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)
EU-ENG1	After July 1, 2007	Yes	Yes	Yes
EU-ENG2	After July 1, 2007	Yes	Yes	Yes
EU-ENG3	5/14/2014	Yes	Yes	Yes
EU-ENG4	After July 1, 2007	Yes	Yes	Yes