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west virginia department of environmental protection

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

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

February 9, 2016

CERTIFIED MAIL  
91 7199 9991 7034 3222 9208

RJ Moses  
Noble Energy, Inc.  
1000 Noble Energy Drive  
Canonsburg, PA 15317

RE: **Approved Registration G70-A026C**  
Noble Energy, Inc.  
Pennsboro 1 Production Facility  
Facility ID No. 085-00035

Dear Mr. Moses:

The Director has determined that the submitted Registration Application and proposed modification 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](http://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. 1223 or [jerry.williams@wv.gov](mailto:jerry.williams@wv.gov).

Sincerely,

Jerry Williams, P.E.  
Engineer

Enclosures: Registration G70-A026C

c: Clayton Murrall

*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**



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-A026C**

Issued to:  
**Noble Energy, Inc.**  
**Pennsboro 1 Production Facility**  
**085-00035**

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

*William F. Durham  
Director*

*Issued: February 9, 2016*

*This Class I General Permit Registration will supersede and replace G70-A026B issued on November 25, 2015.*

Facility Location: Pennsboro, Ritchie County, West Virginia  
Mailing Address: 1000 Noble Energy Drive, Canonsburg, PA 15317  
Facility Description: Natural Gas Production Facility  
NAICS Code: 211111  
SIC Code: 1311  
UTM Coordinates: 500.619 km Easting • 4,353.960 km Northing • Zone 17  
Longitude Coordinates: -80.99283  
Latitude Coordinates: 39.33494  
Directions to Facility: From Pennsboro, WV, take Hwy WV-74 N / Mountain Drive north for approximately 3 miles, then turn left (east) onto C/R 6 / Bonds Creek Road. Go approximately 2.2 miles to the Pennsboro 1 production facility entrance on the right.  
Registration Type: Class II Administrative Update  
Description of Change: Removal of one (1) vapor recovery unit, redirect the tank vapors and loading emissions to the enclosed combustion units, and adjust the tank count as installed (four (4) condensate tanks and four (4) produced water tanks instead of 15 each).

Subject to 40CFR60, Subpart OOOO? Yes  
Subject to 40CFR60, Subpart JJJJ? No  
Subject to 40CFR63, Subpart ZZZZ? Yes  
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.*

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*The source is not subject to 45CSR30.*

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### 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 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
1STK5-8	8E-COMB1-2	Four (4) Condensate Tanks	1C or 2C	2016	400	bbl	6 & 14
2STK1-4	8E-COMB1-2	Four (4) Produced Water Tanks	1C or 2C	2016	400	bbl	6 & 14
3S-ENG1	3E-ENG1	Flash Gas Compressor Engine Caterpillar G3304NA Engine	4C	2015	95	bhp	10,13&15
4S-GPU 1-9	4E-GPU 1-9	(9) GPU Heaters	--	2015	1.0	mmBtu/hr	7
5S - LP	5E-LP	Low Pressure Separator Heater	--	2015	0.75	mmBtu/hr	7
6S - TL1	8E - COMB1-2	Cond. Loading	1C or 2C	2016	4,193,54 4.6	gal/yr	11
7S - TL2	8E - COMB1-2	P.W. Loading	1C or 2C	2016	17,097,2 34	gal/yr	11
12S-TE Gen	12E-TE Gen	Thermoelectric Generator	--	2015	1.44	gal/day (propane)	--
<b>Control Devices (If applicable)</b>							
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	
1C	98	LEED Vapor Combustor	2016	10.4	mmBtu/hr	14	
2C	98	LEED Vapor Combustor	2016	10.4	mmBtu/hr	14	
3C	98	Emergency Flare	2016	19.6	mmBtu/hr	14	
4C	--	Oxidation Catalyst	2015	--	--	10, 13, 15	
<b>Emission Reduction Systems</b>						<b>Yes or No</b>	<b>G-70A Applicable Sections</b>
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
047-085-10009	047-085-10031	047-085-10012
047-085-10032	047-085-10011	047-085-10033
047-085-10010	047-085-10034	047-085-10013

## 3.0 Emission Limitations

Emission Unit ID	Emission Point ID	Emission Unit Description	Regulated Pollutant	Maximum Potential Emissions	
				Hourly (lb/hr)	Annual (tpy)
1S-TK5-8, 2S-TK1-4, 6S-TL1, 7S-TL2	8E-COMB1	Four (4) Condensate Tanks, Four (4) Produced Water Tanks, Condensate Truck Loadout, Produced Water Truck Loadout (Controlled by a Vapor Combustor)	Volatile Organic Compounds	1.44	6.30
			Nitrogen Oxides	0.35	1.55
			Carbon Monoxide	1.61	7.07
1S-TK5-8, 2S-TK1-4, 6S-TL1, 7S-TL2	8E-COMB2	Four (4) Condensate Tanks, Four (4) Produced Water Tanks, Condensate Truck Loadout, Produced Water Truck Loadout (Controlled by a Vapor Combustor)	Volatile Organic Compounds	1.44	6.30
			Nitrogen Oxides	0.35	1.55
			Carbon Monoxide	1.61	7.07
3S-ENG1	3E-ENG1	Compressor Engine Caterpillar G3304NA	Nitrogen Oxides	0.31	1.34
			Carbon Monoxide	0.61	2.69
			Volatile Organic Compounds	0.21	0.93
			Formaldehyde	0.06	0.24
4S-GPU 1-9	4E-GPU 1-9	Nine (9) GPU Burners 1.0 mmBtu/hr	Nitrogen Oxides	0.72	3.24
			Carbon Monoxide	0.62	2.70
5S-LP	5E-LP	Low Pressure Separator Heater 0.75 mmBtu/hr	Nitrogen Oxides	0.06	0.27
			Carbon Monoxide	0.05	0.23
10S-COMB	10E-COMB	Emergency Flare 19.6 mmBtu/hr	Nitrogen Oxides	0.21	0.96
			Carbon Monoxide	1.00	4.38
			Volatile Organic Compounds	4.49	19.65

## 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
6S-TL1	8E-COMB1-2	Condensate Truck Loading	4,193,544.6 gal/yr
7S-TL2	8E-COMB1-2	Produced Water Loading	17,097,234 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)
3E-ENG1	4/1/1995	No	Yes	Yes