

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-A029A

Issued to:

Antero Resources Corporation Pierpoint Pad 095-00034

> William F. Durham Director

Issued: December 12, 2014 • Effective: December 12, 2014

Facility Location:

Middlebourne, Tyler County, West Virginia 1615 Wynkoop Street, Denver, CO 80202

Mailing Address: Facility Description:

Natural Gas Production

NAICS Code:

211111

SIC Code:

1311

UTM Coordinates:

512.149 km Easting • 4,366.958 km Northing • Zone 17

Longitude Coordinates: Lattitude Coordinatees:

-80.858794 39.452103

Directions to Facility:

From Clarksburg, head west on US-50 for 25.4 miles. Turn right onto WV-18 N for 0.6 miles, turn left onto Davis Street / Old US 50 W for 0.5 miles. Take second right back on to WV-18 N / Sistersville Pike for 16.8 miles. Turn left onto C/R 46 / Klondike Ridge for 2 miles. Turn right onto C/R 46/1 and the Pierpoint Pad will be on the right after 0.2

miles.

Registration Type:

Modification

Description of Change:

Modification of natural gas facility by removing the VRU, replacing the sales gas compressor, adding wells, tanks & GPUs and increasing condensate production..

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 | \boxtimes |
|----------------------|--|-------------|
| Section 6 | Storage Vessels* | \boxtimes |
| Section 7 | Gas Production Units, In-Line Heaters, Heater Treaters, and Glycol Dehydration Reboilers | \boxtimes |
| Section 8 | Pneumatic Controllers Affected Facility (NSPS, Subpart OOOO) | |
| Section 9 | Reserved | |
| Section 10 | Natural Gas-Fired Compressor Engine (s) (RICE)** | \boxtimes |
| Section 11 | Tank Truck Loading Facility*** | \boxtimes |
| Section 12 | Standards of Performance for Storage Vessel Affected Facilities (NSPS, Subpart OOOO) | \boxtimes |
| Section 13 | Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (NSPS, Subpart JJJJ) | \boxtimes |
| Section 14 | Control Devices not subject to NSPS, Subpart OOOO | \boxtimes |
| Section 15 | National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40CFR63, Subpart ZZZZ) | \boxtimes |
| 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 | y also be subject to the applicable control device requirements of Section 12 if the registrant is subject to the NSPS, Subpart OOOO cor | ıtrol |

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 | Emission | Emission Unit | Control | Year | Max. | Design | G70-A |
|---------------|-----------|----------------------------|-----------|--------------|--------------------|---------------------|---------------------|
| ID | Point ID | Description (Mfg., Model, | Device ID | Installe d / | Design Capacity | Capacity Unit of | Applicable Sections |
| | | Serial No., | | Modifi | Сараспу | Measure | Sections |
| | | Engine type | | ed | | | |
| | | 2SLB, 4SLB, | | | | | |
| H001 | EP-H001 | 4SRB, etc.) Heater Treater | | 2014 | 1.5 | mmBtu/hr | 7 |
| | | | 11 | | | | |
| H002 | EP-H002 | Heater Treater | | 2014 | 1.5 | mmBtu/hr | 7 |
| H003 | EP-H003 | Heater Treater | | 2014 | 1.5 | mmBtu/hr | 7 |
| H004 | EP-H004 | Heater Treater | | 2014 | 1.5 | mmBtu/hr | 7 |
| H005 | EP-H005 | Heater Treater | | 2014 | 1.5 | mmBtu/hr | 7 |
| H006 | EP-H006 | Heater Treater | | 2014 | 1.5 | mmBtu/hr | 7 |
| H007 | EP-H007 | Heater Treater | | 2014 | 1.5 | mmBtu/hr | 7 |
| H008 | EP-H008 | Heater Treater | | 2014 | 1.5 | mmBtu/hr | 7 |
| TANKCOND001 | FL-001 | Condensate Tank | FL-001 | 2014 | 400 | Bbl | 6 & 14 |
| TANKCOND002 | FL-001 | Condensate Tank | FL-001 | 2014 | 400 | Bbl | 6 & 14 |
| TANKCOND003 | FL-001 | Condensate Tank | FL-001 | 2014 | 400 | Bbl | 6 & 14 |
| TANKCOND004 | FL-001 | Condensate Tank | FL-001 | 2014 | 400 | Bbl | 6 & 14 |
| TANKCOND005 | FL-001 | Condensate Tank | FL-001 | 2014 | 400 | Bbl | 6 & 14 |
| TANKCOND006 | FL-001 | Condensate Tank | FL-001 | 2014 | 400 | Bbl | 6 & 14 |
| TANKCOND007 | FL-001 | Condensate Tank | FL-001 | 2014 | 400 | Bbl | 6 & 14 |
| TANKCOND008 | FL-001 | Condensate Tank | FL-001 | 2014 | 400 | Bbl | 6 & 14 |
| TANKCOND009 | FL-001 | Condensate Tank | FL-001 | 2014 | 400 | Bbl | 6 & 14 |
| TANKCOND010 | FL-001 | Condensate Tank | FL-001 | 2014 | 400 | Bbl | 6 & 14 |
| TANKPW001 | FL-001 | Produced Water Tank | FL-001 | 2014 | 400 | Bbl | 6 & 14 |
| TANKPW002 | FL-0001 | Produced WaterTank | FL-001 | 2014 | 400 | Bbl | 6 & 14 |
| ENG001 | EP-ENG001 | Kubota DG972- E2 | | 2014 | 23.6 | hp | 10, 13 & 15 |
| L001 | EP-L001 | Cond. Loading | N/A | 2014 | 6,132,000 | Gal/year | 11 |
| L002 | EP-L002 | P.W. Loading | N/A | 2014 | 36,492,000 | 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 | Cimmaron Model 48" HV ECD Flare | 2014 | 90 | Scfm | 14 | |
| Emission Reduction Systems | | | | | | 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 | |
|---------------|---------------|------------|--|
| 047-095-02126 | 047-095-02203 | | |
| 047-095-02200 | | | |
| 047-095-02201 | | | |
| 047-095-02202 | | | |

3.0 Emission Limitations

| Emission | Emission | Emission Unit Description | Regulated Pollutant | Max | imum |
|----------|----------|----------------------------------|----------------------------|---------|--------|
| Unit ID | Point ID | | | Pote | ential |
| 1 | | | | Emis | ssions |
|) | | | | Hourly | Annual |
| | | | | (lb/hr) | (tpy) |
| H001- | EP-H001- | (8) 1.5 mmBtu/hr Heater Treaters | Nitrogen Oxides | 0.98 | 4.31 |
| H008 | H008 | | Carbon Monoxide | 0.83 | 3.62 |
| TANKCO | FL-001 | (10) 400 BBL Condensate Tanks | Volatile Organic Compounds | 10.97 | 48.06 |
| ND1-10 | | & Flare | Total HAPs | 0.91 | 3.99 |
| ENG001 | EP- | Kubota DG972-E2 Compressor | Nitrogen Oxides | 0.32 | 1.38 |
| | ENG001 | Engine | 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 | 13.42 | 4.08 |
| | | | Total HAPs | 0.08 | 0.03 |

4.0 Throughput Limitations

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

| Emission ID | Unit | Emission Point ID | Emission Unit Description | Annual Throughput Limit |
|----------------|------|-------------------|---------------------------|----------------------------|
| L001 | | EP-L001 | Condensate Truck Loading | 6,132,000 gal/yr |

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

| Emission | Engine | Subject to 40CFR60, | | Subject to Sections 10.1.4 / |
|----------|--------------------|---------------------|-----------------|-------------------------------------|
| Unit ID | Manufacturing Date | Subpart JJJJ? | Subpart ZZZZ? | 10.2.1 (Catalytic Reduction Device) |
| ENG001 | 2013 | Yes | Yes (JJJJ Only) | No |