

*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 Construct**



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-A148**

Issued to:  
**Jay-Bee Oil & Gas, Inc.**  
Doc Well Pad  
095-00059

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

*William F. Durham  
Director*

*Issued: March 27, 2015*

Facility Location: Middlebourne, Tyler County, West Virginia  
Mailing Address: 3570 Shields Hill Road, Cairo, WV 26337  
Facility Description: Natural Gas Production  
NAICS Code: 211111  
SIC Code: 1311  
UTM Coordinates: 519.942 km Easting • 4,366.642 km Northing • Zone 17  
Longitude Coordinates: -80.768234  
Latitude Coordinates: 39.449105  
Directions to Facility: From Middlebourne, proceed southeast on Route 18 (main Street) out of town. Proceed approximately 5.8 miles to the junction with C/R 1/3 (Indian Creek Road) on the left. From the intersection, take Indian Creek Road east for 4.4 miles. Turn left onto lease road, follow north for 0.2 miles to well pad entrance.  
Registration Type: Construction  
Description of Change: New construction of natural gas facility.

Subject to 40CFR60, Subpart OOOO? Yes

Subject to 40CFR60, Subpart JJJJ? Yes, Non-Certified

Subject to 40CFR63, Subpart ZZZZ? Subpart JJJJ Req's Only

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 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 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 |
|--|----------------------|---|---------------------------|---------------------------|---------------------------------|---------------------------------|---------------------------|
| HTR-1  | 1e                   | Gas Prod. Unit  | --                        | TBD                       | 1.5                             | mmBtu/hr                        | 7                         |
| HTR-2  | 2e                   | Gas Prod. Unit  | --                        | TBD                       | 1.5                             | mmBtu/hr                        | 7                         |
| HTR-3  | 3e                   | Gas Prod. Unit  | --                        | TBD                       | 1.5                             | mmBtu/hr                        | 7                         |
| T01  | 4e                   | Cond. Tank  | --                        | TBD                       | 210                             | Bbl                             | 6 & 14                    |
| T02  | 4e                   | Cond. Tank  | --                        | TBD                       | 210                             | Bbl                             | 6 & 14                    |
| T03  | 4e                   | Cond. Tank  | --                        | TBD                       | 210                             | Bbl                             | 6 & 14                    |
| T04  | 4e                   | P. Water Tank   | --                        | TBD                       | 210                             | Bbl                             | 6 & 14                    |
| T05  | 4e                   | P. Water Tank   | --                        | TBD                       | 210                             | Bbl                             | 6 & 14                    |
| T06  | 4e                   | P. Water Tank   | --                        | TBD                       | 210                             | Bbl                             | 6 & 14                    |
| TL-1   | 5e                   | Cond. Loading   | N/A                       | TBD                       | 1,260,000                       | Gal/year                        | 11                        |
| VRU-1  | 7e                   | Arrow VRC2 Engine   | --                        | TBD                       | 84                              | Hp                              | 10, 13, 15                |
| TEG-1  | 8e                   | Thermoelectric Generator  | N/A                       | TBD                       | 4.4                             | KW/hr                           | 7                         |
| <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       |                           |
| NSCR   | 91% NOx,<br>86% CO   | Miratech VXC-1408-04-HSG  | 2015                      | 430                       | Scfm                            | 10                              |                           |
| <b>Emission Reduction Systems</b>                                    |                      |   |                           |                           |                                 | Yes or No                       | G-70A Applicable Sections |
| Was a vapor recovery system (VRU) used to determine emission limits? |                      |   |                           |                           |                                 | Yes                             | 14                        |
| 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 |
|---------------|------------|------------|
| 047-095-02168 |            |            |
| 047-095-02190 |            |            |
| 047-095-02191 |            |            |
|               |            |            |

### 3.0 Emission Limitations

| Emission Unit ID | Emission Point ID | Emission Unit Description            | Regulated Pollutant        | Maximum Potential Emissions |              |
|------------------|-------------------|--------------------------------------|----------------------------|-----------------------------|--------------|
|                  |                   |                                      |                            | Hourly (lb/hr)              | Annual (tpy) |
| HTR-1 – HTR-3    | 1e-3e             | (3) 1.5mmBtu/hr GPU Heaters          | Nitrogen Oxides            | 0.45                        | 1.98         |
|                  |                   |                                      | Carbon Monoxide            | 0.39                        | 1.65         |
| T01-T06          | 4e                | (6) 210 BBL Condensate & Water Tanks | Volatile Organic Compounds | 6.76                        | 42.50        |
|                  |                   |                                      | Total HAPs                 | 0.22                        | 1.38         |
| TL-1             | 5e                | Condensate Truck Loading             | Volatile Organic Compounds | 12.42                       | 1.86         |
| CE-1             | 7e                | Arrow VRC2 Compressor<br>84 hp       | Nitrogen Oxides            | 0.19                        | 0.81         |
|                  |                   |                                      | Carbon Monoxide            | 0.37                        | 1.62         |
|                  |                   |                                      | Volatile Organic Compounds | 0.05                        | 0.21         |
|                  |                   |                                      | Formaldehyde               | 0.02                        | 0.07         |

### 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 |
|-------------|------|-------------------|---------------------------|-------------------------|
| TL-1        |      | 5e                | Condensate Truck Loading  | 1,260,000 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) |
|------------------|---------------------------|-----------------------------------|-----------------------------------|--|
| CE-1             | 3/19/12                   | Yes                               | Yes                               | Yes  |