



**BP America Production Company**  
Wamsutter Operations Center  
P.O. Box 157  
Wamsutter, WY 82336

July 22, 2015

NSR Program Manager  
Attn: O&G Production Facilities  
Wyoming Department of Environmental Quality  
Air Quality Division  
122 West 25<sup>th</sup> Street, Herschler Building 2-E  
Cheyenne, WY 82002

IMPACT Submittal

**RE:           BP America Production Company**  
**Two Rim Unit 30-40D Pad**  
**Chapter 6, Section 2 Permit Application**

Dear Sir/Madam:

BP America Production Company hereby submits an air permit application for the above noted well site. Note that this is a pad well and there are a total of five (5) wells on location. The facility is equipped with a total of four (4) five smokeless combustion chambers which were installed on January 27, 2015.

Please contact me at (307)-328-3779 or [Shanda.caldwell@bp.com](mailto:Shanda.caldwell@bp.com) if you have any questions concerning this application.

Sincerely,

*Shanda Caldwell*

Field Environmental Coordinator  
e-signature



BP America Production Co.  
Wamsutter Field  
Site Facility Drawing  
Site Security Plan on Fire at  
Wamsutter Operations Center  
Wamsutter, WY  
Monday-Friday

SITE FACILITY

TWO RIM UNIT

30-40 D

FED LEASE

-40 D / -50 D / -130 D

FEU# WYW121148F

FML# WYW117044

-50 D / -150 D

FEU# WYW121148F

FML# WYW124393

SE/4 NW/4 Sec. 30 T18N,  
R94W

LEGEND:

VALVE

L LOAD LINE VALVE

D DRAIN VALVE

S SALES VALVE

F OPEN VALVE

E EQUALIZER VALVE

Blowdown

Flowline

Sales Gas

H<sub>2</sub>O

Condensate

WFS Pipeline

CCS Pipeline

SCC

Methanol Pump

Glycol Pump

PCM Meter

Gas Meter

Oil Turbine Meter

Water Turbine Meter

Check Meter

ASBOM/MSL

CCS- Condensate Collection

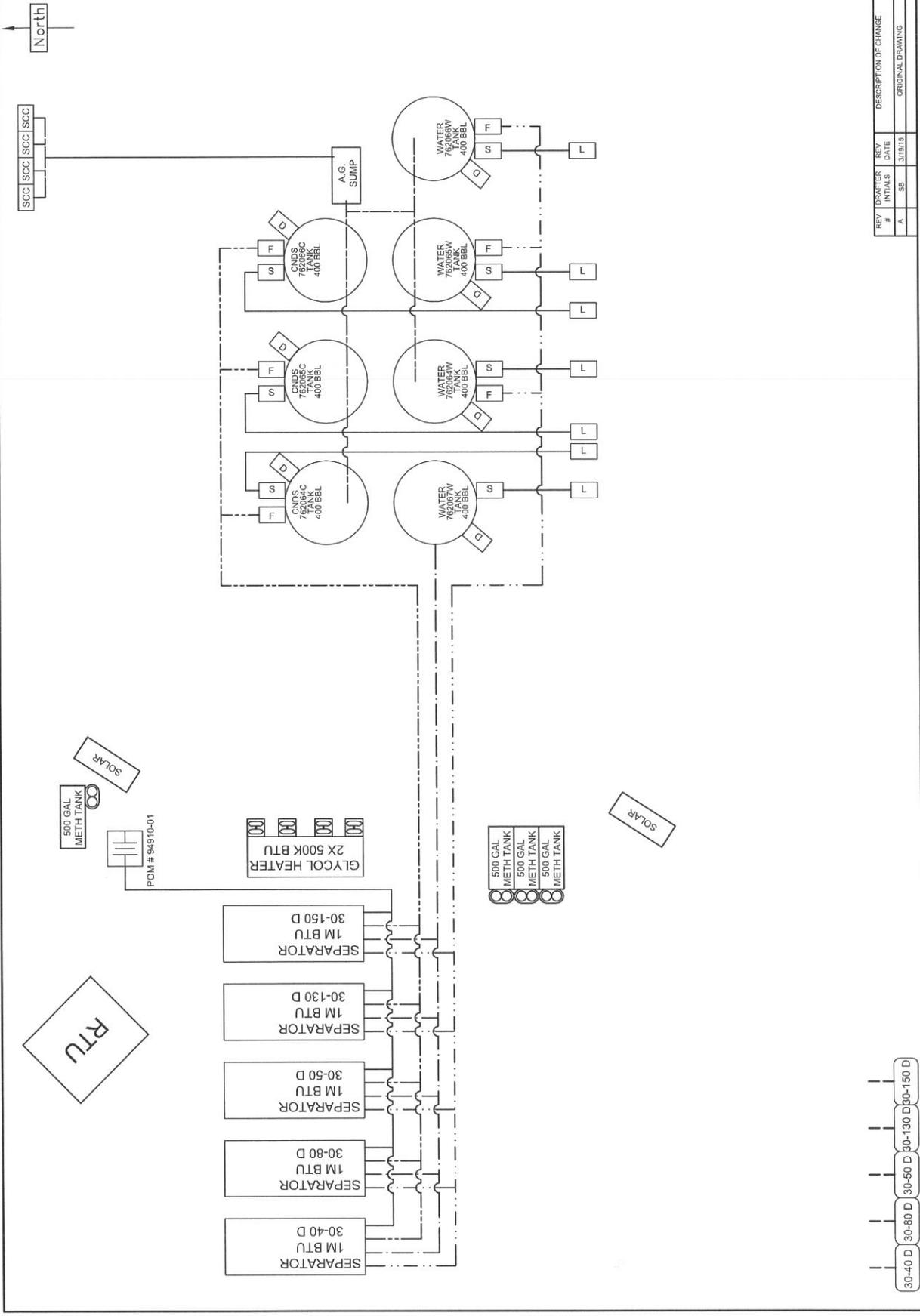
SCC- Simultaneous Combustion

PCM- Point Of Measure

CA- Comprehension Agreement

FEU- Federal Eulatory Units

FML- Federal Mineral Lease





**BP America Production Company  
Wamsutter Operations Center  
Oil & Gas Production Facility  
Chapter 6, Section 2 Air Permit Application  
Construction and Process Description  
Typical Location with a Smokeless Combustion Chamber**

**Construction:** After the well has been drilled and completed, the production equipment is installed. Separators, storage tanks, and dehydration units are manufactured by our suppliers and are complete when brought on location. The various pieces of equipment are placed on the location to meet the appropriate safety considerations and requirements associated with fired equipment on the same location with combustible materials. Equipment is configured to allow clear access for the trucks transporting the fluids from the location. All process flow lines are buried at least four feet deep. The dehydration units are installed concurrently by the company which will be operating the units and transporting the gas to their gathering system.

**Process Description:** The full production stream from the well head is directed to the separator. At the separator, the pressure is reduced from well head to the working pressure. This pressure is dictated by the gas gathering system serving the location. Pressures in the Wamsutter Field generally vary from 250 to 600 psig.

In the separator, the production stream is separated into gas, condensate, and produced water. All control valves, level controllers, pressure controllers, pumps, and temperature controllers are operated pneumatically by natural gas taken off the top of the separator. Fuel gas for the separator fire tube heater is also delivered from the location.

The gas stream is sent to the dehydration unit. In the dehydration unit, the gas is dried by triethylene glycol stripping to pipeline specifications. The dehydration unit is owned and operated by another company. The sale of the gas is accomplished at the location.

The liquid condensate (light hydrocarbons) stream is directed to the condensate storage tank. The condensate is accumulated in the condensate storage tank until a truckload of product is available. A truck-mounted vacuum pump accomplishes transfer of the product to the truck. Sale of the condensate is accomplished when the fluid is transferred to the truck. The condensate is trucked to a pipeline terminal for shipment to pipeline customers.

If the condensate production rate and sales line pressure are such that VOC emissions flashing from the condensate tank are predicted to exceed the criteria set by the Wyoming DEQ Air Quality Division, a smokeless combustion chamber is installed to destroy any released compounds. These units operate with a continuous pilot, the gas being from the top of the separator. Each combustion chamber is also equipped with a thermocouple connected to the automation system to monitor for the continuous presence of the pilot.

The produced water stream is directed to the produced water storage tank. The produced water is accumulated in the storage tank until a truckload is available. A truck-mounted vacuum pump accomplishes transfer of the produced water to the truck. Any condensate that has accumulated in the produced water storage tank is transferred to the condensate storage tank. The produced water is transported to an approved produced water disposal facility.

Hot ethylene glycol, from the glycol bath on the separator, is circulated by pump to various pieces of production equipment to prevent freezing. This is a seasonal requirement. The discharge from the glycol heat medium pneumatic pumps is routed to the SCC for 98% control.

If hydrate formation in the production string becomes a problem, methanol may be injected into the well bore to maintain production. This may be a seasonal or continuous requirement depending on well characteristics. It may also be necessary to periodically vent the well to maintain production due to fluids accumulation or hydrate freezing in the well bore. When this is done, the well is vented to the produced water tank to capture any liquids that are generated.





**STATE OF WYOMING**  
 Department of Environmental Quality - Air Quality Division  
 Oil and Gas Production Facilities C6 S2 Permit Application



**Equipment List**

Company Name BP America Production Company

Facility Name Two Rim Unit 30-40D Pad

List all production equipment at the site including all pressurized vessels with the potential for flash emissions, all hydrocarbon liquids and produced water storage tanks, all dehydration units, all pneumatic pumps, all natural gas-fired burners and heaters and all emission control equipment and devices. Pressurized vessels with the potential for flash emissions are all vessels that vent vapors to the atmosphere during times other than upset or emergency conditions (water knockouts, 2-phase and 3-phase separators, heater treaters, gun barrels, scrubber pots, etc). Provide design ratings for dehyds (MMCFD), process heaters, burners and pilots (MMBtu/hr, SCFH). Provide size of production & water storage tanks (BPD). For dehydration units indicate if the unit includes a glycol flash separator and/or reboiler still vent condenser. For emission control combustors/flares indicate design rating (MMBtu/hr, SCFD) and combustor/flare height (ft). Provide pneumatic pump motive gas usage (SCFH).

If more space is required, continue on page 2 of this sheet.

| Number | Equipment                            | Size/Rating       | Control Equipment Installation Date |
|--------|--------------------------------------|-------------------|-------------------------------------|
| 3      | Condensate Tank(s)                   | 400 bbl           |                                     |
| 3      | Produced Water Tank(s)               | 400 bbl           |                                     |
| 4      | Ethylene Glycol Heat Medium Pump(s)  | Sandpiper(s)      |                                     |
| 5      | Heater(s)                            | 1 MMBtu/hr        |                                     |
| 4      | Smokeless Combustion Chambers (SCCs) | 3 MMBtu/hr        | 1/27/2015                           |
| 3      | Chemical Injection Pump(s)           | TxAM Solar Pump   |                                     |
| 27     | Pneumatic Controllers                | No Bleed/LowBleed |                                     |
| 1      | Blowdown Tank                        | 400 bbl           |                                     |
| 6      | Three Phase Separator(s)             |                   |                                     |
| 2      | Heater(s)                            | 0.5 MMBtu/hr      |                                     |
|        |                                      |                   |                                     |
|        |                                      |                   |                                     |
|        |                                      |                   |                                     |
|        |                                      |                   |                                     |
|        |                                      |                   |                                     |
|        |                                      |                   |                                     |
|        |                                      |                   |                                     |
|        |                                      |                   |                                     |



STATE OF WYOMING

Department of Environmental Quality - Air Quality Division
Oil and Gas Production Facilities C6 S2 Permit Application
Storage Tanks, Pressurized Vessels & Pneumatic Pumps



Use as many copies of this form as necessary to include all tanks, vessels and pumps.

Company Name BP America Production Company

Facility Name Two Rim Unit 30-40D Pad

STORAGE TANKS

Below, list all atmospheric tanks used to store liquids transferred from an upstream vessel or wellhead. Upstream vessels include separators, treaters, flash tanks, FWKOs, gun barrels, tanks, etc. If more than one tank of the same size is used for the same purpose, receiving fluids from the same upstream vessel, those tanks may be combined on one line.

Table with 5 columns: Capacity, use (condensate / oil / H2O), total throughput (bpd), upstream vessel, upstream vessel pressure (psig). Rows include Condensate Tank(s) and Produced Water Tank(s).

PRESSURIZED VESSELS List each vessel separately.

Pressurized vessels include FWKO's, heater-treaters, separators (2-phase & 3-phase), gas boots, gun barrels, flash tanks, etc...

Table with 4 columns: vessel, operating pressure (psig), upstream vessel, upstream vessel pressure (psig). Row includes 6 - Three Phase Separator(s).

What is the API gravity of the SALES oil or condensate at this facility? 52.6

Does this facility handle sour oil / gas? No

EMISSION CONTROL DEVICES & SYSTEMS for FLASH VAPORS & PRESSURE VESSEL PROCESS STREAMS

Identify each emission control system or device and the date(s) of installation for each.

smokeless combustion chambers for the condensate tanks and produced water tanks.

Combustion Device Emission Controls (if applicable)

Date of Installation 1/27/2015
Manufacturer Natco
Smokeless Design? yes
Excess Oxygen (%) 10%
VOC Destruction Efficiency (%) 98%
HAP Destruction Efficiency (%) 98%
Maximum Design Throughput (SCFD)
Minimum Design throughput (SCFD)
Actual Waste Gas Volume (SCFD) 17742.8
Waste Gas Heat Content (Btu/SCF) 2254
Burner Rating (MMBtu/hr) 3
Ignition System: Pilot X Electric Spark Other
Continuous Pilot? yes
Pilot Gas Volume (SCFM) 1.53
Is the Combustion Device Monitored? yes How? thermocouple and continuous monitor

PNEUMATIC PUMPS

Describe each pneumatic pump using natural gas as the motive gas. Indicate where motive gas is vented (atmosphere or other).

Chemical/methanol injection pumps and glycol heat trace pumps with gas routed to the condensate tanks which are controlled by smokeless combustion chambers.



STATE OF WYOMING

Department of Environmental Quality - Air Quality Division  
 Oil and Gas Production Facilities C6 S2 Permit Application



EMISSION SUMMARY

Company Name BP America Production Company  
 Facility Name Two Rim Unit 30-40D Pad

This form must be completed for each emission source at the facility. A list of the emission sources which must be considered is found in Appendix B of the C6 S2 O&G Production Facilities Permitting Guidance.

UNCONTROLLED EMISSIONS (Tons Per Year)

| EMISSION SOURCE<br>(i.e., tank, natural gas-fired heater, reboiler still vent, glycol flash separator, pneumatic pump, separator gas vent, water knockout vent, etc.) | VOCs            | total HAPs     | NO <sub>x</sub> | CO            | SO <sub>2</sub> | H <sub>2</sub> S |
|---|-----------------|----------------|-----------------|---------------|-----------------|------------------|
| Condensate Tank(s)  | 181.8425        | 10.2383        |                 |               |                 |                  |
| Heat Medium Pump(s)   | 12.8446         | 0.4688         |                 |               |                 |                  |
| Chemical Injection Pump(s)  | 0.0000          | 0.0000         |                 |               |                 |                  |
| Heater(s)   | 0.1480          | 0.0020         | 2.6901          | 2.2597        | 0.0161          |                  |
| Loading   | 0.5310          | 0.1188         |                 |               |                 |                  |
| Fugitives*  | 5.4213          | 0.7819         |                 |               |                 |                  |
|   | 0.0211          | 0.0003         | 0.3843          | 0.3228        | 0.0023          |                  |
|   |                 |                |                 |               |                 |                  |
|   |                 |                |                 |               |                 |                  |
| <b>TOTAL</b>  | <b>200.8085</b> | <b>11.6100</b> | <b>3.0744</b>   | <b>2.5825</b> | <b>0.0184</b>   | <b>0.0000</b>    |

\* Fugitive emissions are an estimate only and should not be considered a maximum allowable emission rate. Actual emissions will vary.

CONTROLLED EMISSIONS (Tons Per Year)

These are the total emissions from each source. Include controlled emissions from each controlled source and uncontrolled emissions from each source which does not require control, such as process equipment burners.

| EMISSION SOURCE            | VOCs           | total HAPs    | NO <sub>x</sub> | CO            | SO <sub>2</sub> | H <sub>2</sub> S |
|----------------------------|----------------|---------------|-----------------|---------------|-----------------|------------------|
| Condensate Tank(s)         | 3.6457         | 0.2048        | 1.2786          | 0.3196        | 0.0029          |                  |
| Heat Medium Pump(s)        | 0.2569         | 0.0094        |                 |               |                 |                  |
| Chemical Injection Pump(s) | 0.0000         | 0.0000        |                 |               |                 |                  |
| Heater(s)                  | 0.1480         | 0.0020        | 2.6901          | 2.2597        | 0.0161          |                  |
| Loading                    | 0.5310         | 0.1188        |                 |               |                 |                  |
| Fugitives*                 | 5.4213         | 0.7819        |                 |               |                 |                  |
|                            | 0.0211         | 0.0003        | 0.3843          | 0.3228        | 0.0023          |                  |
|                            |                |               |                 |               |                 |                  |
|                            |                |               |                 |               |                 |                  |
| <b>TOTAL</b>               | <b>10.0240</b> | <b>1.1171</b> | <b>4.3530</b>   | <b>2.9022</b> | <b>0.0214</b>   | <b>0.0000</b>    |

HAZARDOUS AIR POLLUTANT SUMMARY (Tons Per Year)

Complete this section for each emissions source if TOTAL HAPs from that source are 9 TPY or greater.

| SOURCE | Benzene | Toluene | Ethyl-Benzene | Xylenes | Other |
|--------|---------|---------|---------------|---------|-------|
|        |         |         |               |         |       |
|        |         |         |               |         |       |
|        |         |         |               |         |       |

**BP America Production Company  
Wamsutter Operations Center  
Two Rim Unit 30-40D Pad  
Oil & Gas Production Facility  
Chapter 6, Section 2 Air Permit Application  
7/27/2015**

**Description:** Three Condensate Tanks  
**Control:** Four Smokeless Combustion Chambers

**I. Pilot's Source Information**

Fuel Heating Value = 1140 Btu/scf  
Annual Hours of Operation = 8760 hrs/yr  
Pilot Flow Rate = 6.12 scfm

**II. Pilot's Criteria Pollutant Emissions Calculations**

| Pollutant                    | Emission Factor | Controlled Emissions |        |
|------------------------------|-----------------|----------------------|--------|
|                              |                 | (lb/hr)              | (TPY)  |
| NO <sub>x</sub> <sup>1</sup> | 0.14 lb/MMBtu   | 0.0586               | 0.2566 |
| CO <sup>1</sup>              | 0.035 lb/MMBtu  | 0.0146               | 0.0642 |
| PM <sup>2</sup>              | 7.6 lb/MMscf    | 0.0028               | 0.0122 |
| SO <sub>2</sub> <sup>2</sup> | 0.6 lb/MMscf    | 0.0002               | 0.0010 |
| VOC <sup>2</sup>             | 5.5 lb/MMscf    | 0.0020               | 0.0088 |

<sup>1</sup> Emission factors for NO<sub>x</sub> and CO are based on Wyoming DEQ's Oil and Gas Production Facilities Chapter 6, Section 2, Permitting Guidance for flare operations dated 08/07.

<sup>2</sup> Emission factors for PM, SO<sub>2</sub>, and VOC are based on AP-42, Fifth Edition, Volume 1, Chapter 1, Section 1.4, Table 1.4-1 and 1.4-2, dated 7/98.

**III. Condensate Tank's Source Information**

Operating Pressure = 325 psig  
Average Condensate Production = 40.8 bbl/day  
Annual Condensate Production = 14892 bbl/year  
Condensate Heating Value<sup>1</sup> = 2254 Btu/scf  
Condensate Gas Consumed = 6.48 MMscf/yr

<sup>1</sup> The flash gas heating value will vary. The flash gas heating value is based on the flash gas composition at the operating pressure from the 2008 HYSYS model runs for the Wamsutter Operations Center.

**IV. Condensate Tank's Criteria Pollutant Emissions Calculations**

| Pollutant                    | Emission Factor | Uncontrolled Emissions |          | Controlled Emissions |        |
|------------------------------|-----------------|------------------------|----------|----------------------|--------|
|                              |                 | (lb/hr)                | (TPY)    | (lb/hr)              | (TPY)  |
| NO <sub>x</sub> <sup>1</sup> | 0.14 lb/MMBtu   | -                      | -        | 0.2333               | 1.0220 |
| CO <sup>1</sup>              | 0.035 lb/MMBtu  | -                      | -        | 0.0583               | 0.2555 |
| PM <sup>2</sup>              | 7.6 lb/MMscf    | -                      | -        | 0.0056               | 0.0246 |
| SO <sub>2</sub> <sup>2</sup> | 0.6 lb/MMscf    | -                      | -        | 0.0004               | 0.0019 |
| VOC <sup>3</sup>             | 98% DRE         | 41.5166                | 181.8425 | 0.8303               | 3.6368 |
| HAP <sup>3</sup>             | 98% DRE         | 2.3375                 | 10.2383  | 0.0468               | 0.2048 |
| n-Hexane                     | 98% DRE         | 1.4720                 | 6.4474   | 0.0294               | 0.1289 |
| Benzene                      | 98% DRE         | 0.3173                 | 1.3896   | 0.0063               | 0.0278 |
| Toluene                      | 98% DRE         | 0.4059                 | 1.7779   | 0.0081               | 0.0356 |
| Ethylbenzene                 | 98% DRE         | 0.0117                 | 0.0511   | 0.0002               | 0.0010 |
| Xylene                       | 98% DRE         | 0.1306                 | 0.5722   | 0.0026               | 0.0114 |

<sup>1</sup> Emission factors for NO<sub>x</sub> and CO are based on Wyoming DEQ's Oil and Gas Production Facilities Chapter 6, Section 2, Permitting Guidance for flare operations dated 08/07.

<sup>2</sup> Emission factors for PM and SO<sub>2</sub> are based on AP-42, Fifth Edition, Volume 1, Chapter 1, Section 1.4, Table 1.4-1 and 1.4-2, dated 7/98.

<sup>3</sup> VOC emissions are based on HYSYS model runs for the Wamsutter Operations Center. VOC emissions (TPY) = (0.1131 \* tubing pressure (psi) - 12.336) (lb/bbl) \* average condensate production (bbl/day) \* 365 (days/yr) / 2000 (lbs/ton). HAP emissions (TPY) = (0.0071 \* tubing pressure (psi) - 0.9325) (lb/bbl) \* average condensate production (bbl/day) \* 365 (days/yr) / 2000 (lbs/ton). The controlled VOC and HAP emissions are based on a 98% destruction efficiency.

**VII. Emissions Summary**

| Pollutant       | Uncontrolled Emissions |          | Controlled Emissions |        |
|-----------------|------------------------|----------|----------------------|--------|
|                 | (lb/hr)                | (TPY)    | (lb/hr)              | (TPY)  |
| NO <sub>x</sub> | -                      | -        | 0.2919               | 1.2786 |
| CO              | -                      | -        | 0.0730               | 0.3196 |
| PM              | -                      | -        | 0.0084               | 0.0368 |
| SO <sub>2</sub> | -                      | -        | 0.0007               | 0.0029 |
| VOC             | 41.5166                | 181.8425 | 0.8324               | 3.6457 |
| HAP             | 2.3375                 | 10.2383  | 0.0468               | 0.2048 |



**BP America Production Company**  
**Wamsutter Operations Center**  
**Two Rim Unit 30-40D Pad**  
**Oil & Gas Production Facility**  
**Chapter 6, Section 2 Air Permit Application**  
**7/27/2015**

**Description:**                      **Chemical Injection Pump(s)**                      **Pump Controlled?**                      **No**

**I. Chemical Injection Pump's Source Information**

| Number of Pumps | Pump Model | Gas Pressure (psig) | Stokes per Minute | Flow Rate Per Pump (scfm) | Operating Time (month/yr) | Total Annual Flow Rate (MMscf/yr) |
|-----------------|------------|---------------------|-------------------|---------------------------|---------------------------|-----------------------------------|
| 3               | 6.5        | 0                   | 12                | 0.00                      | 12                        | 0.00                              |
|                 |            |                     |                   | 0.60                      | 9                         | 0.00                              |
| <b>TOTAL</b>    |            |                     |                   |                           |                           | <b>0.00</b>                       |

**II. Chemical Injection Pump's Criteria Pollutant Emissions Calculations**

**Sales/Fuel Gas Composition**

| Component              | Mole Percent (%) <sup>1</sup> | Molecular Weight (lb/lb-mole) <sup>2</sup> | Weight Percent (%) | Uncontrolled Emissions |               | Controlled Emissions |               |
|------------------------|-------------------------------|--|--------------------|------------------------|---------------|----------------------|---------------|
|                        |                               |  |                    | (lb/hr)                | (TPY)         | (lb/hr)              | (TPY)         |
| Carbon Dioxide         | 2.7293%                       | 44.010                                     | 6.0691%            | 0.0000                 | 0.0000        |                      |               |
| Nitrogen               | 0.1711%                       | 28.014                                     | 0.2422%            | 0.0000                 | 0.0000        |                      |               |
| Methane                | 84.9036%                      | 16.042                                     | 68.8193%           | 0.0000                 | 0.0000        |                      |               |
| Ethane                 | 6.8178%                       | 30.069                                     | 10.3583%           | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| Propane                | 3.1800%                       | 44.096                                     | 7.0851%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| Isobutane              | 0.6431%                       | 58.122                                     | 1.8887%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| n-Butane               | 0.7262%                       | 58.122                                     | 2.1327%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| Isopentane             | 0.2560%                       | 72.149                                     | 0.9331%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| n-Pentane              | 0.2101%                       | 72.149                                     | 0.7658%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| n-Hexane               | 0.0687%                       | 86.175                                     | 0.2991%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| Cyclohexane            | 0.0145%                       | 84.159                                     | 0.0618%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| 2,2-Dimethylbutane     | 0.0044%                       | 86.175                                     | 0.0192%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| 2,3-Dimethylbutane     | 0.0175%                       | 86.175                                     | 0.0760%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| 2-Methylpentane        | 0.0528%                       | 86.175                                     | 0.2298%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| 3-Methylpentane        | 0.0266%                       | 86.175                                     | 0.1160%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| n-Heptane              | 0.1001%                       | 100.202                                    | 0.5070%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| Methylcyclohexane      | 0.0094%                       | 98.186                                     | 0.0468%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| 2,2,4 Trimethylpentane | 0.0038%                       | 114.230                                    | 0.0222%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| Benzene                | 0.0151%                       | 78.112                                     | 0.0596%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| Toluene                | 0.0197%                       | 92.138                                     | 0.0915%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| Ethylbenzene           | 0.0003%                       | 106.165                                    | 0.0014%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| m-Xylene               | 0.0095%                       | 106.165                                    | 0.0509%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| o-Xylene               | 0.0009%                       | 106.165                                    | 0.0048%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| n-Octane               | 0.0132%                       | 114.229                                    | 0.0763%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| n-Nonane               | 0.0034%                       | 128.255                                    | 0.0218%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| n-Decane               | 0.0030%                       | 142.282                                    | 0.0214%            | 0.0000                 | 0.0000        | 0.0000               | 0.0000        |
| <b>Total</b>           | <b>100.0000%</b>              | <b>19.79</b>                               | <b>100.0000%</b>   | <b>0.0000</b>          | <b>0.0000</b> | <b>0.0000</b>        | <b>0.0000</b> |
| <b>Total VOCs</b>      | <b>5.3782%</b>                |  | <b>14.5111%</b>    | <b>0.0000</b>          | <b>0.0000</b> | <b>0.00</b>          | <b>0.00</b>   |
| <b>Total HAPS</b>      | <b>0.1180%</b>                |  | <b>0.5296%</b>     | <b>0.0000</b>          | <b>0.0000</b> | <b>0.00</b>          | <b>0.00</b>   |

<sup>1</sup> The sales/fuel gas composition is based on the sales/fuel gas composition at the operating pressure from the 2008 HYSYS model runs for the Wamsutter Operations Center.

<sup>2</sup> The molecular weights are from GSPA Engineering Data Book, 12th Edition.

**BP America Production Company  
Wamsutter Operations Center  
Two Rim Unit 30-40D Pad  
Oil & Gas Production Facility  
Chapter 6, Section 2 Air Permit Application  
7/27/2015**

**Description:** Heater(s)

**I. Heater(s) Source Information**

|   |           |          |
|---|-----------|----------|
| No. of Heater(s)                        | 7         |          |
| Design Firing Rate                      | 1.0 & 0.5 | MMBtu/hr |
| Total Firing Rate for all Fired Sources | 6.00      | MMBtu/hr |
| Fuel Heating Value <sup>1</sup>         | 1140      | Btu/scf  |
| Annual Hours of Operation               | 8760      | hr       |
| Fuel Consumed (MMscf/yr)                | 46.12     | MMscf/yr |

**II. Heater(s) Criteria Pollutant Emissions Calculations**

| Pollutant       | Emission Factor<br>(lb/MMscf) <sup>2</sup> | Emissions<br>(lb/hr) | Emissions<br>(TPY) |
|-----------------|--|----------------------|--------------------|
| NO <sub>x</sub> | 100  | 0.5264               | 2.3058             |
| CO              | 84   | 0.4422               | 1.9369             |
| PM              | 7.6  | 0.0400               | 0.1752             |
| SO <sub>2</sub> | 0.6  | 0.0032               | 0.0138             |
| VOC             | 5.5  | 0.0290               | 0.1268             |
| Formaldehyde    | 0.075                                      | 0.0004               | 0.0017             |

<sup>1</sup> The sales/fuel gas heating value is based on the gas composition at the operating pressure from the 2008 HYSYS model runs for the Wamsutter Operations Center.

<sup>2</sup> Emission factors are based on AP-42, Fifth Edition, Volume 1, Chapter 1, Section 1.4, Table 1.4-1 and 1.4-2 dated 7/98.

**BP America Production Company  
Wamsutter Operations Center  
Two Rim Unit 30-40D Pad  
Oil & Gas Production Facility  
Chapter 6, Section 2 Air Permit Application  
7/27/2015**

**Description:** Truck Loading

**Basis**

Emissions from loading are estimated using following from EPA's AP-42 Section 5.2, dated January 1995

$$L_L = 12.46 * SPM/T$$

Where:

6.5

$L_L$  = loading loss, pounds per 1000 gallons (lb/10<sup>3</sup> gal) of liquid loaded

S = saturation factor (see Table 5.2-1)

P = true vapor pressure of liquid loaded, pounds per square inch absolute (psia)

M = molecular weight of vapors, pounds per pound-mole (lb/lb-mole)

T = temperature of bulk liquid loaded, °R (°F + 460)

**Source Information**

Maximum Hourly Throughput = 14000 gal/hr  
 Annual Throughput = 625464.00 gal/yr  
 Production Factor = 1  
 S, Saturation Factor = 0.6 Submerged loading = 0.6  
 P, True Vapor Pressure = 2.30 psia<sup>1</sup>  
 M, Molecular Weight of Vapors = 50.00 lb/lb-mole  
 T, Temperature of Bulk Liquid Loaded = 505.7 °R<sup>2</sup>

<sup>1</sup> The true vapor pressure of 2.3 is from EPA's AP-42 Section 7.1, Table 7.1-2, for crude oil RVP 5 at 50°F, dated November 2006.

<sup>2</sup> The temperature of the bulk liquid loaded is based on annual average temperature for Cheyenne, WY from EPA's AP-42 Section 7.1, Table 7.1-7, dated November 2006.

**Emissions Calculations**

$L_L$  (lb/10<sup>3</sup> gal) = 12.46 \* SPM/T  
 $L_L$  (lb/10<sup>3</sup> gal) = 12.46 \* 0.60 \* 2.30 psia \* 50.00 lb/lb-mole / 505.70 R  
 $L_L$  (lb/10<sup>3</sup> gal) = 1.7001

VOC Emissions (lb/hr) = 1.7001 lb/1000 gal \* 14000.00 gal/hr  
 VOC Emissions (lb/hr) = 23.8014

VOC Emissions (TPY) = 1.7001 lb/1000 gal \* 625464.00 gal/yr \* 1 ton/2000 lbs \* 1.0  
 VOC Emissions (TPY) = 0.5317

**Emissions Composition**

| Component              | Mole Percent (%) <sup>1</sup> | Molecular Weight (lb/lb-mole) <sup>2</sup> | Weight Percent (%) | Emissions (lb/hr) | Emissions (TPY) |
|------------------------|-------------------------------|--|--------------------|-------------------|-----------------|
| Carbon Dioxide         | 0.0306%                       | 44.010                                     | 0.0132%            | 0.0031            | 0.0001          |
| Nitrogen               | 0.0000%                       | 28.014                                     | 0.0000%            | 0.0000            | 0.0000          |
| Methane                | 0.1297%                       | 16.042                                     | 0.0204%            | 0.0049            | 0.0001          |
| Ethane                 | 0.3079%                       | 30.069                                     | 0.0907%            | 0.0216            | 0.0005          |
| Propane                | 1.5336%                       | 44.096                                     | 0.6623%            | 0.1576            | 0.0035          |
| Isobutane              | 1.5619%                       | 58.122                                     | 0.8891%            | 0.2116            | 0.0047          |
| n-Butane               | 3.0388%                       | 58.122                                     | 1.7299%            | 0.4117            | 0.0092          |
| Isopentane             | 3.7281%                       | 72.149                                     | 2.6345%            | 0.6270            | 0.0140          |
| n-Pentane              | 4.3950%                       | 72.149                                     | 3.1057%            | 0.7392            | 0.0165          |
| n-Hexane               | 5.2037%                       | 86.175                                     | 4.3920%            | 1.0454            | 0.0234          |
| Cyclohexane            | 1.4948%                       | 84.159                                     | 1.2322%            | 0.2933            | 0.0066          |
| 2,2-Dimethylbutane     | 0.1779%                       | 86.175                                     | 0.1501%            | 0.0357            | 0.0008          |
| 2,3-Dimethylbutane     | 0.8384%                       | 86.175                                     | 0.7076%            | 0.1684            | 0.0038          |
| 2-Methylpentane        | 2.8070%                       | 86.175                                     | 2.3691%            | 0.5639            | 0.0126          |
| 3-Methylpentane        | 1.6188%                       | 86.175                                     | 1.3663%            | 0.3252            | 0.0073          |
| n-Heptane              | 23.1761%                      | 100.202                                    | 22.7452%           | 5.4137            | 0.1209          |
| Methylcyclohexane      | 2.0432%                       | 98.186                                     | 1.9649%            | 0.4677            | 0.0104          |
| 2,2,4 Trimethylpentane | 0.8230%                       | 114.230                                    | 0.9208%            | 0.2192            | 0.0049          |
| Benzene                | 1.3388%                       | 78.112                                     | 1.0242%            | 0.2438            | 0.0054          |
| Toluene                | 5.5832%                       | 92.138                                     | 5.0384%            | 1.1992            | 0.0268          |
| Ethylbenzene           | 0.2115%                       | 106.165                                    | 0.2199%            | 0.0523            | 0.0012          |
| m-Xylene               | 9.3781%                       | 106.165                                    | 9.7514%            | 2.3210            | 0.0518          |
| o-Xylene               | 0.9567%                       | 106.165                                    | 0.9948%            | 0.2368            | 0.0053          |
| n-Octane               | 8.9033%                       | 114.229                                    | 9.9609%            | 2.3708            | 0.0530          |
| n-Nonane               | 6.2454%                       | 128.255                                    | 7.8453%            | 1.8673            | 0.0417          |
| n-Decane               | 14.4745%                      | 142.282                                    | 20.1709%           | 4.8010            | 0.1072          |
| <b>Total</b>           | <b>100.0000%</b>              | <b>102.10</b>                              | <b>100.0000%</b>   | <b>23.8014</b>    | <b>0.5317</b>   |
| <b>Total VOCs</b>      | <b>99.5318%</b>               |  | <b>99.8758%</b>    | <b>23.7718</b>    | <b>0.5310</b>   |
| <b>Total HAPs</b>      | <b>23.4950%</b>               |  | <b>22.3416%</b>    | <b>5.3176</b>     | <b>0.1188</b>   |

<sup>1</sup> The condensate composition is from the 2008 HYSYS model runs for the Wamsutter Operations Center based on operating pressure.

<sup>2</sup> The molecular weights are from GSPA Engineering Data Book, 12th Edition.

**BP America Production Company**  
**Wamsutter Operations Center**  
**Two Rim Unit 30-40D Pad**  
**Oil & Gas Production Facility**  
**Chapter 6, Section 3 Air Permit Application**  
**7/27/2015**

Description: Fugitives

Source Information  
 Annual Hours of Operation = 8760 hrs/yr

**Emission Calculations**

| Equipment          | Service    | Emissions Factor <sup>1</sup><br>(lb/hr/component) | Component<br>Counts | Emissions <sup>2</sup><br>(lb/yr) | Emissions <sup>3</sup><br>(TPY) |
|--------------------|------------|--|---------------------|-----------------------------------|---------------------------------|
| Valves             | Gas        | 9.52E-03   | 100                 | 0.9523                            | 4.3451                          |
|                    | Condensate | 5.51E-03   | 50                  | 0.2756                            | 1.2972                          |
| Flanges            | Gas        | 8.60E-04   | 840                 | 0.7224                            | 3.1639                          |
|                    | Condensate | 2.43E-04   | 220                 | 0.0534                            | 0.2337                          |
| Connectors         | Gas        | 4.41E-04   | 3370                | 1.4862                            | 6.5294                          |
|                    | Condensate | 4.63E-04   | 220                 | 0.1019                            | 0.4462                          |
| Open-ended Lines   | Gas        | 4.41E-03   | 0                   | 0.0000                            | 0.0000                          |
|                    | Condensate | 3.09E-03   | 0                   | 0.0000                            | 0.0000                          |
| Pump Seals         | Gas        | 5.29E-03   | 0                   | 0.0000                            | 0.0000                          |
|                    | Condensate | 2.87E-02   | 0                   | 0.0000                            | 0.0000                          |
| Other <sup>1</sup> | Gas        | 1.94E-02   | 10                  | 0.1940                            | 0.8499                          |
|                    | Condensate | 1.65E-02   | 10                  | 0.1654                            | 0.7243                          |
| <b>Total</b>       |            |  | <b>4823</b>         | <b>3.9911</b>                     | <b>17.4808</b>                  |
|                    | Gas        |  | 4320                | 3.3946                            | 14.8593                         |
|                    | Condensate |  | 500                 | 0.5962                            | 2.6115                          |

<sup>1</sup> Other includes compressor seals, pressure relief valves, dump level arms, polished rod pumps, and miscellaneous components.  
<sup>2</sup> The emission factors are based on EPA's "Protocol for Equipment Leak Emission Estimates," Oil and Gas Production Operations Average Emission Factors Table, dated November 1995.  
<sup>3</sup> Fugitive emissions are an estimate only and should not be considered a maximum allowable emission rate. Actual emissions will vary.

**Emissions Composition**

| Component              | Mole Percent (%) <sup>1</sup> | Molecular Weight (lb/lb-mole) <sup>2</sup> | Weight Percent (%) | Emissions (lb/yr) <sup>3</sup> | Emissions (TPY) <sup>3</sup> |
|------------------------|-------------------------------|--|--------------------|--------------------------------|------------------------------|
| Carbon Dioxide         | 2.7009%                       | 44.010                                     | 5.7299%            | 0.1945                         | 0.8520                       |
| Nitrogen               | 0.1588%                       | 28.014                                     | 0.2279%            | 0.0077                         | 0.0339                       |
| Methane                | 83.8101%                      | 16.042                                     | 94.8697%           | 2.2002                         | 9.5367                       |
| Ethane                 | 1.7425%                       | 30.069                                     | 3.1193%            | 0.3333                         | 1.4600                       |
| Propane                | 3.2192%                       | 44.096                                     | 5.8428%            | 0.2323                         | 1.0175                       |
| Isobutane              | 0.6763%                       | 58.122                                     | 1.8548%            | 0.0543                         | 0.2817                       |
| n-Butane               | 0.7830%                       | 58.122                                     | 2.1938%            | 0.0745                         | 0.3262                       |
| Isopentane             | 0.3055%                       | 72.149                                     | 1.0729%            | 0.0394                         | 0.1595                       |
| n-Pentane              | 0.2582%                       | 72.149                                     | 0.9327%            | 0.0317                         | 0.1387                       |
| n-Hexane               | 0.1281%                       | 86.175                                     | 0.5322%            | 0.0181                         | 0.0791                       |
| Cyclohexane            | 0.0313%                       | 84.159                                     | 0.1271%            | 0.0043                         | 0.0189                       |
| 2,2-Dimethylbutane     | 0.0095%                       | 86.175                                     | 0.0272%            | 0.0009                         | 0.0040                       |
| 2,3-Dimethylbutane     | 0.0274%                       | 86.175                                     | 0.1138%            | 0.0039                         | 0.0169                       |
| 2-Methylpentane        | 0.0857%                       | 86.175                                     | 0.3561%            | 0.0121                         | 0.0529                       |
| 3-Methylpentane        | 0.0454%                       | 86.175                                     | 0.1889%            | 0.0064                         | 0.0281                       |
| n-Heptane              | 0.3522%                       | 100.202                                    | 1.7014%            | 0.0578                         | 0.2530                       |
| Methylcyclohexane      | 0.0317%                       | 98.186                                     | 0.1501%            | 0.0051                         | 0.0223                       |
| 2,2,4-Trimethylpentane | 0.0128%                       | 114.230                                    | 0.0709%            | 0.0024                         | 0.0105                       |
| Benzene                | 0.0353%                       | 78.112                                     | 0.1413%            | 0.0039                         | 0.0170                       |
| Toluene                | 0.0802%                       | 92.138                                     | 0.3562%            | 0.0121                         | 0.0530                       |
| Ethylbenzene           | 0.0025%                       | 106.165                                    | 0.0129%            | 0.0004                         | 0.0019                       |
| m-Xylene               | 0.1097%                       | 106.165                                    | 0.5616%            | 0.0181                         | 0.0835                       |
| p-Xylene               | 0.0111%                       | 106.165                                    | 0.0569%            | 0.0019                         | 0.0085                       |
| n-Octane               | 0.1089%                       | 114.229                                    | 0.5960%            | 0.0203                         | 0.0889                       |
| n-Nonane               | 0.0699%                       | 128.255                                    | 0.4324%            | 0.0147                         | 0.0643                       |
| n-Decane               | 0.1571%                       | 142.282                                    | 1.0772%            | 0.0366                         | 0.1602                       |
| <b>Total</b>           | <b>100.0000%</b>              | <b>20.745</b>                              | <b>100.0000%</b>   | <b>3.9949</b>                  | <b>14.8693</b>               |
| <b>Total VOC</b>       | <b>6.5460%</b>                |  | <b>19.4136%</b>    | <b>0.5991</b>                  | <b>2.8667</b>                |
| <b>Total HAPs</b>      | <b>0.3748%</b>                |  | <b>1.7046%</b>     | <b>0.0579</b>                  | <b>0.2535</b>                |

<sup>1</sup> The gas stream composition is the well stream from the 2008 HYSYS model runs for the Wamsutter Operations Center.  
<sup>2</sup> The molecular weights are from GSPA Engineering Data Book, 12th Edition.  
<sup>3</sup> Fugitive emissions are an estimate only and should not be considered a maximum allowable emission rate. Actual emissions will vary.

**Condensate Stream**

| Component              | Mole Percent (%) <sup>1</sup> | Molecular Weight (lb/lb-mole) <sup>2</sup> | Weight Percent (%) | Emissions (lb/yr) <sup>3</sup> | Emissions (TPY) <sup>3</sup> |
|------------------------|-------------------------------|--|--------------------|--------------------------------|------------------------------|
| Carbon Dioxide         | 0.5895%                       | 44.010                                     | 0.2991%            | 0.0018                         | 0.0078                       |
| Nitrogen               | 0.0015%                       | 28.014                                     | 0.0005%            | 0.0000                         | 0.0000                       |
| Methane                | 6.3647%                       | 16.042                                     | 1.1770%            | 0.5070                         | 0.3307                       |
| Ethane                 | 4.2279%                       | 30.069                                     | 1.4655%            | 0.0067                         | 0.0383                       |
| Propane                | 6.4613%                       | 44.096                                     | 3.2845%            | 0.0295                         | 0.0858                       |
| Isobutane              | 3.3352%                       | 58.122                                     | 2.2347%            | 0.0133                         | 0.0584                       |
| n-Butane               | 5.5703%                       | 58.122                                     | 3.3232%            | 0.0223                         | 0.0975                       |
| Isopentane             | 4.6953%                       | 72.149                                     | 3.9053%            | 0.0233                         | 0.1020                       |
| n-Pentane              | 4.8213%                       | 72.149                                     | 4.0101%            | 0.0239                         | 0.1047                       |
| n-Hexane               | 4.3135%                       | 86.175                                     | 4.2852%            | 0.0255                         | 0.1119                       |
| Cyclohexane            | 0.0000%                       | 84.159                                     | 0.0000%            | 0.0000                         | 0.0000                       |
| 2,2-Dimethylbutane     | 0.1557%                       | 86.175                                     | 0.1547%            | 0.0009                         | 0.0040                       |
| 2,3-Dimethylbutane     | 0.7549%                       | 86.175                                     | 0.7499%            | 0.0045                         | 0.0196                       |
| 2-Methylpentane        | 2.5259%                       | 86.175                                     | 2.5933%            | 0.0150                         | 0.0655                       |
| 3-Methylpentane        | 1.3900%                       | 86.175                                     | 1.3909%            | 0.0082                         | 0.0361                       |
| n-Heptane              | 19.7522%                      | 100.202                                    | 22.8155%           | 0.1360                         | 0.5969                       |
| Methylcyclohexane      | 0.0000%                       | 98.186                                     | 0.0000%            | 0.0000                         | 0.0000                       |
| 2,2,4-Trimethylpentane | 0.0097%                       | 114.230                                    | 0.0103%            | 0.0004                         | 0.0009                       |
| Benzene                | 1.0483%                       | 78.112                                     | 0.9440%            | 0.0056                         | 0.0247                       |
| Toluene                | 4.2312%                       | 92.138                                     | 4.4943%            | 0.0268                         | 0.1174                       |
| Ethylbenzene           | 0.1357%                       | 106.165                                    | 0.1681%            | 0.0019                         | 0.0043                       |
| m-Xylene               | 7.0912%                       | 106.165                                    | 8.5788%            | 0.0517                         | 0.2266                       |
| p-Xylene               | 0.7057%                       | 106.165                                    | 0.8549%            | 0.0052                         | 0.0226                       |
| n-Octane               | 6.8011%                       | 114.229                                    | 8.4016%            | 0.0501                         | 0.2194                       |
| n-Nonane               | 4.3024%                       | 128.255                                    | 5.3612%            | 0.0379                         | 0.1661                       |
| n-Decane               | 10.5354%                      | 142.282                                    | 17.2822%           | 0.1030                         | 0.4513                       |
| <b>Total</b>           | <b>100.0000%</b>              | <b>86.745</b>                              | <b>100.0000%</b>   | <b>0.5962</b>                  | <b>2.6115</b>                |
| <b>Total VOC</b>       | <b>88.1633%</b>               |  | <b>97.6787%</b>    | <b>0.5787</b>                  | <b>2.5347</b>                |
| <b>Total HAPs</b>      | <b>18.1353%</b>               |  | <b>20.2347%</b>    | <b>0.1206</b>                  | <b>0.5284</b>                |

<sup>1</sup> The condensate stream composition is the pressurized condensate from the 2008 HYSYS model runs for the Wamsutter Operations Center.  
<sup>2</sup> The molecular weights are from GSPA Engineering Data Book, 12th Edition.  
<sup>3</sup> Fugitive emissions are an estimate only and should not be considered a maximum allowable emission rate. Actual emissions will vary.

**Emissions Summary**

| Component              | Emissions (lb/yr) | Emissions (TPY) |
|------------------------|-------------------|-----------------|
| Carbon Dioxide         | 0.1983            | 0.8586          |
| Nitrogen               | 0.0077            | 0.0339          |
| Methane                | 2.2072            | 9.5575          |
| Ethane                 | 0.3421            | 1.4863          |
| Propane                | 0.2516            | 1.1032          |
| Isobutane              | 0.0776            | 0.3401          |
| n-Butane               | 0.0987            | 0.4237          |
| Isopentane             | 0.0387            | 0.2516          |
| n-Pentane              | 0.0566            | 0.2434          |
| n-Hexane               | 0.0436            | 0.1910          |
| Cyclohexane            | 0.0043            | 0.0189          |
| 2,2-Dimethylbutane     | 0.0018            | 0.0081          |
| 2,3-Dimethylbutane     | 0.0083            | 0.0395          |
| 2-Methylpentane        | 0.0270            | 0.1185          |
| 3-Methylpentane        | 0.0146            | 0.0641          |
| n-Heptane              | 0.1938            | 0.8488          |
| Methylcyclohexane      | 0.0051            | 0.0223          |
| 2,2,4-Trimethylpentane | 0.0072            | 0.0314          |
| Benzene                | 0.0095            | 0.0416          |
| Toluene                | 0.0389            | 0.1703          |
| Ethylbenzene           | 0.0014            | 0.0063          |
| m-Xylene               | 0.0708            | 0.3102          |
| p-Xylene               | 0.0071            | 0.0311          |
| n-Octane               | 0.0704            | 0.3083          |
| n-Nonane               | 0.0526            | 0.2304          |
| n-Decane               | 0.1386            | 0.6115          |
| <b>Total</b>           | <b>3.9911</b>     | <b>17.4808</b>  |
| <b>Total VOC</b>       | <b>1.2177</b>     | <b>5.4513</b>   |
| <b>Total HAPs</b>      | <b>0.1785</b>     | <b>0.7819</b>   |

<sup>1</sup> Fugitive emissions are an estimate only and should not be considered a maximum allowable emission rate. Actual emissions will vary.

**NSR Application A0001334  
Two Rim Unit 30-40D Pad  
F026714  
July 28, 2015**

If I am claiming any information in this submission is a trade secret, I hereby swear or affirm that the trade secret request meets the requirements of Wyoming Air Quality Standards and Regulations and that the justification submitted with the trade secret request sets forth the basis for claiming that the information should be considered a trade secret as defined in Wyoming Air Quality Standards and Regulations.

- a) I am the Authorized Representative identified in applicable Wyoming Air Quality Standards and Regulations as authorized to sign this document; and
- b) Based on information and belief formed after reasonable inquiry, I hereby affirm that all factual statements in this transmittal are true, accurate and complete to the best of my knowledge and that all judgments and estimates have been made in good faith.

Account: caldwejh

Date/time submitted: Jul 28 2015, 10:57:24

**Air Quality Division**  
**Application for NSR Permit**

Jul 28 2015, 10:57:24

- **NSR Application**

*This information should be filled out for each New Source Review (NSR) application. An NSR permit is required for all air contaminant sources (emissions units) installed or modified after January 1, 1974. See the application instructions for additional information.*

- **Purpose of Application**

Please summarize the reason this permit is being applied for.

Install a new pad well facility

Has the facility changed location or is it a new/greenfield facility? Yes

Has a Land Use Planning document been included in this application? No

Does production at this facility contain H2S? No

- **Federal Rules Applicability - Facility Level**

**Prevention of Significant Deterioration (PSD)** Not affected  
*These rules are found under WAQSR Chapter 6, Section 4.*

**Non-Attainment New Source Review** Not affected  
*These rules are found under WAQSR Chapter 6, Section 13.*

- **Trade Secret Information** - One or more Emissions Units in this application contains trade secret information.

No

- **Permit Application Contact** - Newly created contacts and application contact changes will be saved when the application is saved.

|                 |                      |                               |
|-----------------|----------------------|-------------------------------|
| Shanda Caldwell |                      | BP America Production Company |
| Name            | Title                | Company                       |
| P.O. Box 157    | Wamsutter, WY        | 82336                         |
| Street Address  | City/Township, State | Zip Code                      |
| (307) 328-3779  | (307) 328-3779       | shanda.caldwell@bp.com        |
| Phone           | Fax                  | E-mail                        |

- **Modeling Section**

*Ambient Air Quality Impact Analysis: WAQSR Chapter 6, Section 2(c)(ii) requires that permit applicants demonstrate that a proposed facility will not prevent the attainment or maintenance of any ambient air quality standard.*

Has the applicant contacted AQD to determine if modeling is required? No

Is a modeling analysis part of this application? No

Is the proposed project subject to Prevention of Significant Deterioration (PSD) requirements? No

- **Application Attachments**

| Required Attachment | Public Document Id | Attachment Type                  | Description                          |
|---------------------|--------------------|----------------------------------|--------------------------------------|
| X                   | 6832               | Process Flow Diagram             | Process Description for Pad Location |
| X                   | 6833               | Emissions Calculations           | Emissions Calculations               |
| X                   | 6834               | Cover Letter/Project Description | Cover letter                         |
| X                   | 6835               | Equipment List                   | equipment list                       |

|   |      |              |              |
|---|------|--------------|--------------|
| X | 6836 | Facility Map | Site diagram |
|---|------|--------------|--------------|

**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** FUG001

**AQD EU description:**

**Company EU ID:** Fugitives

**Company EU Description:** Fugitive Leaks at O&G site

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

**Date production began:**

04/27/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Fugitive

Type of Fugitive Emission : Fugitive Leaks at O&G

| Equipment and Service Type | Number of Each Equipment Type | Leak Rate (ppm) | Percent VOC |
|----------------------------|-------------------------------|-----------------|-------------|
| Valve; Gas                 | 20                            | 0.01            | 19.400      |
| Flange; Gas                | 168                           | 0.01            | 19.400      |
| Connector; Gas             | 674                           | 0.01            | 19.400      |
| Other; Gas                 | 2                             | 0.01            | 19.400      |
| Valve; Light Oil           | 10                            | 0.01            | 97.100      |
| Flange; Light Oil          | 44                            | 0.01            | 97.100      |
| Connector; Light Oil       | 44                            | 0.01            | 97.100      |
| Other; Light Oil           | 2                             | 0.01            | 97.100      |

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

**Criteria Pollutants :**

| Pollutant | Pre-Controlled Potential | Efficiency Standards | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------------|----------------------|-----------------------------------|------------------------------------|--------------------------|
|           |                          |                      |                                   |                                    |                          |
|           |                          |                      |                                   |                                    |                          |

|   | Emissions (tons/yr) | Potential to Emit (PTE)* | Units* |   |   |       |
|---|---------------------|--------------------------|--------|---|---|-------|
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0                   | 0                        |        | 0 | 0 |       |
| PM # 10 microns in diameter (PE/PM10)                           | 0                   | 0                        |        | 0 | 0 |       |
| PM # 2.5 microns in diameter (PE/PM2.5)                         | 0                   | 0                        |        | 0 | 0 |       |
| Sulfur dioxide (SO2)  | 0                   | 0                        |        | 0 | 0 |       |
| Nitrogen oxides (NOx)   | 0                   | 0                        |        | 0 | 0 |       |
| Carbon monoxide (CO)  | 0                   | 0                        |        | 0 | 0 |       |
| Volatile organic compounds (VOC)                                | 1.0843              | 0                        |        | 0 | 0 | AP-42 |
| Lead (Pb)   | 0                   | 0                        |        | 0 | 0 |       |
| Total Hazardous Air Pollutants (HAPs)                           | 0.1564              | 0                        |        | 0 | 0 | AP-42 |
| Fluoride (F)  | 0                   | 0                        |        | 0 | 0 |       |
| Hydrogen Sulfide (H2S)  | 0                   | 0                        |        | 0 | 0 |       |
| Mercury (Hg)  | 0                   | 0                        |        | 0 | 0 |       |
| Total Reduced Sulfur (TRS)                                      | 0                   | 0                        |        | 0 | 0 |       |
| Sulfuric Acid Mist (SAM)  | 0                   | 0                        |        | 0 | 0 |       |

**Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
|           |                    |  |                          |        |                                   |                                    |                          |

**Greenhouse Gases (GHGs):**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
|           |                    |  |                          |        |                                   |                                    |                          |

\* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected. Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

\*\* AQD Calculated - See 'Help' for more information.

**- Best Available Control Technology (BACT)**

Was a BACT Analysis completed for this unit? No

**- Lowest Achievable Emission Rate (LAER)**

Was a LAER Analysis completed for this unit? No

**- Federal and State Rule Applicability**

**New Source Performance Standards (NSPS)** Not affected  
*New Source Performance Standards are listed under 40*

CFR 60 - Standards of Performance for New Stationary Sources.

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)** Not affected  
*National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)** Not affected  
*National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 63) standards are listed under 40 CFR 63.*

**Prevention of Significant Deterioration (PSD)** Not Affected  
*These rules are found under WAQSR Chapter 6, Section 4.*

**Non-Attainment New Source Review** Not Affected  
*These rules are found under WAQSR Chapter 6, Section 13.*

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** HET001

**AQD EU description:**

**Company EU ID:** Htr 30-40D

**Company EU Description:** Heater on t-pak -  
1.0 mmbtu/hr

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

**Date production began:**

04/27/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Heater/Chiller

Fuel Sulfur Content : 0.00

Units : %

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

**Criteria Pollutants :**

| Pollutant   | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|---|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|   |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0.0292                                       | 0                        |        | 0                                 | 0                                  |                          |
| PM # 10 microns in diameter (PE/PM10)                           | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 2.5 microns in diameter (PE/PM2.5)                         | 0  | 0                        |        | 0                                 | 0                                  |                          |
| Sulfur dioxide (SO2)  | 0.0023                                       | 0                        |        | 0                                 | 0                                  | AP-42                    |
| Nitrogen oxides (NOx)   | 0.3843                                       | 0                        |        | 0                                 | 0                                  | AP-42                    |

|                                       |        |   |  |   |   |       |
|---------------------------------------|--------|---|--|---|---|-------|
| Carbon monoxide (CO)                  | 0.3228 | 0 |  | 0 | 0 | AP-42 |
| Volatile organic compounds (VOC)      | 0.0211 | 0 |  | 0 | 0 | AP-42 |
| Lead (Pb)                             | 0      | 0 |  | 0 | 0 |       |
| Total Hazardous Air Pollutants (HAPs) | 0      | 0 |  | 0 | 0 |       |
| Fluoride (F)                          | 0      | 0 |  | 0 | 0 |       |
| Hydrogen Sulfide (H2S)                | 0      | 0 |  | 0 | 0 |       |
| Mercury (Hg)                          | 0      | 0 |  | 0 | 0 |       |
| Total Reduced Sulfur (TRS)            | 0      | 0 |  | 0 | 0 |       |
| Sulfuric Acid Mist (SAM)              | 0      | 0 |  | 0 | 0 |       |

**Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:**

| Pollutant    | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|--------------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|              |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Formaldehyde | VOC-HAP            | 0  | 0                        |        | 0.0001                            | 0.0003                             | AP-42                    |

**Greenhouse Gases (GHGs):**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

\* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected. Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

\*\* AQD Calculated - See 'Help' for more information.

**- Best Available Control Technology (BACT)**

Was a BACT Analysis completed for this unit? No

**- Lowest Achievable Emission Rate (LAER)**

Was a LAER Analysis completed for this unit? No

**- Federal and State Rule Applicability**

**New Source Performance Standards (NSPS)** Not affected  
*New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)** Not affected  
*National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)** Not affected  
*National Emission Standards for Hazardous Air Pollutants*

(NESHAP Part 63) standards are listed under 40 CFR 63.

**Prevention of Significant Deterioration (PSD)**

These rules are found under WAQSR Chapter 6, Section 4.

Not Affected

**Non-Attainment New Source Review**

These rules are found under WAQSR Chapter 6, Section 13.

Not Affected

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

| Required Attachment | Public Document Id | Attachment Type | Attachment Description | Attachment Title | Attachment Path | Attachment Size | Attachment Date |
|---------------------|--------------------|-----------------|------------------------|------------------|-----------------|-----------------|-----------------|
|                     |                    |                 |                        |                  |                 |                 |                 |

**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** HET002

**AQD EU description:**

**Company EU ID:** Htr 30-80D

**Company EU Description:** Heater on t-pak -  
1.0 mmbtu/hr

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

**Date production began:**

04/27/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Heater/Chiller

Fuel Sulfur Content : 0.00

Units : %

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

**Criteria Pollutants :**

| Pollutant   | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|---|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|   |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0.0292                                       | 0                        |        | 0                                 | 0                                  |                          |
| PM # 10 microns in diameter (PE/PM10)                           | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 2.5 microns in diameter (PE/PM2.5)                         | 0  | 0                        |        | 0                                 | 0                                  |                          |
| Sulfur dioxide (SO2)  | 0.0023                                       | 0                        |        | 0                                 | 0                                  | AP-42                    |
| Nitrogen oxides (NOx)   | 0.3843                                       | 0                        |        | 0                                 | 0                                  | AP-42                    |

|                                       |        |   |  |   |   |       |
|---------------------------------------|--------|---|--|---|---|-------|
| Carbon monoxide (CO)                  | 0.3228 | 0 |  | 0 | 0 | AP-42 |
| Volatile organic compounds (VOC)      | 0.0211 | 0 |  | 0 | 0 | AP-42 |
| Lead (Pb)                             | 0      | 0 |  | 0 | 0 |       |
| Total Hazardous Air Pollutants (HAPs) | 0      | 0 |  | 0 | 0 |       |
| Fluoride (F)                          | 0      | 0 |  | 0 | 0 |       |
| Hydrogen Sulfide (H2S)                | 0      | 0 |  | 0 | 0 |       |
| Mercury (Hg)                          | 0      | 0 |  | 0 | 0 |       |
| Total Reduced Sulfur (TRS)            | 0      | 0 |  | 0 | 0 |       |
| Sulfuric Acid Mist (SAM)              | 0      | 0 |  | 0 | 0 |       |

**Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:**

| Pollutant    | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|--------------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|              |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Formaldehyde | VOC-HAP            | 0  | 0                        |        | 0.0001                            | 0.0003                             | AP-42                    |

**Greenhouse Gases (GHGs):**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

\* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected.

Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

\*\* AQD Calculated - See 'Help' for more information.

**- Best Available Control Technology (BACT)**

Was a BACT Analysis completed for this unit? No

**- Lowest Achievable Emission Rate (LAER)**

Was a LAER Analysis completed for this unit? No

**- Federal and State Rule Applicability**

**New Source Performance Standards (NSPS)**

New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.

Not affected

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)**

National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).

Not affected

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)**

National Emission Standards for Hazardous Air Pollutants

Not affected

(NESHAP Part 63) standards are listed under 40 CFR 63.

**Prevention of Significant Deterioration (PSD)** Not Affected  
*These rules are found under WAQSR Chapter 6, Section 4.*

**Non-Attainment New Source Review** Not Affected  
*These rules are found under WAQSR Chapter 6, Section 13.*

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** HET003

**AQD EU description:**

**Company EU ID:** Htr 30-50D

**Company EU Description:** Heater on t-pak -  
1.0 mmbtu/hr

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

**Date production began:**

04/27/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Heater/Chiller

Fuel Sulfur Content : 0.00

Units : %

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

**Criteria Pollutants :**

| Pollutant   | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|---|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|   |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0.0292                                       | 0                        |        | 0                                 | 0                                  |                          |
| PM # 10 microns in diameter (PE/PM10)                           | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 2.5 microns in diameter (PE/PM2.5)                         | 0  | 0                        |        | 0                                 | 0                                  |                          |
| Sulfur dioxide (SO2)  | 0.0023                                       | 0                        |        | 0                                 | 0                                  | AP-42                    |
| Nitrogen oxides (NOx)   | 0.3843                                       | 0                        |        | 0                                 | 0                                  | AP-42                    |

|                                       |        |   |  |   |   |       |
|---------------------------------------|--------|---|--|---|---|-------|
| Carbon monoxide (CO)                  | 0.3228 | 0 |  | 0 | 0 | AP-42 |
| Volatile organic compounds (VOC)      | 0.0211 | 0 |  | 0 | 0 | AP-42 |
| Lead (Pb)                             | 0      | 0 |  | 0 | 0 |       |
| Total Hazardous Air Pollutants (HAPs) | 0      | 0 |  | 0 | 0 |       |
| Fluoride (F)                          | 0      | 0 |  | 0 | 0 |       |
| Hydrogen Sulfide (H2S)                | 0      | 0 |  | 0 | 0 |       |
| Mercury (Hg)                          | 0      | 0 |  | 0 | 0 |       |
| Total Reduced Sulfur (TRS)            | 0      | 0 |  | 0 | 0 |       |
| Sulfuric Acid Mist (SAM)              | 0      | 0 |  | 0 | 0 |       |

**Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:**

| Pollutant    | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|--------------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|              |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Formaldehyde | VOC-HAP            | 0  | 0                        |        | 0.0001                            | 0.0003                             | AP-42                    |

**Greenhouse Gases (GHGs):**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

\* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected.

Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

\*\* AQD Calculated - See 'Help' for more information.

**- Best Available Control Technology (BACT)**

Was a BACT Analysis completed for this unit? No

**- Lowest Achievable Emission Rate (LAER)**

Was a LAER Analysis completed for this unit? No

**- Federal and State Rule Applicability**

**New Source Performance Standards (NSPS)**

New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.

Not affected

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)**

National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).

Not affected

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)**

National Emission Standards for Hazardous Air Pollutants

Not affected

(NESHAP Part 63) standards are listed under 40 CFR 63.

**Prevention of Significant Deterioration (PSD)**

These rules are found under WAQSR Chapter 6, Section 4.

Not Affected

**Non-Attainment New Source Review**

These rules are found under WAQSR Chapter 6, Section 13.

Not Affected

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** HET004

**AQD EU description:**

**Company EU ID:** Htr 30-130D

**Company EU Description:** Heater on t-pak - 1.0 mmbtu/hr

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

**Date production began:**

04/27/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Heater/Chiller

Fuel Sulfur Content : 0.00

Units : %

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

**Criteria Pollutants :**

| Pollutant   | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|---|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|   |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0.0292                                       | 0                        |        | 0                                 | 0                                  |                          |
| PM # 10 microns in diameter (PE/PM10)                           | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 2.5 microns in diameter (PE/PM2.5)                         | 0  | 0                        |        | 0                                 | 0                                  |                          |
| Sulfur dioxide (SO2)  | 0.0023                                       | 0                        |        | 0                                 | 0                                  | AP-42                    |
| Nitrogen oxides (NOx)   | 0.3843                                       | 0                        |        | 0                                 | 0                                  | AP-42                    |

|                                       |        |   |  |   |   |       |
|---------------------------------------|--------|---|--|---|---|-------|
| Carbon monoxide (CO)                  | 0.3228 | 0 |  | 0 | 0 | AP-42 |
| Volatile organic compounds (VOC)      | 0.0211 | 0 |  | 0 | 0 | AP-42 |
| Lead (Pb)                             | 0      | 0 |  | 0 | 0 |       |
| Total Hazardous Air Pollutants (HAPs) | 0      | 0 |  | 0 | 0 |       |
| Fluoride (F)                          | 0      | 0 |  | 0 | 0 |       |
| Hydrogen Sulfide (H2S)                | 0      | 0 |  | 0 | 0 |       |
| Mercury (Hg)                          | 0      | 0 |  | 0 | 0 |       |
| Total Reduced Sulfur (TRS)            | 0      | 0 |  | 0 | 0 |       |
| Sulfuric Acid Mist (SAM)              | 0      | 0 |  | 0 | 0 |       |

**Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:**

| Pollutant    | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|--------------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|              |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Formaldehyde | VOC-HAP            | 0  | 0                        |        | 0.0001                            | 0.0003                             | AP-42                    |

**Greenhouse Gases (GHGs):**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

\* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected.

Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

\*\* AQD Calculated - See 'Help' for more information.

**- Best Available Control Technology (BACT)**

Was a BACT Analysis completed for this unit? No

**- Lowest Achievable Emission Rate (LAER)**

Was a LAER Analysis completed for this unit? No

**- Federal and State Rule Applicability**

**New Source Performance Standards (NSPS)** Not affected  
*New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)** Not affected  
*National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)** Not affected  
*National Emission Standards for Hazardous Air Pollutants*

(NESHAP Part 63) standards are listed under 40 CFR 63.

**Prevention of Significant Deterioration (PSD)** Not Affected  
*These rules are found under WAQSR Chapter 6, Section 4.*

**Non-Attainment New Source Review** Not Affected  
*These rules are found under WAQSR Chapter 6, Section 13.*

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** HET005

**AQD EU description:**

**Company EU ID:** Htr 30-150D

**Company EU Description:** Heater on t-pak -  
1.0 mmbtu/hr

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

**Date production began:**

04/27/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Heater/Chiller

Fuel Sulfur Content : 0.00

Units : %

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

**Criteria Pollutants :**

| Pollutant   | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|---|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|   |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0.0292                                       | 0                        |        | 0                                 | 0                                  |                          |
| PM # 10 microns in diameter (PE/PM10)                           | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 2.5 microns in diameter (PE/PM2.5)                         | 0  | 0                        |        | 0                                 | 0                                  |                          |
| Sulfur dioxide (SO2)  | 0.0023                                       | 0                        |        | 0                                 | 0                                  | AP-42                    |
| Nitrogen oxides (NOx)   | 0.3843                                       | 0                        |        | 0                                 | 0                                  | AP-42                    |

|                                       |        |   |  |   |   |       |
|---------------------------------------|--------|---|--|---|---|-------|
| Carbon monoxide (CO)                  | 0.3228 | 0 |  | 0 | 0 | AP-42 |
| Volatile organic compounds (VOC)      | 0.0211 | 0 |  | 0 | 0 | AP-42 |
| Lead (Pb)                             | 0      | 0 |  | 0 | 0 |       |
| Total Hazardous Air Pollutants (HAPs) | 0      | 0 |  | 0 | 0 |       |
| Fluoride (F)                          | 0      | 0 |  | 0 | 0 |       |
| Hydrogen Sulfide (H <sub>2</sub> S)   | 0      | 0 |  | 0 | 0 |       |
| Mercury (Hg)                          | 0      | 0 |  | 0 | 0 |       |
| Total Reduced Sulfur (TRS)            | 0      | 0 |  | 0 | 0 |       |
| Sulfuric Acid Mist (SAM)              | 0      | 0 |  | 0 | 0 |       |

**Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:**

| Pollutant    | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|--------------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|              |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Formaldehyde | VOC-HAP            | 0  | 0                        |        | 0.0001                            | 0.0003                             | AP-42                    |

**Greenhouse Gases (GHGs):**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

\* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected. Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

\*\* AQD Calculated - See 'Help' for more information.

**- Best Available Control Technology (BACT)**

Was a BACT Analysis completed for this unit? No

**- Lowest Achievable Emission Rate (LAER)**

Was a LAER Analysis completed for this unit? No

**- Federal and State Rule Applicability**

**New Source Performance Standards (NSPS)** Not affected  
*New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)** Not affected  
*National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)** Not affected  
*National Emission Standards for Hazardous Air Pollutants*

(NESHAP Part 63) standards are listed under 40 CFR 63.

**Prevention of Significant Deterioration (PSD)**  
 These rules are found under WAQSR Chapter 6, Section 4.

Not Affected

**Non-Attainment New Source Review**  
 These rules are found under WAQSR Chapter 6, Section 13.

Not Affected

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

| Required Attachment | Public Document Id | Attachment Type | Attachment Description | Attachment Description |
|---------------------|--------------------|-----------------|------------------------|------------------------|
|                     |                    |                 |                        |                        |

**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** HET006

**AQD EU description:**

**Company EU ID:** Line Htr 1

**Company EU Description:** Line Heater - 0.5 mmbtu/hr (line heater consists of 2 heaters, Line Htr 1 and Line Htr 2, and 1 separator)

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

**Date production began:**

04/27/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Heater/Chiller

Fuel Sulfur Content : 0.00

Units : %

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

**Criteria Pollutants :**

| Pollutant   | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|---|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|   |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0.0146                                       | 0                        |        | 0                                 | 0                                  |                          |
| PM # 10 microns in diameter (PE/PM10)                           | 0  | 0                        |        | 0                                 | 0                                  |                          |
|   |  |                          |        |                                   |                                    |                          |

|   |        |   |  |   |   |       |
|---|--------|---|--|---|---|-------|
| PM # 2.5 microns in diameter (PE/PM2.5) | 0      | 0 |  | 0 | 0 |       |
| Sulfur dioxide (SO2)                    | 0.0012 | 0 |  | 0 | 0 | AP-42 |
| Nitrogen oxides (NOx)                   | 0.1922 | 0 |  | 0 | 0 | AP-42 |
| Carbon monoxide (CO)                    | 0.1614 | 0 |  | 0 | 0 | AP-42 |
| Volatile organic compounds (VOC)        | 0.0106 | 0 |  | 0 | 0 | AP-42 |
| Lead (Pb)                               | 0      | 0 |  | 0 | 0 |       |
| Total Hazardous Air Pollutants (HAPs)   | 0      | 0 |  | 0 | 0 |       |
| Fluoride (F)                            | 0      | 0 |  | 0 | 0 |       |
| Hydrogen Sulfide (H2S)                  | 0      | 0 |  | 0 | 0 |       |
| Mercury (Hg)                            | 0      | 0 |  | 0 | 0 |       |
| Total Reduced Sulfur (TRS)              | 0      | 0 |  | 0 | 0 |       |
| Sulfuric Acid Mist (SAM)                | 0      | 0 |  | 0 | 0 |       |

**Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:**

| Pollutant    | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|--------------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|              |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Formaldehyde | VOC-HAP            | 0  | 0                        |        | 0                                 | 0.0001                             | AP-42                    |

**Greenhouse Gases (GHGs):**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

\* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected.

Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

\*\* AQD Calculated - See 'Help' for more information.

**- Best Available Control Technology (BACT)**

Was a BACT Analysis completed for this unit? No

**- Lowest Achievable Emission Rate (LAER)**

Was a LAER Analysis completed for this unit? No

**- Federal and State Rule Applicability**

**New Source Performance Standards (NSPS)**

New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.

Not affected

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)**

National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).

Not affected

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)** Not affected  
*National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63) standards are listed under 40 CFR 63.*

**Prevention of Significant Deterioration (PSD)** Not Affected  
*These rules are found under WAQSR Chapter 6, Section 4.*

**Non-Attainment New Source Review** Not Affected  
*These rules are found under WAQSR Chapter 6, Section 13.*

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** HET007

**AQD EU description:**

**Company EU ID:** Line Htr 2

**Company EU Description:** Line Heater - 0.5 mmbtu/hr (line heater consists of 2 heaters, Line Htr 1 and Line Htr 2, and 1 separator)

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

**Date production began:**

04/27/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Heater/Chiller

Fuel Sulfur Content : 0.00

Units : %

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

**Criteria Pollutants :**

| Pollutant   | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|---|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|   |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0.0146                                       | 0                        |        | 0                                 | 0                                  |                          |
| PM # 10 microns in diameter (PE/PM10)                           | 0  | 0                        |        | 0                                 | 0                                  |                          |
|   |  |                          |        |                                   |                                    |                          |

|   |        |   |  |   |   |       |
|---|--------|---|--|---|---|-------|
| PM # 2.5 microns in diameter (PE/PM2.5) | 0      | 0 |  | 0 | 0 |       |
| Sulfur dioxide (SO2)                    | 0.0012 | 0 |  | 0 | 0 | AP-42 |
| Nitrogen oxides (NOx)                   | 0.1922 | 0 |  | 0 | 0 | AP-42 |
| Carbon monoxide (CO)                    | 0.1614 | 0 |  | 0 | 0 | AP-42 |
| Volatile organic compounds (VOC)        | 0.0106 | 0 |  | 0 | 0 | AP-42 |
| Lead (Pb)                               | 0      | 0 |  | 0 | 0 |       |
| Total Hazardous Air Pollutants (HAPs)   | 0      | 0 |  | 0 | 0 |       |
| Fluoride (F)                            | 0      | 0 |  | 0 | 0 |       |
| Hydrogen Sulfide (H2S)                  | 0      | 0 |  | 0 | 0 |       |
| Mercury (Hg)                            | 0      | 0 |  | 0 | 0 |       |
| Total Reduced Sulfur (TRS)              | 0      | 0 |  | 0 | 0 |       |
| Sulfuric Acid Mist (SAM)                | 0      | 0 |  | 0 | 0 |       |

**Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:**

| Pollutant    | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|--------------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|              |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Formaldehyde | VOC-HAP            | 0  | 0                        |        | 0                                 | 0.0001                             | AP-42                    |

**Greenhouse Gases (GHGs):**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

\* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected. Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

\*\* AQD Calculated - See 'Help' for more information.

**- Best Available Control Technology (BACT)**

Was a BACT Analysis completed for this unit? No

**- Lowest Achievable Emission Rate (LAER)**

Was a LAER Analysis completed for this unit? No

**- Federal and State Rule Applicability**

**New Source Performance Standards (NSPS)** Not affected  
 New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)** Not affected  
 National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)**  
*National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63) standards are listed under 40 CFR 63.*

Not affected

**Prevention of Significant Deterioration (PSD)**  
*These rules are found under WAQSR Chapter 6, Section 4.*

Not Affected

**Non-Attainment New Source Review**  
*These rules are found under WAQSR Chapter 6, Section 13.*

Not Affected

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** PNE001

**AQD EU description:**

**Company EU ID:** Glycol Pump

**Company EU Description:** There are four (4) glycol heat trace pumps on pad

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

**Date production began:**

04/27/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Pneumatic Equipment

Motive Force : Field Gas

VOC Content (%) : 14.500

HAP Content (%) : 0.530

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 6696

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

**Criteria Pollutants :**

| Pollutant   | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|---|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|   |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 10 microns in diameter (PE/PM10)                           | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 2.5 microns in diameter (PE/PM2.5)                         | 0  | 0                        |        | 0                                 | 0                                  |                          |
|   |  |                          |        |                                   |                                    |                          |

|                                       |         |   |  |   |      |                |
|---------------------------------------|---------|---|--|---|------|----------------|
| Sulfur dioxide (SO2)                  | 0       | 0 |  | 0 | 0    |                |
| Nitrogen oxides (NOx)                 | 0       | 0 |  | 0 | 0    |                |
| Carbon monoxide (CO)                  | 0       | 0 |  | 0 | 0    |                |
| Volatile organic compounds (VOC)      | 12.8446 | 0 |  | 0 | 0.26 | GRI<br>GlyCalc |
| Lead (Pb)                             | 0       | 0 |  | 0 | 0    |                |
| Total Hazardous Air Pollutants (HAPs) | 0.4688  | 0 |  | 0 | 0.01 | GRI<br>GlyCalc |
| Fluoride (F)                          | 0       | 0 |  | 0 | 0    |                |
| Hydrogen Sulfide (H2S)                | 0       | 0 |  | 0 | 0    |                |
| Mercury (Hg)                          | 0       | 0 |  | 0 | 0    |                |
| Total Reduced Sulfur (TRS)            | 0       | 0 |  | 0 | 0    |                |
| Sulfuric Acid Mist (SAM)              | 0       | 0 |  | 0 | 0    |                |

**Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

**Greenhouse Gases (GHGs):**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

\* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected. Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

\*\* AQD Calculated - See 'Help' for more information.

**- Best Available Control Technology (BACT)**

Was a BACT Analysis completed for this unit? No

**- Lowest Achievable Emission Rate (LAER)**

Was a LAER Analysis completed for this unit? No

**- Federal and State Rule Applicability**

**New Source Performance Standards (NSPS)** Not affected  
*New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)** Not affected  
*National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)** Not affected

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63) standards are listed under 40 CFR 63.

**Prevention of Significant Deterioration (PSD)** Not Affected  
These rules are found under WAQSR Chapter 6, Section 4.

**Non-Attainment New Source Review** Not Affected  
These rules are found under WAQSR Chapter 6, Section 13.

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** PNE002

**AQD EU description:**

**Company EU ID:** Chem Pump

**Company EU Description:** There are three (3) solar pumps on pad

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

**Date production began:**

04/27/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Pneumatic Equipment

Motive Force : Air

VOC Content (%) : 0.000

HAP Content (%) : 0.000

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

**Criteria Pollutants :**

| Pollutant   | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|---|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|   |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 10 microns in diameter (PE/PM10)                           | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 2.5 microns in diameter (PE/PM2.5)                         | 0  | 0                        |        | 0                                 | 0                                  |                          |

|                                       |   |   |  |   |   |  |
|---------------------------------------|---|---|--|---|---|--|
| Sulfur dioxide (SO2)                  | 0 | 0 |  | 0 | 0 |  |
| Nitrogen oxides (NOx)                 | 0 | 0 |  | 0 | 0 |  |
| Carbon monoxide (CO)                  | 0 | 0 |  | 0 | 0 |  |
| Volatile organic compounds (VOC)      | 0 | 0 |  | 0 | 0 |  |
| Lead (Pb)                             | 0 | 0 |  | 0 | 0 |  |
| Total Hazardous Air Pollutants (HAPs) | 0 | 0 |  | 0 | 0 |  |
| Fluoride (F)                          | 0 | 0 |  | 0 | 0 |  |
| Hydrogen Sulfide (H2S)                | 0 | 0 |  | 0 | 0 |  |
| Mercury (Hg)                          | 0 | 0 |  | 0 | 0 |  |
| Total Reduced Sulfur (TRS)            | 0 | 0 |  | 0 | 0 |  |
| Sulfuric Acid Mist (SAM)              | 0 | 0 |  | 0 | 0 |  |

**Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

**Greenhouse Gases (GHGs):**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

\* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected. Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

\*\* AQD Calculated - See 'Help' for more information.

**- Best Available Control Technology (BACT)**

Was a BACT Analysis completed for this unit? No

**- Lowest Achievable Emission Rate (LAER)**

Was a LAER Analysis completed for this unit? No

**- Federal and State Rule Applicability**

**New Source Performance Standards (NSPS)** Not affected  
*New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)** Not affected  
*National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)** Not affected

National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63) standards are listed under 40 CFR 63.

**Prevention of Significant Deterioration (PSD)** Not Affected  
 These rules are found under WAQSR Chapter 6, Section 4.

**Non-Attainment New Source Review** Not Affected  
 These rules are found under WAQSR Chapter 6, Section 13.

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

| Required Attachment | Public Document Id | Attachment Type | Attachment Description | Attachment Title | Attachment File Name | Attachment File Size | Attachment File Type | Attachment File Path |
|---------------------|--------------------|-----------------|------------------------|------------------|----------------------|----------------------|----------------------|----------------------|
|                     |                    |                 |                        |                  |                      |                      |                      |                      |

**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** PNE003

**AQD EU description:**

**Company EU ID:** Controllers

**Company EU Description:** There are 27 low bleed or no bleed pneumatic controllers on pad

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

**Date production began:**

04/27/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Pneumatic Equipment

Motive Force : Field Gas

VOC Content (%) : 14.600

HAP Content (%) : 0.560

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

**Criteria Pollutants :**

| Pollutant   | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|---|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|   |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 10 microns in diameter (PE/PM10)                           | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 2.5 microns in diameter (PE/PM2.5)                         | 0  | 0                        |        | 0                                 | 0                                  |                          |

|                                       |   |   |  |   |   |  |
|---------------------------------------|---|---|--|---|---|--|
| Sulfur dioxide (SO2)                  | 0 | 0 |  | 0 | 0 |  |
| Nitrogen oxides (NOx)                 | 0 | 0 |  | 0 | 0 |  |
| Carbon monoxide (CO)                  | 0 | 0 |  | 0 | 0 |  |
| Volatile organic compounds (VOC)      | 0 | 0 |  | 0 | 0 |  |
| Lead (Pb)                             | 0 | 0 |  | 0 | 0 |  |
| Total Hazardous Air Pollutants (HAPs) | 0 | 0 |  | 0 | 0 |  |
| Fluoride (F)                          | 0 | 0 |  | 0 | 0 |  |
| Hydrogen Sulfide (H2S)                | 0 | 0 |  | 0 | 0 |  |
| Mercury (Hg)                          | 0 | 0 |  | 0 | 0 |  |
| Total Reduced Sulfur (TRS)            | 0 | 0 |  | 0 | 0 |  |
| Sulfuric Acid Mist (SAM)              | 0 | 0 |  | 0 | 0 |  |

**Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

**Greenhouse Gases (GHGs):**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

\* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected. Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

\*\* AQD Calculated - See 'Help' for more information.

**- Best Available Control Technology (BACT)**

Was a BACT Analysis completed for this unit? No

**- Lowest Achievable Emission Rate (LAER)**

Was a LAER Analysis completed for this unit? No

**- Federal and State Rule Applicability**

**New Source Performance Standards (NSPS)** Not affected  
*New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)** Not affected  
*National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)** Not affected

National Emission Standards for Hazardous Air Pollutants  
(NESHAP Part 63) standards are listed under 40 CFR 63.

**Prevention of Significant Deterioration (PSD)**  
These rules are found under WAQSR Chapter 6, Section 4.

Not Affected

**Non-Attainment New Source Review**  
These rules are found under WAQSR Chapter 6, Section  
13.

Not Affected

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** SEP001

**AQD EU description:**

**Company EU ID:** Separators

**Company EU Description:** There are six separators on location - heaters are reported separately

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

**Date production began:**

04/27/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Separator/Treater

Operating Temperature (F) : 70

Operating Pressure (psig) : 325.00

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

**Criteria Pollutants :**

| Pollutant   | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|---|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|   |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 10 microns in diameter (PE/PM10)                           | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 2.5 microns in diameter (PE/PM2.5)                         | 0  | 0                        |        | 0                                 | 0                                  |                          |

|                                       |   |   |  |   |   |  |
|---------------------------------------|---|---|--|---|---|--|
| Sulfur dioxide (SO2)                  | 0 | 0 |  | 0 | 0 |  |
| Nitrogen oxides (NOx)                 | 0 | 0 |  | 0 | 0 |  |
| Carbon monoxide (CO)                  | 0 | 0 |  | 0 | 0 |  |
| Volatile organic compounds (VOC)      | 0 | 0 |  | 0 | 0 |  |
| Lead (Pb)                             | 0 | 0 |  | 0 | 0 |  |
| Total Hazardous Air Pollutants (HAPs) | 0 | 0 |  | 0 | 0 |  |
| Fluoride (F)                          | 0 | 0 |  | 0 | 0 |  |
| Hydrogen Sulfide (H2S)                | 0 | 0 |  | 0 | 0 |  |
| Mercury (Hg)                          | 0 | 0 |  | 0 | 0 |  |
| Total Reduced Sulfur (TRS)            | 0 | 0 |  | 0 | 0 |  |
| Sulfuric Acid Mist (SAM)              | 0 | 0 |  | 0 | 0 |  |

**Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

**Greenhouse Gases (GHGs):**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

\* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected. Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

\*\* AQD Calculated - See 'Help' for more information.

**- Best Available Control Technology (BACT)**

Was a BACT Analysis completed for this unit? No

**- Lowest Achievable Emission Rate (LAER)**

Was a LAER Analysis completed for this unit? No

**- Federal and State Rule Applicability**

**New Source Performance Standards (NSPS)** Not affected  
*New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)** Not affected  
*National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)** Not affected



**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** TNK001

**AQD EU description:**

**Company EU ID:** Condo

**Company EU Description:** There are three 400-bbl condensate tanks on pad

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

**Date production began:**

04/27/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Storage Tank/Silo

Maximum Hourly Throughput : 2.0000

Units : barrels/hr

Is Tank Heated : No

Operating Pressure (psig) : 16.00

Vapor Pressure of Material Stored (psig) : 9.32

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

**Criteria Pollutants :**

| Pollutant   | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|---|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|   |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 10 microns in diameter (PE/PM10)                           | 0  | 0                        |        | 0                                 | 0                                  |                          |

|   |          |   |  |        |        |               |
|---|----------|---|--|--------|--------|---------------|
| PM # 2.5 microns in diameter (PE/PM2.5) | 0        | 0 |  | 0      | 0      |               |
| Sulfur dioxide (SO2)                    | 0        | 0 |  | 0      | 0      |               |
| Nitrogen oxides (NOx)                   | 0        | 0 |  | 0      | 0      |               |
| Carbon monoxide (CO)                    | 0        | 0 |  | 0      | 0      |               |
| Volatile organic compounds (VOC)        | 181.8425 | 0 |  | 0.0004 | 3.6457 | Tanks Program |
| Lead (Pb)                               | 0        | 0 |  | 0      | 0      |               |
| Total Hazardous Air Pollutants (HAPs)   | 10.2383  | 0 |  | 0      | 0.2048 | Tanks Program |
| Fluoride (F)                            | 0        | 0 |  | 0      | 0      |               |
| Hydrogen Sulfide (H2S)                  | 0        | 0 |  | 0      | 0      |               |
| Mercury (Hg)                            | 0        | 0 |  | 0      | 0      |               |
| Total Reduced Sulfur (TRS)              | 0        | 0 |  | 0      | 0      |               |
| Sulfuric Acid Mist (SAM)                | 0        | 0 |  | 0      | 0      |               |

**Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

**Greenhouse Gases (GHGs):**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

\* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected. Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

\*\* AQD Calculated - See 'Help' for more information.

**- Best Available Control Technology (BACT)**

Was a BACT Analysis completed for this unit? No

**- Lowest Achievable Emission Rate (LAER)**

Was a LAER Analysis completed for this unit? No

**- Federal and State Rule Applicability**

**New Source Performance Standards (NSPS)** Not affected  
*New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)** Not affected  
*National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).*

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)** Not affected  
*National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63) standards are listed under 40 CFR 63.*

**Prevention of Significant Deterioration (PSD)** Not Affected  
*These rules are found under WAQSR Chapter 6, Section 4.*

**Non-Attainment New Source Review** Not Affected  
*These rules are found under WAQSR Chapter 6, Section 13.*

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** TNK002

**AQD EU description:**

**Company EU ID:** Prod Water

**Company EU Description:** There are three 400 bbl produced water tanks on pad

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

**Date production began:**

04/27/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Storage Tank/Silo

Maximum Hourly Throughput 100.0000

Units : barrels/hr

Is Tank Heated : No

Operating Pressure (psig) : 16.00

Vapor Pressure of Material 0.01  
Stored (psig) :

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

**Criteria Pollutants :**

| Pollutant   | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|---|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|   |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 10 microns in diameter (PE/PM10)                           | 0  | 0                        |        | 0                                 | 0                                  |                          |

|   |   |   |  |   |   |  |
|---|---|---|--|---|---|--|
| PM # 2.5 microns in diameter (PE/PM2.5) | 0 | 0 |  | 0 | 0 |  |
| Sulfur dioxide (SO2)                    | 0 | 0 |  | 0 | 0 |  |
| Nitrogen oxides (NOx)                   | 0 | 0 |  | 0 | 0 |  |
| Carbon monoxide (CO)                    | 0 | 0 |  | 0 | 0 |  |
| Volatile organic compounds (VOC)        | 0 | 0 |  | 0 | 0 |  |
| Lead (Pb)                               | 0 | 0 |  | 0 | 0 |  |
| Total Hazardous Air Pollutants (HAPs)   | 0 | 0 |  | 0 | 0 |  |
| Fluoride (F)                            | 0 | 0 |  | 0 | 0 |  |
| Hydrogen Sulfide (H2S)                  | 0 | 0 |  | 0 | 0 |  |
| Mercury (Hg)                            | 0 | 0 |  | 0 | 0 |  |
| Total Reduced Sulfur (TRS)              | 0 | 0 |  | 0 | 0 |  |
| Sulfuric Acid Mist (SAM)                | 0 | 0 |  | 0 | 0 |  |

**Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

**Greenhouse Gases (GHGs):**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

\* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected.

Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

\*\* AQD Calculated - See 'Help' for more information.

**- Best Available Control Technology (BACT)**

Was a BACT Analysis completed for this unit? No

**- Lowest Achievable Emission Rate (LAER)**

Was a LAER Analysis completed for this unit? No

**- Federal and State Rule Applicability**

**New Source Performance Standards (NSPS)**

New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.

Not affected

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)**

National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).

Not affected

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)**  
*National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63) standards are listed under 40 CFR 63.*

Not affected

**Prevention of Significant Deterioration (PSD)**  
*These rules are found under WAQSR Chapter 6, Section 4.*

Not Affected

**Non-Attainment New Source Review**  
*These rules are found under WAQSR Chapter 6, Section 13.*

Not Affected

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

| Emission Unit | Pollutant | Standard | Limit | Control | Compliance | Notes |
|---------------|-----------|----------|-------|---------|------------|-------|
|               |           |          |       |         |            |       |
|               |           |          |       |         |            |       |
|               |           |          |       |         |            |       |

**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** TNK003

**AQD EU description:**

**Company EU ID:** Blowdown TK

**Company EU Description:** There is one 400 bbl blow down tank on pad

- **Source Installation or Modification Schedule** – Select reason(s) for this emissions unit being included in this application (must be completed regardless of date of installation or modification):

Construction(greenfield/new facility)

**Date production began:**

04/27/2015

- **Emission Unit Type Specific Information**

Emission Unit Type : Storage Tank/Silo

Maximum Hourly Throughput 100.0000

Units : barrels/hr

Is Tank Heated : No

Operating Pressure (psig) : 16.00

Vapor Pressure of Material 0.01  
Stored (psig) :

- **Potential Operating Schedule** – Provide the operating schedule for this emissions unit

Hours/day : 24

Hours/year : 8760

- **Emissions Information** "Potential to emit" means the maximum capacity of a source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by the EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder.

Basis for Determination Options:

- *Manufacturer Data*
- *Test results for this source*
- *Similar source test results*
- *GRICalc*
- *Tanks Program*
- *AP-42*
- *Other. If this is selected, attach a document with a description of the method used.*

**Criteria Pollutants :**

| Pollutant   | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|---|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|   |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |
| Particulate emissions (PE/PM) (formerly particulate matter, PM) | 0  | 0                        |        | 0                                 | 0                                  |                          |
| PM # 10 microns in diameter (PE/PM10)                           | 0  | 0                        |        | 0                                 | 0                                  |                          |

|   |   |   |  |   |   |  |
|---|---|---|--|---|---|--|
| PM # 2.5 microns in diameter (PE/PM2.5) | 0 | 0 |  | 0 | 0 |  |
| Sulfur dioxide (SO2)                    | 0 | 0 |  | 0 | 0 |  |
| Nitrogen oxides (NOx)                   | 0 | 0 |  | 0 | 0 |  |
| Carbon monoxide (CO)                    | 0 | 0 |  | 0 | 0 |  |
| Volatile organic compounds (VOC)        | 0 | 0 |  | 0 | 0 |  |
| Lead (Pb)                               | 0 | 0 |  | 0 | 0 |  |
| Total Hazardous Air Pollutants (HAPs)   | 0 | 0 |  | 0 | 0 |  |
| Fluoride (F)                            | 0 | 0 |  | 0 | 0 |  |
| Hydrogen Sulfide (H2S)                  | 0 | 0 |  | 0 | 0 |  |
| Mercury (Hg)                            | 0 | 0 |  | 0 | 0 |  |
| Total Reduced Sulfur (TRS)              | 0 | 0 |  | 0 | 0 |  |
| Sulfuric Acid Mist (SAM)                | 0 | 0 |  | 0 | 0 |  |

**Hazardous Air Pollutants (HAPs) and Toxic Air Contaminants:**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

**Greenhouse Gases (GHGs):**

| Pollutant | Pollutant Category | Pre-Controlled Potential Emissions (tons/yr) | Efficiency Standards     |        | Potential to Emit (PTE) (lbs/hr)* | Potential to Emit (PTE) (tons/yr)* | Basis for Determination* |
|-----------|--------------------|--|--------------------------|--------|-----------------------------------|------------------------------------|--------------------------|
|           |                    |  | Potential to Emit (PTE)* | Units* |                                   |                                    |                          |

\* Provide your calculations as an attachment and explain how all process variables and emissions factors were selected. Note the emission factor(s) employed and document origin. Example: AP-42, Table 4.4-3 (8/97); stack test, Method 5, 4/96; mass balance based on MSDS; etc.

\*\* AQD Calculated - See 'Help' for more information.

**- Best Available Control Technology (BACT)**

Was a BACT Analysis completed for this unit? No

**- Lowest Achievable Emission Rate (LAER)**

Was a LAER Analysis completed for this unit? No

**- Federal and State Rule Applicability**

**New Source Performance Standards (NSPS)**  
New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.

Not affected

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 61)**  
National Emissions Standards for Hazardous Air Pollutants (NESHAP Part 61) are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).

Not affected

**National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63)** Not affected  
*National Emission Standards for Hazardous Air Pollutants (NESHAP Part 63) standards are listed under 40 CFR 63.*

**Prevention of Significant Deterioration (PSD)** Not Affected  
*These rules are found under WAQSR Chapter 6, Section 4.*

**Non-Attainment New Source Review** Not Affected  
*These rules are found under WAQSR Chapter 6, Section 13.*

- **Emission Unit Attachments**

| Required Attachment | Public Document Id | Attachment Type | Description |
|---------------------|--------------------|-----------------|-------------|
|---------------------|--------------------|-----------------|-------------|

# Facility Detail Report

Facility Name: Two Rim Unit 30-40D Pad  
ID: F026714

Facility Information

Facility Name: Two Rim Unit 30-40D Pad  
ID: F026714  
County: ...  
City: ...  
Address: ...

County: ...  
City: ...  
Address: ...  
State: ...  
Zip: ...

Location

| Address | City | County | Latitude | Longitude | State | Zip |
|---------|------|--------|----------|-----------|-------|-----|
| ...     | ...  | ...    | ...      | ...       | ...   | ... |

Location Detail for ...

Notes: ...

APR

| APR | ... | ... | ... | ... |
|-----|-----|-----|-----|-----|
| ... | ... | ... | ... | ... |

Notes

| ... | ... |
|-----|-----|
| ... | ... |

WACS Codes

Contact

| Contact Type | Contact Name | Contact Title | Contact Phone | Contact Email |
|--------------|--------------|---------------|---------------|---------------|
| ...          | ...          | ...           | ...           | ...           |

Contact Detail for ...

- Facility Information

Facility ID: F026714  
 FacilityName: Two Rim Unit 30-40D Pad  
 Facility Description:  
 Company Name: BP America Production Company  
 Operating Status: Operating  
 Facility Class: Minor  
 CERR Class: NON  
 AFS:  
 Facility Type: Production Site

- Location

| Physical Address     | City              | County     | Lat/Long            | PLSS          | Effective Date |
|----------------------|-------------------|------------|---------------------|---------------|----------------|
| Section 30, 19N, 94W | Sweetwater County | Sweetwater | 41.59451/-108.03642 | S30-T19N-R94W | 02/25/2015     |

Location Detail For : Section 30, 19N, 94W

Latitude: 41.59451 Longitude: -108.03642  
 Quarter Quarter: Quarter:  
 Section: 30  
 Township: 19N Range: 94W  
 County: Sweetwater State: Wyoming  
 Distict: District 5  
 Physical Address 1: Section 30, 19N, 94W Physical Address 2:  
 City: Sweetwater County Zip: 82935  
 Effective Date: 02/25/2015

- API

| API     |
|---------|
| 3729283 |
| 3729284 |
| 3729285 |
| 3729286 |
| 3729287 |

- Notes

| User Name | Date | Note |
|-----------|------|------|
|-----------|------|------|

- NAICS Codes

21111 Oil and Gas Extraction

- Contacts

| Contact Type          | Contact Person   | Phone Number   | Email                  | Start Date | End Date |
|-----------------------|------------------|----------------|------------------------|------------|----------|
| Environmental contact | Caldwell, Shanda | (307) 328-3779 | shanda.caldwell@bp.com | 04/08/2015 |          |

Contact Detail For : Caldwell, Shanda

Prefix: First Name: Shanda  
 Middle Name: Last Name: Caldwell  
 Suffix:  
 Company Title: Contact's Company Name: BP America Production Company  
 Address 1: P.O. Box 157  
 Address 2:  
 City: Wamsutter Zip Code: 82336  
 State: Wyoming  
 Work Phone No: (307) 328-3779 Secondary Phone No.:  
 Address 2: Secondary Ext. No.:  
 Mobile Phone No.: Pager No.:  
 Fax No: (307) 328-3779 Pager PIN No.:  
 Email: shanda.caldwell@bp.com  
 Email Pager Address:

**- Rules & Regs**

Subject to Part 60 NSPS: X Subject to 112(r) Accidental Release Prevention:  
 Subject to Part 61 NESHAP: Subject to non-attainment NSR:  
 Subject Part 63 NESHAP: X Subject to PSD:  
 Subject to Title IV Acid Rain:

**Part 60 NSPS Subparts**

JJJJ - Stationary Spark Ignition Internal Combustion Engine

**Part 63 NESHAP Subparts**

ZZZZ - Reciprocating Internal Combustion Engines

**- Attachments**

| Description | Type | Modified By | Modified Date |
|-------------|------|-------------|---------------|
|-------------|------|-------------|---------------|

**- Version**

| Version ID | Version Start Date | Version End Date | Preserved |
|------------|--------------------|------------------|-----------|
| CURRENT    | 07/28/2015         |                  | X         |
| 30412      | 05/19/2015         | 07/28/2015       | X         |
| 30001      | 04/16/2015         | 05/19/2015       | X         |
| 29267      | 02/25/2015         | 04/16/2015       | X         |



Additional Information

Additional information for this unit.

Printed Emission

| Unit   | Component | Material | Quantity | Unit | Material | Quantity |
|--------|-----------|----------|----------|------|----------|----------|
| 30-40D | ...       | ...      | ...      | ...  | ...      | ...      |
| 30-40D | ...       | ...      | ...      | ...  | ...      | ...      |
| 30-40D | ...       | ...      | ...      | ...  | ...      | ...      |

Page 4 of 4

Unit 30-40D

...

...

...

...

...

## Emission Unit : FUG001

Sep 23 2015, 08:56:39

### - Emission Unit Information

AQD Emissions Unit ID: FUG001

Emission Unit Type: Fugitive

AQD Description:

Company Equipment ID: Fugitives

Company Equipment Description: Fugitive Leaks at O&G site

Operating Status: Operating

Initial Construction Commencement Date: 01/27/2015

Initial Operation Commencement Date: 01/27/2015

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

### - Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|

### - Processes

#### - Emission Process Information

Process ID: PRC002

Process Name:

Company Process Description:

Source Classification Code (SCC): 3-10-002-20

Release points(s) directly associated with this process

AVL001

## Emission Unit : HET001

Sep 23 2015, 08:56:39

### - Emission Unit Information

AQD Emissions Unit ID: HET001  
 Emission Unit Type: Heater/Chiller  
 Firing Type: Indirect  
 Heat Input Rating: 1.0 Units: MMBtu/hr  
 Primary Fuel Type: Field Gas Secondary Fuel Type: Pipeline Grade Natural Gas  
 Heat Content of Fuel (BTU/scf): 1143  
 AQD Description:  
 Company Equipment ID: Htr 30-40D  
 Company Equipment Description: Heater on t-pak - 1.0 mmbtu/hr  
 Operating Status: Operating  
 Initial Construction Commencement Date: 01/01/2015  
 Initial Operation Commencement Date: 01/27/2015  
 Most Recent Construction/Modification Commencement Date:  
 Most Recent Operation Commencement Date:

### - Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|           |                                |                                 |                                |                                 |          |

### - Processes

#### - Emission Process Information

Process ID: PRC003  
 Process Name:  
 Company Process Description: Heater on T-pak  
 Source Classification Code (SCC): 3-10-004-04

Release points(s) directly associated with this process

VER011

**Emission Unit : HET002**

Sep 23 2015, 08:56:39

**- Emission Unit Information**

AQD Emissions Unit ID: HET002  
 Emission Unit Type: Heater/Chiller  
 Firing Type: Indirect  
 Heat Input Rating: 1.0  
 Primary Fuel Type: Field Gas  
 Heat Content of Fuel (BTU/scf): 1143  
 AQD Description:  
 Company Equipment ID: Htr 30-80D  
 Company Equipment Description: Heater on t-pak - 1.0 mmbtu/hr  
 Operating Status: Operating  
 Units: MMBtu/hr  
 Secondary Fuel Type: Pipeline Grade Natural Gas  
 Initial Construction Commencement Date: 01/01/2015  
 Initial Operation Commencement Date: 01/27/2015  
 Most Recent Construction/Modification Commencement Date:  
 Most Recent Operation Commencement Date:

**- Permitted Emissions**

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|           |                                |                                 |                                |                                 |          |

**- Processes**

**- Emission Process Information**

Process ID: PRC004  
 Process Name:  
 Company Process Description: Heater on T-pak  
 Source Classification Code (SCC): 3-10-004-04

Release points(s) directly associated with this process

VER002

Emission Unit : HET003

Sep 23 2015, 08:56:39

- Emission Unit Information

AQD Emissions Unit ID: HET003  
 Emission Unit Type: Heater/Chiller  
 Firing Type: Indirect  
 Heat Input Rating: 1.0  
 Primary Fuel Type: Field Gas  
 Heat Content of Fuel (BTU/scf): 1143  
 AQD Description:  
 Company Equipment ID: Htr 30-50D  
 Company Equipment Description: Heater on t-pak - 1.0 mmbtu/hr  
 Operating Status: Operating  
 Initial Construction Commencement Date: 01/01/2015  
 Initial Operation Commencement Date: 01/27/2015  
 Most Recent Construction/Modification Commencement Date:  
 Most Recent Operation Commencement Date:

Units: MMBtu/hr

Secondary Fuel Type: Pipeline Grade Natural Gas

- Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|

- Processes

- Emission Process Information

Process ID: PRC006  
 Process Name:  
 Company Process Description: Heater on T-pak  
 Source Classification Code (SCC): 3-10-004-04

Release points(s) directly associated with this process

VER003

## Emission Unit : HET004

Sep 23 2015, 08:56:39

### - Emission Unit Information

AQD Emissions Unit ID: HET004

Emission Unit Type: Heater/Chiller

Firing Type: Indirect

Heat Input Rating: 1.0

Units: MMBtu/hr

Primary Fuel Type: Field Gas

Secondary Fuel Type: Pipeline Grade Natural Gas

Heat Content of Fuel (BTU/scf): 1143

AQD Description:

Company Equipment ID: Htr 30-130D

Company Equipment Description: Heater on t-pak - 1.0 mmbtu/hr

Operating Status: Operating

Initial Construction Commencement Date: 01/01/2015

Initial Operation Commencement Date: 01/27/2015

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

### - Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|

### - Processes

#### - Emission Process Information

Process ID: PRC007

Process Name:

Company Process Description: Heater on T-pak

Source Classification Code (SCC): 3-10-004-04

Release points(s) directly associated with this process

VER004

## Emission Unit : HET005

Sep 23 2015, 08:56:39

### - Emission Unit Information

AQD Emissions Unit ID: HET005  
 Emission Unit Type: Heater/Chiller  
 Firing Type: Indirect  
 Heat Input Rating: 1.0 Units: MMBtu/hr  
 Primary Fuel Type: Field Gas Secondary Fuel Type: Pipeline Grade Natural Gas  
 Heat Content of Fuel (BTU/scf): 1143  
 AQD Description:  
 Company Equipment ID: Htr 30-150D  
 Company Equipment Description: Heater on t-pak - 1.0 mmbtu/hr  
 Operating Status: Operating  
 Initial Construction Commencement Date: 01/01/2015  
 Initial Operation Commencement Date: 01/27/2015  
 Most Recent Construction/Modification Commencement Date:  
 Most Recent Operation Commencement Date:

### - Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|           |                                |                                 |                                |                                 |          |

### - Processes

#### - Emission Process Information

Process ID: PRC008  
 Process Name:  
 Company Process Description: Heater on T-pak  
 Source Classification Code (SCC): 3-10-004-04

Release points(s) directly associated with this process

VER005

## Emission Unit : HET006

Sep 23 2015, 08:56:39

**- Emission Unit Information**

AQD Emissions Unit ID: HET006  
 Emission Unit Type: Heater/Chiller  
 Firing Type: Indirect  
 Heat Input Rating: 1.0 Units: MMBtu/hr  
 Primary Fuel Type: Field Gas Secondary Fuel Type: Pipeline Grade Natural Gas  
 Heat Content of Fuel (BTU/scf): 1143  
 AQD Description:  
 Company Equipment ID: Line Htr 1  
 Company Equipment Description: Line Heater - 0.5 mmbtu/hr (line heater consists of 2 heaters, Line Htr 1 and Line Htr 2, and 1 separator)  
 Operating Status: Operating  
 Initial Construction Commencement Date: 01/01/2015  
 Initial Operation Commencement Date: 01/27/2015  
 Most Recent Construction/Modification Commencement Date:  
 Most Recent Operation Commencement Date:

**- Permitted Emissions**

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|           |                                |                                 |                                |                                 |          |

**- Processes**

**- Emission Process Information**

Process ID: PRC009  
 Process Name:  
 Company Process Description: Line Heater  
 Source Classification Code (SCC): 3-10-004-04

Release points(s) directly associated with this process

VER006

## Emission Unit : HET007

Sep 23 2015, 08:56:39

### - Emission Unit Information

AQD Emissions Unit ID: HET007  
 Emission Unit Type: Heater/Chiller  
 Firing Type: Indirect  
 Heat Input Rating: 1.0 Units: MMBtu/hr  
 Primary Fuel Type: Field Gas Secondary Fuel Type: Pipeline Grade Natural Gas  
 Heat Content of Fuel (BTU/scf): 1143  
 AQD Description:  
 Company Equipment ID: Line Htr 2  
 Company Equipment Description: Line Heater - 0.5 mmbtu/hr (line heater consists of 2 heaters, Line Htr 1 and Line Htr 2, and 1 separator)  
 Operating Status: Operating  
 Initial Construction Commencement Date: 01/01/2015  
 Initial Operation Commencement Date: 01/27/2015  
 Most Recent Construction/Modification Commencement Date:  
 Most Recent Operation Commencement Date:

### - Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|           |                                |                                 |                                |                                 |          |

### - Processes

#### - Emission Process Information

Process ID: PRC010  
 Process Name:  
 Company Process Description: Line Heater  
 Source Classification Code (SCC): 3-10-004-04

Release points(s) directly associated with this process

VER007

## Emission Unit : PNE001

Sep 23 2015, 08:56:39

**- Emission Unit Information**

AQD Emissions Unit ID: PNE001  
 Emission Unit Type: Pneumatic Equipment  
 Type of Equipment: Pump  
 Bleed rate (cu. ft/hr):  
 Gas Consumption Rate (cu. ft/hr): 129.0000  
 AQD Description:  
 Company Equipment ID: Glycol Pump  
 Company Equipment Description: There are four (4) glycol heat trace pumps on pad  
 Operating Status: Operating  
 Initial Construction Commencement Date: 01/01/2015  
 Initial Operation Commencement Date: 01/27/2015  
 Most Recent Construction/Modification Commencement Date:  
 Most Recent Operation Commencement Date:

**- Permitted Emissions**

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|           |                                |                                 |                                |                                 |          |

**- Processes**

**- Emission Process Information**

Process ID: PRC011  
 Process Name:  
 Company Process Description: Glycol / Heat Trace  
 Source Classification Code (SCC): 3-10-002-99

Control equipment(s) directly associated with this process

OTH002

Emission Unit : PNE002

Sep 23 2015, 08:56:39

- Emission Unit Information

AQD Emissions Unit ID: PNE002  
 Emission Unit Type: Pneumatic Equipment  
 Type of Equipment: Pump  
 Bleed rate (cu. ft/hr):  
 Gas Consumption Rate (cu. ft/hr): 0.0000  
 AQD Description:  
 Company Equipment ID: Chem Pump  
 Company Equipment Description: There are three (3) solar pumps on pad  
 Operating Status: Operating

Initial Construction Commencement Date: 01/01/2015  
 Initial Operation Commencement Date: 01/27/2015  
 Most Recent Construction/Modification Commencement Date:  
 Most Recent Operation Commencement Date:

- Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|           |                                |                                 |                                |                                 |          |

- Processes

- Emission Process Information

Process ID: PRC012  
 Process Name:  
 Company Process Description: Chemical Injection Pumps  
 Source Classification Code (SCC): 3-10-002-99

Release points(s) directly associated with this process

VER008

## Emission Unit : PNE003

Sep 23 2015, 08:56:39

### - Emission Unit Information

AQD Emissions Unit ID: PNE003

Emission Unit Type: Pneumatic Equipment

Type of Equipment: Controller (Intermittent)

Bleed rate (cu. ft/hr): 0.6000

Gas Consumption Rate (cu. ft/hr):

AQD Description:

Company Equipment ID: Controllers

Company Equipment Description: There are 27 low bleed or no bleed pneumatic controllers on pad

Operating Status: Operating

Initial Construction Commencement Date: 01/01/2015

Initial Operation Commencement Date: 01/27/2015

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

### - Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|           |                                |                                 |                                |                                 |          |

### - Processes

#### - Emission Process Information

Process ID: PRC013

Process Name:

Company Process Description: Pneumatic Controllers

Source Classification Code (SCC): 3-10-002-99

Release points(s) directly associated with this process

AVL003

## Emission Unit : SEP001

Sep 23 2015, 08:56:39

### - Emission Unit Information

AQD Emissions Unit ID: SEP001

Emission Unit Type: Separator/Treater

Type Of Vessel: 3-Phase Separator

is Vessel Heated: Yes

AQD Description:

Company Equipment ID: Separators

Company Equipment Description: There are six separators on location - heaters are reported separately

Operating Status: Operating

Initial Construction Commencement Date: 01/01/2015

Initial Operation Commencement Date: 01/27/2015

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

### - Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|

### - Processes

#### - Emission Process Information

Process ID: PRC005

Process Name:

Company Process Description: Separation of Fluid / Gas

Source Classification Code (SCC): 3-10-002-99

Release points(s) directly associated with this process

AVL002

**Emission Unit : TNK001**

Sep 23 2015, 08:56:39

**- Emission Unit Information**

AQD Emissions Unit ID: TNK001  
 Emission Unit Type: Storage Tank/Silo  
 Material Type: Liquid  
 Description of Material Stored: Condensate  
 Capacity: 1200 Units: barrels  
 Maximum Throughput: 40.8000 Units: barrels/day  
 AQD Description:  
 Company Equipment ID: Condo  
 Company Equipment Description: There are three 400-bbl condensate tanks on pad  
 Operating Status: Operating  
 Initial Construction Commencement Date: 01/01/2015  
 Initial Operation Commencement Date: 01/27/2015  
 Most Recent Construction/Modification Commencement Date:  
 Most Recent Operation Commencement Date:

**- Permitted Emissions**

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|           |                                |                                 |                                |                                 |          |

**- Processes**

**- Emission Process Information**

Process ID: PRC014  
 Process Name:  
 Company Process Description: Storage of Condensate  
 Source Classification Code (SCC): 4-04-003-11

Control equipment(s) directly associated with this process

OTH002

## Emission Unit : TNK002

Sep 23 2015, 08:56:39

### - Emission Unit Information

AQD Emissions Unit ID: TNK002

Emission Unit Type: Storage Tank/Silo

Material Type: Liquid

Description of Material Stored: Produced Water

Capacity: 1200

Units: barrels

Maximum Throughput: 400.0000

Units: barrels/day

AQD Description:

Company Equipment ID: Prod Water

Company Equipment Description: There are three 400 bbl produced water tanks on pad

Operating Status: Operating

Initial Construction Commencement Date: 01/01/2015

Initial Operation Commencement Date: 01/27/2015

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

### - Permitted Emissions

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|

### - Processes

#### - Emission Process Information

Process ID: PRC015

Process Name:

Company Process Description: Storage of Produced Water

Source Classification Code (SCC): 4-04-003-15

Control equipment(s) directly associated with this process

OTH002

**Emission Unit : TNK003**

Sep 23 2015, 08:56:39

**- Emission Unit Information**

AQD Emissions Unit ID: TNK003  
 Emission Unit Type: Storage Tank/Silo  
 Material Type: Liquid  
 Description of Material Stored: Produced Water  
 Capacity: 400 Units: barrels  
 Maximum Throughput: 400.0000 Units: barrels/day  
 AQD Description:  
 Company Equipment ID: Blowdown TK  
 Company Equipment Description: There is one 400 bbl blow down tank on pad  
 Operating Status: Operating  
 Initial Construction Commencement Date: 01/01/2015  
 Initial Operation Commencement Date: 01/27/2015  
 Most Recent Construction/Modification Commencement Date:  
 Most Recent Operation Commencement Date:

**- Permitted Emissions**

| Pollutant | Potential Emissions (Lbs/hour) | Potential Emissions (Tons/Year) | Allowable Emissions (Lbs/Hour) | Allowable Emissions (Tons/Year) | Comments |
|-----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|----------|
|           |                                |                                 |                                |                                 |          |

**- Processes**

**- Emission Process Information**

Process ID: PRC016  
 Process Name:  
 Company Process Description: Blowdown Tank  
 Source Classification Code (SCC): 4-04-003-15

Release points(s) directly associated with this process

VER010

## Control Equipment : OTH001

Sep 23 2015, 08:56:39

### - Control Equipment Information

Equipment Type: Other  
Control Equipment ID: OTH001  
AQD Description:  
Company Control Equipment ID: NSCR  
Company Control Equipment Description: Three-way NSRC catalyst with air / fuel ration controller  
Operating Status: Not Operating  
Manufacturer: Miratech  
Initial Installation Date:  
Model: Element # VX-RE-05XC

### - Specific Equipment Type information

### - Pollutants Controlled

| Pollutant             | Design Control Efficiency(%) | Operating Control Efficiency(%) | Capture Efficiency(%) | Total Capture Control(%) |
|-----------------------|------------------------------|---------------------------------|-----------------------|--------------------------|
| CO - Carbon Monoxide  | 82                           | 82                              | 100                   | 82                       |
| NOx - Nitrogen Oxides | 93                           | 93                              | 100                   | 93                       |

### - Associated Control Equipments And Release Points

Release points(s) directly associated with this control equipment

VER001

## Control Equipment : OTH002

Sep 23 2015, 08:56:39

### - Control Equipment Information

Equipment Type: Other  
Control Equipment ID: OTH002  
AQD Description:  
Company Control Equipment ID: SCC  
Company Control Equipment Description: There are four Smokeless Combustion Chambers (SCC) on pad  
Operating Status: Operating Initial Installation Date: 07/27/2015  
Manufacturer: Natco Model:

### - Specific Equipment Type information

### - Pollutants Controlled

| Pollutant                        | Design Control Efficiency(%) | Operating Control Efficiency(%) | Capture Efficiency(%) | Total Capture Control(%) |
|----------------------------------|------------------------------|---------------------------------|-----------------------|--------------------------|
| VOC - Volatile Organic Compounds | 98                           | 98                              | 100                   | 98                       |

### - Associated Control Equipments And Release Points

Release points(s) directly associated with this control equipment

VER009

## Release Point : VER011

Sep 23 2015, 08:56:39

### - Release Point Information

Release Point ID: VER011  
Release Type: Vertical  
AQD Description:  
Company Release Point ID: 30-40D  
Company Release Point Description: exhaust for heater 30-40D  
Operating Status: Operating  
Base Elevation (ft): 6772.0

### - Stack Details

Stack Height (ft): 15.0  
Stack Diameter (ft): 0.5  
Exit Gas Velocity (ft/s): 0.99  
Exit Gas Flow Rate (acfm): 0.99  
Exit Gas Temp (F): 0.99

### - Release Latitude and Longitude

Latitude: 41.59451

Longitude: -108.03642

### - CEM Data

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|

## Release Point : VER010

Sep 23 2015, 08:56:39

### - Release Point Information

Release Point ID: VER010

Release Type: Vertical

AQD Description:

Company Release Point ID: Blowdown Tk

Company Release Point Description: Top of blow down tank

Operating Status: Operating

Base Elevation (ft): 6772.0

### - Stack Details

Stack Height (ft): 20.0

Stack Diameter (ft): 0.83

Exit Gas Velocity (ft/s): 0.99

Exit Gas Flow Rate (acfm): 0.99

Exit Gas Temp (F): 0.99

### - Release Latitude and Longitude

Latitude: 41.59451

Longitude: -108.03642

### - CEM Data

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|

Release Point : VER008

Sep 23 2015, 08:56:39

- Release Point Information

Release Point ID: VER008

Release Type: Vertical

AQD Description:

Company Release Point ID: Chem Pump

Company Release Point Description: The chemical pumps are solar, electric driven pumps

Operating Status: Operating

Base Elevation (ft): 6772.0

- Stack Details

Stack Height (ft): 5.0

Stack Diameter (ft): 0.5

Exit Gas Velocity (ft/s): 0.99

Exit Gas Flow Rate (acfm): 0.99

Exit Gas Temp (F): 0.99

- Release Latitude and Longitude

Latitude: 41.59451

Longitude: -108.03642

- CEM Data

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|

## Release Point : AVL003

Sep 23 2015, 08:56:39

### - Release Point Information

Release Point ID: AVL003

Release Type: Fugitive (Area, Volume, Line)

AQD Description:

Company Release Point ID: Controllers

Company Release Point Description: Pneumatic controllers - low bleed or no bleed

Operating Status: Operating

Release Height (ft): 5.0

### - Release Latitude and Longitude

Latitude: 41.59451

Longitude: -108.03642

### - CEM Data

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|

# Release Point : AVL001

Sep 23 2015, 08:56:39

## - Release Point Information

Release Point ID: AVL001

Release Type: Fugitive (Area, Volume, Line)

AQD Description:

Company Release Point ID: Fugitive

Company Release Point Description: Fugitive Gas Leaks

Operating Status: Operating

Release Height (ft): 5.0

## - Release Latitude and Longitude

Latitude: 41.59451

Longitude: -108.03642

## - CEM Data

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|

## Release Point : VER004

Sep 23 2015, 08:56:39

### - Release Point Information

Release Point ID: VER004

Release Type: Vertical

AQD Description:

Company Release Point ID: Htr 30-130D

Company Release Point Description: Exhaust from t-pak on 30-130D

Operating Status: Operating

Base Elevation (ft): 6772.0

### - Stack Details

Stack Height (ft): 15.0

Stack Diameter (ft): 0.5

Exit Gas Velocity (ft/s): 0.99

Exit Gas Flow Rate (acfm): 0.99

Exit Gas Temp (F): 0.99

### - Release Latitude and Longitude

Latitude: 41.59451

Longitude: -108.03642

### - CEM Data

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|



## Release Point : VER002

Sep 23 2015, 08:56:39

### - Release Point Information

Release Point ID: VER002

Release Type: Vertical

AQD Description:

Company Release Point ID: Htr 30-40D

Company Release Point Description: Exhaust on t-pak heater

Operating Status: Operating

Base Elevation (ft): 6772.0

### - Stack Details

Stack Height (ft): 15.0

Stack Diameter (ft): 0.5

Exit Gas Velocity (ft/s): 0.99

Exit Gas Flow Rate (acfm): 0.99

Exit Gas Temp (F): 0.99

### - Release Latitude and Longitude

Latitude: 41.59451

Longitude: -108.03642

### - CEM Data

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|

**Release Point : VER003**

Sep 23 2015, 08:56:39

**- Release Point Information**

Release Point ID: VER003  
Release Type: Vertical  
AQD Description:  
Company Release Point ID: Htr 30-80D  
Company Release Point Description: Exhaust on t-pak 30-80D  
Operating Status: Operating  
Base Elevation (ft): 6772.0

**- Stack Details**

Stack Height (ft): 15.0  
Stack Diameter (ft): 0.5  
Exit Gas Velocity (ft/s): 0.99  
Exit Gas Flow Rate (acfm): 0.99  
Exit Gas Temp (F): 0.99

**- Release Latitude and Longitude**

Latitude: 41.59451  
Longitude: -108.03642

**- CEM Data**

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|

**Release Point : VER006**

Sep 23 2015, 08:56:39

- **Release Point Information**

Release Point ID: VER006

Release Type: Vertical

AQD Description:

Company Release Point ID: Line Htr 1

Company Release Point Description: Exhaust from 1 of 2 burners on line heater

Operating Status: Operating

Base Elevation (ft): 6772.0

- **Stack Details**

Stack Height (ft): 15.0

Stack Diameter (ft): 0.5

Exit Gas Velocity (ft/s): 0.99

Exit Gas Flow Rate (acfm): 0.99

Exit Gas Temp (F): 0.99

- **Release Latitude and Longitude**

Latitude: 41.59451

Longitude: -108.03642

- **CEM Data**

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|

**Release Point : VER007**

Sep 23 2015, 08:56:39

**- Release Point Information**

Release Point ID: VER007

Release Type: Vertical

AQD Description:

Company Release Point ID: Line Htr 2

Company Release Point Description: exhaust from second burner on line heater

Operating Status: Operating

Base Elevation (ft): 6772.0

**- Stack Details**

Stack Height (ft): 15.0

Stack Diameter (ft): 0.5

Exit Gas Velocity (ft/s): 0.99

Exit Gas Flow Rate (acfm): 0.99

Exit Gas Temp (F): 0.99

**- Release Latitude and Longitude**

Latitude: 41.59451

Longitude: -108.03642

**- CEM Data**

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|

## Release Point : VER009

Sep 23 2015, 08:56:39

### - Release Point Information

Release Point ID: VER009

Release Type: Vertical

AQD Description:

Company Release Point ID: SCC Stack

Company Release Point Description: Exhaust from SCCs

Operating Status: Operating

Base Elevation (ft): 6772.0

### - Stack Details

Stack Height (ft): 20.0

Stack Diameter (ft): 3.0

Exit Gas Velocity (ft/s): 0.99

Exit Gas Flow Rate (acfm): 0.99

Exit Gas Temp (F): 0.99

### - Release Latitude and Longitude

Latitude: 41.59451

Longitude: -108.03642

### - CEM Data

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|

## Release Point : AVL002

Sep 23 2015, 08:56:39

### - Release Point Information

Release Point ID: AVL002

Release Type: Fugitive (Area, Volume, Line)

AQD Description:

Company Release Point ID: Separators

Company Release Point Description: There are not any defined release points from the separators

Operating Status: Operating

Release Height (ft): 0.0

### - Release Latitude and Longitude

Latitude: 41.59451

Longitude: -108.03642

### - CEM Data

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|

## Release Point : VER001

Sep 23 2015, 08:56:39

### - Release Point Information

Release Point ID: VER001

Release Type: Vertical

AQD Description:

Company Release Point ID: VRU Exhaust

Company Release Point Description: Exhaust from NG compressor associated with VRU

Operating Status: Not Operating

Base Elevation (ft): 6772.0

### - Stack Details

Stack Height (ft): 20.0

Stack Diameter (ft): 0.5

Exit Gas Velocity (ft/s): 0.0

Exit Gas Flow Rate (acfm): 0.0

Exit Gas Temp (F): 1350.0

### - Release Latitude and Longitude

Latitude: 41.59451

Longitude: -108.03642

### - CEM Data

| Description | H2S | SO2 | NOX | CO | THC | HCL | HFL | O | TRS | CO2 | FLOW | OPACITY | PM |
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|
|-------------|-----|-----|-----|----|-----|-----|-----|---|-----|-----|------|---------|----|