



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

July 27, 2015

NSR Program Manager  
Attn: Cole Anderson  
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  
              Strategic Pad Compression Fleet  
              Compressor(s) Application**

Dear Mr. Anderson:

BP America Production Company (BP) hereby submits an air permit application for installation of fleet of eleven (11) compressors. BP would like to permit a fleet of compressors that would have the flexibility to move throughout the Wamsutter field, Sweetwater and Carbon Counties. The compressor(s) vary in size and engineering design. Being able to re-locate the compressors is important in maximizing production and costs associated with a compression project. 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

*Electronic Signature*

BP America Production Company

**Facility Detail Report**  
**Facility Name: Strategic Pad Compression Fleet**  
**ID: F026827**

- **Facility Information**

Facility ID: F026827  
 FacilityName: Strategic Pad Compression Fleet  
 Facility Description:  
 Company Name: BP America Production Company  
 Operating Status: Operating  
 Facility Class: Minor  
 CERR Class: NON  
 AFS:  
 Facility Type: Compressor, Portable

- **Location**

Physical Address	City	County	Lat/Long	PLSS	Effective Date
Section 19, 22N, 93W	Sweetwater County	Sweetwater	41.86148/-107.95972	S19-T22N-R93W	04/13/2015

Location Detail For : Section 19, 22N, 93W

Latitude: 41.86148 Longitude: -107.95972  
 Quarter Quarter: Quarter:  
 Section: 19  
 Township: 22N Range: 93W  
 County: Sweetwater State: Wyoming  
 Distict: District 5  
 Physical Address 1: Section 19, 22N, 93W Physical Address 2:  
 City: Sweetwater County Zip: 82935  
 Effective Date: 04/13/2015

- **Notes**

User Name	Date	Note
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- **NAICS Codes**

211111 Crude Petroleum and Natural Gas Extraction (SIC 1311)

- **Contacts**

Contact Type	Contact Person	Phone Number	Email	Start Date	End Date
Environmental contact	Caldwell, Shanda	(307) 328-3779	shanda.caldwell@bp.com	05/08/2015	

Contact Detail For : Caldwell, Shanda

Prefix: Ms. First Name: Shanda  
 Middle Name: Last Name: Caldwell  
 Suffix:  
 Company Title: Area Environmental Advisor 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: (307)328-3779

Secondary Ext. No.:

Mobile Phone No.: (307)328-3779

Pager No.:

Fax No:

Pager PIN No.:

Email: shanda.caldwell@bp.com

Email Pager Address:

- **Rules & Regs**

Subject to Part 60 NSPS:

Subject to 112(r) Accidental Release  
Prevention:

Subject to Part 61 NESHAP:

Subject to non-attainment NSR:

Subject Part 63 NESHAP:

Subject to PSD:

Subject to Title IV Acid Rain:

- **Attachments**

Description	Type	Modified By	Modified Date
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- **Version**

Version ID	Version Start Date	Version End Date	Preserved
CURRENT	07/31/2015		X
31344	07/29/2015	07/31/2015	X
29952	04/13/2015	07/29/2015	X

## Emission Unit : ENG001

Aug 10 2015, 11:32:04

### - Emission Unit Information

AQD Emissions Unit ID: ENG001

Emission Unit Type: Engine

Name Plate Rating: 380.00

Units: hp

Site Rating: 362.00

Units: hp

Primary Fuel Type: Field Gas

Secondary Fuel Type: Pipeline Grade Natural Gas

Model Name and Number: Cummins KTA19GC

Engine: 4 Stroke Rich Burn

AQD Description:

Company Equipment ID: PP1-1

Company Equipment Description: 380 hp Cummins - KTA19GC with catalyst

Operating Status: Not Yet Installed

Initial Construction Commencement  
Date:

Initial Operation Commencement  
Date:

Most Recent  
Construction/Modification  
Commencement Date:

Most Recent Operation  
Commencement Date:

### - Serial Number Tracking

Serial Number	Manufacturer Name	Construction/Installation Commencement Date	Operation Commencement/Start-up Date	Order Date	Manufacture Date	Shutdown Date	Removal Date
TBD	Cummins						

### - 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: PRC001

Process Name:

Company Process Description: Wellhead Compression

Source Classification Code (SCC): 2-02-002-53

Control equipment(s) directly associated with this process

OTH001

**Emission Unit : ENG002**

Aug 10 2015, 11:32:04

**- Emission Unit Information**

AQD Emissions Unit ID: ENG002

Emission Unit Type: Engine

Name Plate Rating: 380.00

Units: hp

Site Rating: 362.00

Units: hp

Primary Fuel Type: Field Gas

Secondary Fuel Type: Pipeline Grade Natural Gas

Model Name and Number: 380 hp Cummins KTA19GC

Engine: 4 Stroke Rich Burn

AQD Description:

Company Equipment ID: PP1-2 Engine

Company Equipment Description: 380 hp Cummins - KTA19GC

Operating Status: Not Yet Installed

Initial Construction Commencement Date:

Initial Operation Commencement Date:

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

**- Serial Number Tracking**

Serial Number	Manufacturer Name	Construction/Installation Commencement Date	Operation Commencement/Start-up Date	Order Date	Manufacture Date	Shutdown Date	Removal Date
TBD	Cummins						

**- 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: Wellhead Compression

Source Classification Code (SCC): 2-02-002-53

Control equipment(s) directly associated with this process

OTH002

**Emission Unit : ENG003**

Aug 10 2015, 11:32:04

**Emission Unit Information**

AQD Emissions Unit ID: ENG003

Emission Unit Type: Engine

Name Plate Rating: 380.00

Units: hp

Site Rating: 362.00

Units: hp

Primary Fuel Type: Field Gas

Secondary Fuel Type: Pipeline Grade Natural Gas

Model Name and Number: Cummins KTA19GC

Engine: 4 Stroke Rich Burn

AQD Description:

Company Equipment ID: PP1-3

Company Equipment Description: 380 hp Cummins KTA19GC

Operating Status: Not Yet Installed

Initial Construction Commencement Date:

Initial Operation Commencement Date:

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

**Serial Number Tracking**

Serial Number	Manufacturer Name	Construction/Installation Commencement Date	Operation Commencement/Start-up Date	Order Date	Manufacture Date	Shutdown Date	Removal Date
TBD							

**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: Wellhead Compression

Source Classification Code (SCC): 2-02-002-53

Control equipment(s) directly associated with this process

OTH003

**Emission Unit : ENG004**

Aug 10 2015, 11:32:04

**- Emission Unit Information**

AQD Emissions Unit ID: ENG004

Emission Unit Type: Engine

Name Plate Rating: 415.00

Units: hp

Site Rating: 395.00

Units: hp

Primary Fuel Type: Field Gas

Secondary Fuel Type: Pipeline Grade Natural Gas

Model Name and Number: Caterpillar G379TA

Engine: 4 Stroke Rich Burn

AQD Description:

Company Equipment ID: PP1-4

Company Equipment Description: 415 hp Caterpillar G379TA

Operating Status: Not Yet Installed

Initial Construction Commencement Date:

Initial Operation Commencement Date:

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

**- Serial Number Tracking**

Serial Number	Manufacturer Name	Construction/Installation Commencement Date	Operation Commencement/Start-up Date	Order Date	Manufacture Date	Shutdown Date	Removal Date
TBD							

**- 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: Wellhead Compression

Source Classification Code (SCC): 2-02-002-53

Control equipment(s) directly associated with this process

OTH004

- Emission Unit Information

AQD Emissions Unit ID: ENG005

Emission Unit Type: Engine

Name Plate Rating: 830.00

Units: hp

Site Rating: 790.00

Units: hp

Primary Fuel Type: Field Gas

Secondary Fuel Type: Pipeline Grade Natural Gas

Model Name and Number: Caterpillar G399TA

Engine: 4 Stroke Rich Burn

AQD Description:

Company Equipment ID: PP1-5

Company Equipment Description: Caterpillar G399TA

Operating Status: Not Yet Installed

Initial Construction Commencement  
Date:

Initial Operation Commencement  
Date:

Most Recent  
Construction/Modification  
Commencement Date:

Most Recent Operation  
Commencement Date:

- Serial Number Tracking

Serial Number	Manufacturer Name	Construction/Installation Commencement Date	Operation Commencement/Start-up Date	Order Date	Manufacture Date	Shutdown Date	Removal Date
TBD	Caterpillar						

- 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: Wellhead Compression

Source Classification Code (SCC): 2-02-002-53

Control equipment(s) directly associated with this process

OTH005

- **Emission Unit Information**

AQD Emissions Unit ID: ENG006

Emission Unit Type: Engine

Name Plate Rating: 215.00

Units: hp

Site Rating: 205.00

Units: hp

Primary Fuel Type: Field Gas

Secondary Fuel Type: Pipeline Grade Natural Gas

Model Name and Number: Caterpillar G3406NA

Engine: 4 Stroke Rich Burn

AQD Description:

Company Equipment ID: PP1-6

Company Equipment Description: Caterpillar G3406NA

Operating Status: Not Yet Installed

Initial Construction Commencement  
Date:

Initial Operation Commencement  
Date:

Most Recent  
Construction/Modification  
Commencement Date:

Most Recent Operation  
Commencement Date:

- **Serial Number Tracking**

Serial Number	Manufacturer Name	Construction/Installation Commencement Date	Operation Commencement/Start-up Date	Order Date	Manufacture Date	Shutdown Date	Removal Date
TBD	Caterpillar						

- **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: Wellhead Compression

Source Classification Code (SCC): 2-02-002-53

Control equipment(s) directly associated with this process

OTH007

**Emission Unit : ENG007**

Aug 10 2015, 11:32:04

**Emission Unit Information**

AQD Emissions Unit ID: ENG007

Emission Unit Type: Engine

Name Plate Rating: 255.00

Units: hp

Site Rating:

Units:

Primary Fuel Type: Field Gas

Secondary Fuel Type: Pipeline Grade Natural Gas

Model Name and Number: Caterpillar G3408NA

Engine: 4 Stroke Rich Burn

AQD Description:

Company Equipment ID: PP1-7

Company Equipment Description: 255 hp Caterpillar G3408NA

Operating Status: Not Yet Installed

Initial Construction Commencement Date:

Initial Operation Commencement Date:

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

**Serial Number Tracking**

Serial Number	Manufacturer Name	Construction/Installation Commencement Date	Operation Commencement/Start-up Date	Order Date	Manufacture Date	Shutdown Date	Removal Date
TBD							

**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: Compression

Company Process Description:

Source Classification Code (SCC): 2-02-002-53

Control equipment(s) directly associated with this process

CNC008

**Emission Unit : ENG008**

Aug 10 2015, 11:32:04

**Emission Unit Information**

AQD Emissions Unit ID: ENG008

Emission Unit Type: Engine

Name Plate Rating: 625.00

Units: hp

Site Rating: 595.00

Units: hp

Primary Fuel Type: Field Gas

Secondary Fuel Type: Pipeline Grade Natural Gas

Model Name and Number: Caterpillar G398TA

Engine: 4 Stroke Rich Burn

AQD Description:

Company Equipment ID: PP1-8

Company Equipment Description: One Caterpillar G398

Operating Status: Not Yet Installed

Initial Construction Commencement Date:

Initial Operation Commencement Date:

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

**Serial Number Tracking**

Serial Number	Manufacturer Name	Construction/Installation Commencement Date	Operation Commencement/Start-up Date	Order Date	Manufacture Date	Shutdown Date	Removal Date
TBD							

**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: Compression

Company Process Description:

Source Classification Code (SCC): 2-02-002-53

Control equipment(s) directly associated with this process

CNC009

**Emission Unit : ENG009**

Aug 10 2015, 11:32:04

**- Emission Unit Information**

AQD Emissions Unit ID: ENG009

Emission Unit Type: Engine

Name Plate Rating: 625.00

Units: hp

Site Rating: 595.00

Units: hp

Primary Fuel Type: Field Gas

Secondary Fuel Type: Pipeline Grade Natural Gas

Model Name and Number: Caterpillar G398TA

Engine: 4 Stroke Rich Burn

AQD Description:

Company Equipment ID: PP1-9

Company Equipment Description: One 625 hp Caterpillar G398TA

Operating Status: Not Yet Installed

Initial Construction Commencement Date:

Initial Operation Commencement Date:

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

**- Serial Number Tracking**

Serial Number	Manufacturer Name	Construction/Installation Commencement Date	Operation Commencement/Start-up Date	Order Date	Manufacture Date	Shutdown Date	Removal Date
TBD							

**- 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:

Source Classification Code (SCC): 2-02-002-53

Control equipment(s) directly associated with this process

CNC001

**Emission Unit : ENG010**

Aug 10 2015, 11:32:04

**- Emission Unit Information**

AQD Emissions Unit ID: ENG010

Emission Unit Type: Engine

Name Plate Rating: 625.00

Units: hp

Site Rating: 595.00

Units: hp

Primary Fuel Type: Field Gas

Secondary Fuel Type: Pipeline Grade Natural Gas

Model Name and Number: Caterpillar G398TA

Engine: 4 Stroke Rich Burn

AQD Description:

Company Equipment ID: PP1-10

Company Equipment Description: Caterpillar G 398TA

Operating Status: Not Yet Installed

Initial Construction Commencement Date:

Initial Operation Commencement Date:

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

**- Serial Number Tracking**

Serial Number	Manufacturer Name	Construction/Installation Commencement Date	Operation Commencement/Start-up Date	Order Date	Manufacture Date	Shutdown Date	Removal Date
TBD							

**- 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:

Source Classification Code (SCC): 2-02-002-53

Control equipment(s) directly associated with this process

CNC010

**Emission Unit : ENG011**

Aug 10 2015, 11:32:04

**- Emission Unit Information**

AQD Emissions Unit ID: ENG011

Emission Unit Type: Engine

Name Plate Rating: 330.00

Units: hp

Site Rating: 314.00

Units: hp

Primary Fuel Type: Field Gas

Secondary Fuel Type: Pipeline Grade Natural Gas

Model Name and Number: Caterpillar G3408NA

Engine: 4 Stroke Rich Burn

AQD Description:

Company Equipment ID: PP1-11

Company Equipment Description: Caterpillar G379NA

Operating Status: Not Yet Installed

Initial Construction Commencement Date:

Initial Operation Commencement Date:

Most Recent Construction/Modification Commencement Date:

Most Recent Operation Commencement Date:

**- Serial Number Tracking**

Serial Number	Manufacturer Name	Construction/Installation Commencement Date	Operation Commencement/Start-up Date	Order Date	Manufacture Date	Shutdown Date	Removal Date
TBD							

**- 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:

Source Classification Code (SCC): 2-02-002-53

Control equipment(s) directly associated with this process

OTH006

## Control Equipment : CNC001

Aug 10 2015, 11:32:04

### - Control Equipment Information

Equipment Type: Catalytic NOx Control Technology

Control Equipment ID: CNC001

AQD Description:

Company Control Equipment ID: NSCR

Company Control Equipment Description: Catalyst

Operating Status: Not Operating

Initial Installation Date:

Manufacturer: DCL America

Model: DC601

### - Specific Equipment Type information

Catalytic Reduction Type: Nonselective Catalytic

Reagent Type:

Reagent Injection Rate - specify units:

Reagent Slip Concentration:

Reagent Slip Concentration % O2:

Inlet Gas Flow Rate: 1.99

Inlet Gas Temp: 0

Outlet Gas Temp: 1112

Air Fuel Ratio Controller: 1112

### - Pollutants Controlled

Pollutant	Design Control Efficiency(%)	Operating Control Efficiency(%)	Capture Efficiency(%)	Total Capture Control(%)
CO - Carbon Monoxide	78.6	78.6	100	78.6
NOx - Nitrogen Oxides	93.4	93.4	100	93.4

### - Associated Control Equipments And Release Points

Release points(s) directly associated with this control equipment

VER008

## Control Equipment : CNC008

Aug 10 2015, 11:32:04

### - Control Equipment Information

Equipment Type: Catalytic NOx Control Technology

Control Equipment ID: CNC008

AQD Description: null [CE ID Changed Log] 06/24/2015 15:11:40, OTH002 >> CNC008.

Company Control Equipment ID: NSCR

Company Control Equipment Description: Catalyst

Operating Status: Not Operating

Initial Installation Date:

Manufacturer: DCL America

Model: A7YG-01-10L9-31

### - Specific Equipment Type information

Catalytic Reduction Type: Nonselective Catalytic

Reagent Type:

Reagent Injection Rate - specify units:

Reagent Slip Concentration:

Reagent Slip Concentration % O2:

Inlet Gas Flow Rate: 1.99

Inlet Gas Temp: 750

Outlet Gas Temp: 1148

Air Fuel Ratio Controller: 1148

### - Pollutants Controlled

Pollutant	Design Control Efficiency(%)	Operating Control Efficiency(%)	Capture Efficiency(%)	Total Capture Control(%)
CO - Carbon Monoxide	83.3	83.3	100	83.3
NOx - Nitrogen Oxides	94.2	94.2	100	94.2

### - Associated Control Equipments And Release Points

Release points(s) directly associated with this control equipment

HOR001

## Control Equipment : CNC009

Aug 10 2015, 11:32:04

**- Control Equipment Information**

Equipment Type: Catalytic NOx Control Technology

Control Equipment ID: CNC009

AQD Description: null [CE ID Changed Log] 06/24/2015 15:12:43, OTH001 >> CNC009.

Company Control Equipment ID: NSCR

Company Control Equipment Description: Catalyst

Operating Status: Not Operating

Initial Installation Date:

Manufacturer: DCL America

Model: DCE3 (C800-RH-40E3-31)

**- Specific Equipment Type information**

Catalytic Reduction Type: Nonselective Catalytic

Reagent Type:

Reagent Injection Rate - specify units:

Reagent Slip Concentration:

Reagent Slip Concentration % O2:

Inlet Gas Flow Rate: 1.99

Inlet Gas Temp: 750

Outlet Gas Temp: 1112

Air Fuel Ratio Controller: 1112

**- Pollutants Controlled**

Pollutant	Design Control Efficiency(%)	Operating Control Efficiency(%)	Capture Efficiency(%)	Total Capture Control(%)
CO - Carbon Monoxide	81.3	81.3	100	81.3
NOx - Nitrogen Oxides	92.8	92.8	100	92.8

**- Associated Control Equipments And Release Points**

Release points(s) directly associated with this control equipment

VER007

## Control Equipment : CNC010

Aug 10 2015, 11:32:04

### - Control Equipment Information

Equipment Type: Catalytic NOx Control Technology

Control Equipment ID: CNC010

AQD Description:

Company Control Equipment ID: NSCR

Company Control Equipment Description:  
NSCR

Operating Status: Not Operating

Initial Installation Date:

Manufacturer: DCL America

Model: DC3W

### - Specific Equipment Type information

Catalytic Reduction Type: Nonselective Catalytic

Reagent Type:

Reagent Injection Rate - specify  
units:

Reagent Slip Concentration:

Reagent Slip Concentration % O2:

Inlet Gas Flow Rate: 1.99

Inlet Gas Temp: 750

Outlet Gas Temp: 1112

Air Fuel Ratio Controller: 1112

### - Pollutants Controlled

Pollutant	Design Control Efficiency(%)	Operating Control Efficiency(%)	Capture Efficiency(%)	Total Capture Control(%)
CO - Carbon Monoxide	81.3	81.3	100	81.3
NOx - Nitrogen Oxides	92.9	92.9	100	92.9

### - Associated Control Equipments And Release Points

Release points(s) directly associated with this control equipment

VER009

## Control Equipment : OTH001

Aug 10 2015, 11:32:04

### - Control Equipment Information

Equipment Type: Other

Control Equipment ID: OTH001

AQD Description: null [CE ID Changed Log] 06/24/2015 14:59:24, OXI001 >> CNC002. [CE ID Changed Log] 07/22/2015 13:02:19, CNC002 >> OTH001.

Company Control Equipment ID: CAT01

Company Control Equipment Compressor engine catalyst  
Description:

Operating Status: Not Operating

Initial Installation Date:

Manufacturer: EICS

Model: E2379018

### - Specific Equipment Type information

### - Pollutants Controlled

Pollutant	Design Control Efficiency(%)	Operating Control Efficiency(%)	Capture Efficiency(%)	Total Capture Control(%)
CO - Carbon Monoxide	67	67	100	67
NOx - Nitrogen Oxides	96	96	100	96

### - Associated Control Equipments And Release Points

Release points(s) directly associated with this control equipment

VER001

## Control Equipment : OTH002

Aug 10 2015, 11:32:04

### - Control Equipment Information

Equipment Type: Other

Control Equipment ID: OTH002

AQD Description: null [CE ID Changed Log] 06/24/2015 15:01:42, OXI002 >> CNC003. [CE ID Changed Log] 07/22/2015 13:21:46, CNC003 >> OTH002.

Company Control Equipment ID: PP1-2 Cat

Company Control Equipment Description: EICS NSCR Catalytic Converter

Operating Status: Not Operating

Initial Installation Date:

Manufacturer: EICS

Model: E2379018

### - Specific Equipment Type information

### - Pollutants Controlled

Pollutant	Design Control Efficiency(%)	Operating Control Efficiency(%)	Capture Efficiency(%)	Total Capture Control(%)
CO - Carbon Monoxide	67	67	100	67
NOx - Nitrogen Oxides	96	96	100	96

### - Associated Control Equipments And Release Points

Release points(s) directly associated with this control equipment

VER002

## Control Equipment : OTH003

Aug 10 2015, 11:32:04

### - Control Equipment Information

Equipment Type: Other

Control Equipment ID: OTH003

AQD Description: null [CE ID Changed Log] 06/24/2015 15:03:38, OXI003 >> CNC004. [CE ID Changed Log] 07/23/2015 08:47:00, CNC004 >> OTH003.

Company Control Equipment ID: PP1-3 Cat

Company Control Equipment Description: Engine catalyst

Operating Status: Not Operating

Initial Installation Date:

Manufacturer: EICS

Model: E2379018

### - Specific Equipment Type information

### - Pollutants Controlled

Pollutant	Design Control Efficiency(%)	Operating Control Efficiency(%)	Capture Efficiency(%)	Total Capture Control(%)
CO - Carbon Monoxide	67	67	100	67
NOx - Nitrogen Oxides	96	96	100	96

### - Associated Control Equipments And Release Points

Release points(s) directly associated with this control equipment

VER003

## Control Equipment : OTH004

Aug 10 2015, 11:32:04

### - Control Equipment Information

Equipment Type: Other

Control Equipment ID: OTH004

AQD Description: null [CE ID Changed Log] 06/24/2015 15:06:11, OXI004 >> CNC005. [CE ID Changed Log] 07/23/2015 08:50:08, CNC005 >> OTH004.

Company Control Equipment ID: Catalyst

Company Control Equipment Description: Engine catalyst

Operating Status: Not Operating

Initial Installation Date:

Manufacturer: DCL America

Model: DC50-8 CC

### - Specific Equipment Type information

### - Pollutants Controlled

Pollutant	Design Control Efficiency(%)	Operating Control Efficiency(%)	Capture Efficiency(%)	Total Capture Control(%)
CO - Carbon Monoxide	83.3	83.3	100	83.3
NOx - Nitrogen Oxides	94.2	94.2	100	94.2

### - Associated Control Equipments And Release Points

Release points(s) directly associated with this control equipment

VER004

## Control Equipment : OTH005

Aug 10 2015, 11:32:04

### - Control Equipment Information

Equipment Type: Other

Control Equipment ID: OTH005

AQD Description: null [CE ID Changed Log] 06/24/2015 15:09:13, OXI005 >> CNC006. [CE ID Changed Log] 07/23/2015 08:55:29, CNC006 >> OTH005.

Company Control Equipment ID: Catalyst

Company Control Equipment Description: Engine catalyst

Operating Status: Not Operating

Initial Installation Date:

Manufacturer: DCL America

Model: DC800 (B333-CE-40Z1-31)

### - Specific Equipment Type information

### - Pollutants Controlled

Pollutant	Design Control Efficiency(%)	Operating Control Efficiency(%)	Capture Efficiency(%)	Total Capture Control(%)
CO - Carbon Monoxide	75.3	75.3	100	75.3
NOx - Nitrogen Oxides	92.7	92.7	100	92.7

### - Associated Control Equipments And Release Points

Release points(s) directly associated with this control equipment

VER005

## Control Equipment : OTH006

Aug 10 2015, 11:32:04

### - Control Equipment Information

Equipment Type: Other

Control Equipment ID: OTH006

AQD Description:

Company Control Equipment ID: PP1-11 Cat

Company Control Equipment Description: Compressor catalyst

Operating Status: Not Operating

Initial Installation Date:

Manufacturer: DCL America

Model: A71A-01-4ZW&-31

### - Specific Equipment Type information

### - Pollutants Controlled

Pollutant	Design Control Efficiency(%)	Operating Control Efficiency(%)	Capture Efficiency(%)	Total Capture Control(%)
CO - Carbon Monoxide	83.3	83.3	100	83.3
NOx - Nitrogen Oxides	94.2	94.2	100	94.2

### - Associated Control Equipments And Release Points

Release points(s) directly associated with this control equipment

VER010

## Control Equipment : OTH007

Aug 10 2015, 11:32:04

### - Control Equipment Information

Equipment Type: Other

Control Equipment ID: OTH007

AQD Description: null [CE ID Changed Log] 06/24/2015 15:10:21, OXI006 >> CNC007. [CE ID Changed Log] 07/23/2015 12:34:45, CNC007 >> OTH007.

Company Control Equipment ID: Catalyst

Company Control Equipment Oxidation Catalyst  
Description:

Operating Status: Not Operating

Initial Installation Date:

Manufacturer: EICS

Model: E2379011

### - Specific Equipment Type information

### - Pollutants Controlled

Pollutant	Design Control Efficiency(%)	Operating Control Efficiency(%)	Capture Efficiency(%)	Total Capture Control(%)
CO - Carbon Monoxide	83.74	83.74	100	83.74
NOx - Nitrogen Oxides	95.54	95.54	100	95.54

### - Associated Control Equipments And Release Points

Release points(s) directly associated with this control equipment

VER006

# Release Point : VER002

Aug 10 2015, 11:32:04

## - Release Point Information

Release Point ID: VER002

Release Type: Vertical

AQD Description:

Company Release Point ID: Comp Exhaust

Company Release Point Description: Engine exhaust post catalyst

Operating Status: Not Operating

Base Elevation (ft): 6772.0

## - Stack Details

Stack Height (ft): 15.0

Stack Diameter (ft): 0.5

Exit Gas Velocity (ft/s): 164.76

Exit Gas Flow Rate (acfm): 1941.0

Exit Gas Temp (F): 1341.0

## - Release Latitude and Longitude

Latitude: 41.86148

Longitude: -107.95972

## - CEM Data

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

# Release Point : VER004

Aug 10 2015, 11:32:04

## - Release Point Information

Release Point ID: VER004

Release Type: Vertical

AQD Description:

Company Release Point ID: Exhaust

Company Release Point Description: Exhaust stack - post catalyst

Operating Status: Not Operating

Base Elevation (ft): 6772.0

## - Stack Details

Stack Height (ft): 15.0

Stack Diameter (ft): 0.5

Exit Gas Velocity (ft/s): 0.0

Exit Gas Flow Rate (acfm): 0.0

Exit Gas Temp (F): 1341.0

## - Release Latitude and Longitude

Latitude: 41.86148

Longitude: -107.95972

## - CEM Data

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

# Release Point : VER005

Aug 10 2015, 11:32:04

## - Release Point Information

Release Point ID: VER005

Release Type: Vertical

AQD Description:

Company Release Point ID: Exhaust

Company Release Point Description: Exhaust from engine post catalyst

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): 0.0

Exit Gas Flow Rate (acfm): 0.0

Exit Gas Temp (F): 1108.0

## - Release Latitude and Longitude

Latitude: 41.86148

Longitude: -107.95972

## - CEM Data

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

# Release Point : VER006

Aug 10 2015, 11:32:04

## - Release Point Information

Release Point ID: VER006

Release Type: Vertical

AQD Description:

Company Release Point ID: Exhaust

Company Release Point Description: engine exhaust post catalyst

Operating Status: Not Operating

Base Elevation (ft): 6772.0

## - Stack Details

Stack Height (ft): 15.0

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: 41.86148

Longitude: -107.95972

## - CEM Data

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

# Release Point : VER001

Aug 10 2015, 11:32:04

## - Release Point Information

Release Point ID: VER001

Release Type: Vertical

AQD Description:

Company Release Point ID: Exhaust

Company Release Point Description: Engine exhaust post catalyst

Operating Status: Not Operating

Base Elevation (ft): 6772.0

## - Stack Details

Stack Height (ft): 15.0

Stack Diameter (ft): 0.5

Exit Gas Velocity (ft/s): 164.76

Exit Gas Flow Rate (acfm): 1341.0

Exit Gas Temp (F): 1941.0

## - Release Latitude and Longitude

Latitude: 41.86148

Longitude: -107.95972

## - CEM Data

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

# Release Point : HOR001

Aug 10 2015, 11:32:04

## - Release Point Information

Release Point ID: HOR001

Release Type: Horizontal

AQD Description:

Company Release Point ID: exhaust 7

Company Release Point Description: engine exhaust post NSCR

Operating Status: Not Operating

Base Elevation (ft): 6772.0

## - Stack Details

Stack Height (ft): 15.0

Stack Diameter (ft): 0.5

Exit Gas Velocity (ft/s): 0.0

Exit Gas Flow Rate (acfm): 0.0

Exit Gas Temp (F): 0.0

## - Release Latitude and Longitude

Latitude: 41.86148

Longitude: -107.95972

## - CEM Data

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

# Release Point : VER007

Aug 10 2015, 11:32:04

## - Release Point Information

Release Point ID: VER007

Release Type: Vertical

AQD Description:

Company Release Point ID: Exhaust 8

Company Release Point Description: engine exhaust post catalyst

Operating Status: Not Operating

Base Elevation (ft): 6772.0

## - Stack Details

Stack Height (ft): 15.0

Stack Diameter (ft): 0.5

Exit Gas Velocity (ft/s): 0.0

Exit Gas Flow Rate (acfm): 0.0

Exit Gas Temp (F): 0.0

## - Release Latitude and Longitude

Latitude: 41.86148

Longitude: -107.95972

## - CEM Data

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

# Release Point : VER009

Aug 10 2015, 11:32:04

## - Release Point Information

Release Point ID: VER009

Release Type: Vertical

AQD Description:

Company Release Point ID: PP1-10 Exh

Company Release Point Description: Engine exhaust post catalyst

Operating Status: Not Operating

Base Elevation (ft): 6772.0

## - Stack Details

Stack Height (ft): 15.0

Stack Diameter (ft): 0.5

Exit Gas Velocity (ft/s): 1.99

Exit Gas Flow Rate (acfm): 1.99

Exit Gas Temp (F): 1112.0

## - Release Latitude and Longitude

Latitude: 41.86148

Longitude: -107.95972

## - CEM Data

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

# Release Point : VER003

Aug 10 2015, 11:32:04

## - Release Point Information

Release Point ID: VER003

Release Type: Vertical

AQD Description:

Company Release Point ID: PP1-3 Exh

Company Release Point Description: Engine exhaust post catalyst

Operating Status: Not Operating

Base Elevation (ft): 6772.0

## - Stack Details

Stack Height (ft): 15.0

Stack Diameter (ft): 0.5

Exit Gas Velocity (ft/s): 164.76

Exit Gas Flow Rate (acfm): 1941.0

Exit Gas Temp (F): 1341.0

## - Release Latitude and Longitude

Latitude: 41.86148

Longitude: -107.95972

## - CEM Data

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

# Release Point : VER008

Aug 10 2015, 11:32:04

## - Release Point Information

Release Point ID: VER008

Release Type: Vertical

AQD Description:

Company Release Point ID: PP1-9 EXH

Company Release Point Description: engine exhaust post catalyst

Operating Status: Not 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): 1112.0

## - Release Latitude and Longitude

Latitude: 41.86148

Longitude: -107.95972

## - CEM Data

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

# Release Point : VER010

Aug 10 2015, 11:32:04

## - Release Point Information

Release Point ID: VER010

Release Type: Vertical

AQD Description:

Company Release Point ID: verPP1-11

Company Release Point Description: Compressor exhaust

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): 0.99

Exit Gas Flow Rate (acfm): 0.99

Exit Gas Temp (F): 1068.0

## - Release Latitude and Longitude

Latitude: 41.86148

Longitude: -107.95972

## - CEM Data

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

**NSR Application A0000968**  
**Strategic Pad Compression Fleet**  
**F026827**  
**July 29, 2015**

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

Aug 10 2015, 11:34:39

**- NSR Application**

Date application received : 07/29/2015

Is this a legacy NSR Application? No

*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.*

Emission Unit application reason summary :	<input checked="" type="checkbox"/> Construction	<input type="checkbox"/> Synthetic Minor
	<input type="checkbox"/> Modification	<input type="checkbox"/> Temporary Permit
	<input type="checkbox"/> Reconstruction	<input type="checkbox"/> Other

Facility Type :

Sage Grouse :

**- Purpose of Application**

Please summarize the reason this permit is being applied for.

BP would like to permit a fleet of compressors that would have the flexibility to move throughout the Wamsutter field, Sweetwater and Carbon Counties. The compressor(s) vary in size and engineering design. Being able to re-locate the compressors is important in maximizing production and costs associated with a compression project.

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	Area Environmental Advisor	BP America Production Company
Name	Title	Company
P.O. Box 157	Wamsutter, WY	82336
Street Address	City/Township, State	Zip Code
(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**

<b>Required Attachment</b>	<b>Public Document Id</b>	<b>Attachment Type</b>	<b>Description</b>
X	4885	Emissions Calculations	emission calcs
X	4886	Cover Letter/Project Description	cover letter
X	4887	Facility Map	flow diagram
	6927	Equipment List	equipment list

- **Notes**

<b>User Name</b>	<b>Date</b>	<b>Note</b>
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**Section II - Specific Air Contaminant Source Information**

**AQD EU ID:** ENG001

**AQD EU description:**

**Company EU ID:** PP1-1

**Company EU Description:** 380 hp Cummins - KTA19GC with catalyst

- **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)

- **Emission Unit Type Specific Information**

Emission Unit Type : Engine

Btu Content : 1,143.00

Units : Btu/scf

Fuel Sulfur Content : 0.00

Units : ppm

Type of Service : Compression

- **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		0.0245	0.11	AP-42
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		0.0015	0.0064	AP-42

Nitrogen oxides (NOx)	0	0		0.48	2.12	Manufacturer Data
Carbon monoxide (CO)	0	0		1.38	6.07	Manufacturer Data
Volatile organic compounds (VOC)	0	0		0.48	2.12	Manufacturer Data
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** Subject to subpart

**Pollutants (NESHAP Part 63)**

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

<b>Part 63 NESHAP Subpart</b>
ZZZZ - Reciprocating Internal Combustion Engines

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

**AQD EU ID:** ENG002

**AQD EU description:**

**Company EU ID:** PP1-2 Engine

**Company EU Description:** 380 hp Cummins - KTA19GC

- **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)

- **Emission Unit Type Specific Information**

Emission Unit Type : Engine

Btu Content : 1,143.00

Units : Btu/scf

Fuel Sulfur Content : 0.00

Units : ppm

Type of Service : Compression

- **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		0.0245	0.11	AP-42
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		0.0015	0.0064	AP-42
Nitrogen oxides (NOx)	0	0		0.48	2.12	Manufactur

						er Data
Carbon monoxide (CO)	0	0		1.38	6.07	Manufacturer Data
Volatile organic compounds (VOC)	0	0		0.48	2.12	Manufacturer Data
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)** Subject to subpart  
*National Emission Standards for Hazardous Air Pollutants*

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

<b>Part 63 NESHAP Subpart</b>
ZZZZ - Reciprocating Internal Combustion Engines

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

**AQD EU ID:** ENG003

**AQD EU description:**

**Company EU ID:** PP1-3

**Company EU Description:** 380 hp Cummins  
KTA19GC

- **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)

- **Emission Unit Type Specific Information**

Emission Unit Type : Engine

Btu Content : 1,143.00

Units : Btu/scf

Fuel Sulfur Content : 0.00

Units : ppm

Type of Service : Compression

- **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		0.0245	0.11	AP-42
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		0.0015	0.0064	AP-42
Nitrogen oxides (NOx)	0	0		0.48	2.12	Manufactur

						er Data
Carbon monoxide (CO)	0	0		1.38	6.07	Manufacturer Data
Volatile organic compounds (VOC)	0	0		0.48	2.12	Manufacturer Data
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)** Subject to subpart  
*National Emission Standards for Hazardous Air Pollutants*

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

<b>Part 63 NESHAP Subpart</b>
ZZZZ - Reciprocating Internal Combustion Engines

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

**AQD EU ID:** ENG004

**AQD EU description:**

**Company EU ID:** PP1-4

**Company EU Description:** 415 hp Caterpillar G379TA

- **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)

- **Emission Unit Type Specific Information**

Emission Unit Type : Engine

Btu Content : 1,143.00

Units : Btu/scf

Fuel Sulfur Content : 0.00

Units : ppm

Type of Service : Compression

- **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		0.031	0.14	AP-42
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		0.0018	0.008	AP-42
Nitrogen oxides (NOx)	0	0		0.61	2.67	Manufactur

						er Data
Carbon monoxide (CO)	0	0		1.74	7.62	Manufacturer Data
Volatile organic compounds (VOC)	0	0		0.61	2.67	Manufacturer Data
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)** Subject to subpart  
*National Emission Standards for Hazardous Air Pollutants*

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

<b>Part 63 NESHAP Subpart</b>
ZZZZ - Reciprocating Internal Combustion Engines

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

**AQD EU ID:** ENG005

**AQD EU description:**

**Company EU ID:** PP1-5

**Company EU Description:** Caterpillar G399TA

- **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)

- **Emission Unit Type Specific Information**

Emission Unit Type : Engine

Btu Content : 1,143.00

Units : Btu/scf

Fuel Sulfur Content : 0.00

Units : ppm

Type of Service : Compression

- **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		0.062	0.27	AP-42
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		0.004	0.02	AP-42
Nitrogen oxides (NOx)	0	0		1.22	5.34	Manufacturer Data

Carbon monoxide (CO)	0	0		3.48	15.26	Manufacturer Data
Volatile organic compounds (VOC)	0	0		1.22	5.34	Manufacturer Data
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*			

**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.

Subject to subpart

**Part 63 NESHAP Subpart**

ZZZZ - Reciprocating Internal Combustion Engines

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

**AQD EU ID:** ENG006

**AQD EU description:**

**Company EU ID:** PP1-6

**Company EU Description:** Caterpillar  
G3406NA

- **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)

- **Emission Unit Type Specific Information**

Emission Unit Type : Engine

Btu Content : 1,143.00

Units : Btu/scf

Fuel Sulfur Content : 0.00

Units : ppm

Type of Service : Compression

- **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		0.016	0.07	AP-42
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		0.0009	0.0042	AP-42
Nitrogen oxides (NOx)	0	0		0.32	1.38	Manufactur

						er Data
Carbon monoxide (CO)	0	0		0.9	3.95	Manufacturer Data
Volatile organic compounds (VOC)	0	0		0.32	1.38	Manufacturer Data
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)** Subject to subpart  
*National Emission Standards for Hazardous Air Pollutants*

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

<b>Part 63 NESHAP Subpart</b>
ZZZZ - Reciprocating Internal Combustion Engines

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

**AQD EU ID:** ENG007

**AQD EU description:**

**Company EU ID:** PP1-7

**Company EU Description:** 255 hp Caterpillar G3408NA

- **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)

- **Emission Unit Type Specific Information**

Emission Unit Type : Engine

Btu Content : 1,143.00

Units : Btu/scf

Fuel Sulfur Content : 0.00

Units : ppm

Type of Service : Compression

- **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		0.02	0.83	AP-42
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		0.001	0.005	AP-42
Nitrogen oxides (NOx)	0	0		0.37	1.64	Manufactur

						er Data
Carbon monoxide (CO)	0	0		1.07	4.68	Manufacturer Data
Volatile organic compounds (VOC)	0	0		0.37	1.64	Manufacturer Data
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

Subject to subpart

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

<b>Part 63 NESHAP Subpart</b>
ZZZZ - Reciprocating Internal Combustion Engines

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

**AQD EU ID:** ENG008

**AQD EU description:**

**Company EU ID:** PP1-8

**Company EU Description:** One Caterpillar G398

- **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)

- **Emission Unit Type Specific Information**

Emission Unit Type : Engine

Btu Content : 1,143.00

Units : Btu/scf

Fuel Sulfur Content : 0.00

Units : ppm

Type of Service : Compression

- **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		0.05	0.2	AP-42
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		0.003	0.012	AP-42
Nitrogen oxides (NOx)	0	0		0.92	4.02	Manufactur

						er Data
Carbon monoxide (CO)	0	0		2.62	11.49	Manufacturer Data
Volatile organic compounds (VOC)	0	0		0.92	4.02	Manufacturer Data
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)** Subject to subpart  
*National Emission Standards for Hazardous Air Pollutants*

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

<b>Part 63 NESHAP Subpart</b>
ZZZZ - Reciprocating Internal Combustion Engines

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

**AQD EU ID:** ENG009

**AQD EU description:**

**Company EU ID:** PP1-9

**Company EU Description:** One 625 hp  
Caterpillar G398TA

- **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)

- **Emission Unit Type Specific Information**

Emission Unit Type : Engine

Btu Content : 1,143.00

Units : Btu/scf

Fuel Sulfur Content : 0.00

Units : ppm

Type of Service : Compression

- **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		0.05	0.2	AP-42
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		0.003	0.012	AP-42
Nitrogen oxides (NOx)	0	0		0.92	4.02	Manufactur

						er Data
Carbon monoxide (CO)	0	0		2.62	11.49	Manufacturer Data
Volatile organic compounds (VOC)	0	0		0.92	4.02	Manufacturer Data
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)** Subject to subpart  
*National Emission Standards for Hazardous Air Pollutants*

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

<b>Part 63 NESHAP Subpart</b>
ZZZZ - Reciprocating Internal Combustion Engines

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

**AQD EU ID:** ENG010

**AQD EU description:**

**Company EU ID:** PP1-10

**Company EU Description:** Caterpillar G  
398TA

- **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)

- **Emission Unit Type Specific Information**

Emission Unit Type : Engine

Btu Content : 1,143.00

Units : Btu/scf

Fuel Sulfur Content : 0.00

Units : ppm

Type of Service : Compression

- **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		0.05	0.2	AP-42
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		0.003	0.012	AP-42
Nitrogen oxides (NOx)	0	0		0.92	4.02	Manufactur

						er Data
Carbon monoxide (CO)	0	0		2.62	11.49	Manufacturer Data
Volatile organic compounds (VOC)	0	0		0.92	4.02	Manufacturer Data
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)** Subject to subpart  
*National Emission Standards for Hazardous Air Pollutants*

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

<b>Part 63 NESHAP Subpart</b>
ZZZZ - Reciprocating Internal Combustion Engines

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

**AQD EU ID:** ENG011

**AQD EU description:**

**Company EU ID:** PP1-11

**Company EU Description:** Caterpillar G379NA

- **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)

- **Emission Unit Type Specific Information**

Emission Unit Type : Engine

Btu Content : 1,143.00

Units : Btu/scf

Fuel Sulfur Content : 0.00

Units : ppm

Type of Service : Compression

- **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		0.0245	0.11	AP-42
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		0.0015	0.0064	AP-42
Nitrogen oxides (NOx)	0	0		0.48	2.12	Manufacturer Data

Carbon monoxide (CO)	0	0		1.38	6.07	Manufacturer Data
Volatile organic compounds (VOC)	0	0		0.48	2.12	Manufacturer Data
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*			

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

**Part 63 NESHAP Subpart**

ZZZZ - Reciprocating Internal Combustion Engines

**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
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**BP America Production Company  
Wamsutter Operations Center  
Engine 1  
Oil & Gas Production Facility  
Chapter 6, Section 2 Air Permit Application  
July 2015**

**Description:** 380 HP Cummins Engine KTA19GC

**Source Information:**

Site Rating<sup>1</sup> = 314 hp  
 Hours of Operation = 8760 hr/yr  
 Fuel Consumption = 7,877 Btu/hp-hr

**Criteria Pollutant Emissions Calculations:**

Pollutant	Emission Factor	Emissions (lb/hr)	Emissions (TPY)
NO <sub>x</sub> <sup>2</sup>	0.7 g/hp-hr	0.4847	2.1230
CO <sup>2</sup>	2.0 g/hp-hr	1.3849	6.0658
VOC <sup>2</sup>	0.7 g/hp-hr	0.4847	2.1230
SO <sub>2</sub> <sup>3</sup>	5.88E-04 lb/MMBtu	0.0015	0.0064
PM <sup>3</sup>	9.91E-03 lb/MMBtu	0.0245	0.1074

**Example Calculations:**

NO<sub>x</sub> Emissions (lb/hr) = 314 hp \* 0.70 g/hp-hr \* lb/453.6 g = 0.48 lb/hr

NO<sub>x</sub> Emissions (TPY) = 0.48 lb/hr \* 8760 hr/yr \* 1 Ton/2000 lb = 2.12 tpy

<sup>1</sup> De-rated for an elevation of 6820 ft above MSL.

<sup>2</sup> EICS Emissions Performance

<sup>3</sup> Based on AP-42, Fifth Edition, Volume 1, Chapter 3, Section 3.2, Table 3.2-3 Uncontrolled Emission Factors For 4-Stroke Rich-Burn Engines, 7/00.

**BP America Production Company  
Wamsutter Operations Center  
Engine 2  
Oil & Gas Production Facility  
Chapter 6, Section 2 Air Permit Application  
July 2015**

**Description:** 380 HP Cummins Engine KTA19GC

**Source Information:**

Site Rating<sup>1</sup> = 314 hp  
 Hours of Operation = 8760 hr/yr  
 Fuel Consumption = 7,877 Btu/hp-hr

**Criteria Pollutant Emissions Calculations:**

Pollutant	Emission Factor	Emissions (lb/hr)	Emissions (TPY)
NO <sub>x</sub> <sup>2</sup>	0.7 g/hp-hr	0.4847	2.1230
CO <sup>2</sup>	2.0 g/hp-hr	1.3849	6.0658
VOC <sup>2</sup>	0.7 g/hp-hr	0.4847	2.1230
SO <sub>2</sub> <sup>3</sup>	5.88E-04 lb/MMBtu	0.0015	0.0064
PM <sup>3</sup>	9.91E-03 lb/MMBtu	0.0245	0.1074

**Example Calculations:**

NO<sub>x</sub> Emissions (lb/hr) = 314 hp \* 0.70 g/hp-hr \* lb/453.6 g = 0.48 lb/hr

NO<sub>x</sub> Emissions (TPY) = 0.48 lb/hr \* 8760 hr/yr \* 1 Ton/2000 lb = 2.12 tpy

<sup>1</sup> De-rated for an elevation of 6820 ft above MSL.

<sup>2</sup> EICS Emissions Performance

<sup>3</sup> Based on AP-42, Fifth Edition, Volume 1, Chapter 3, Section 3.2, Table 3.2-3 Uncontrolled Emission Factors For 4-Stroke Rich-Burn Engines, 7/00.

**BP America Production Company  
Wamsutter Operations Center  
Engine 3  
Oil & Gas Production Facility  
Chapter 6, Section 2 Air Permit Application  
July 2015**

**Description:** 380 HP Cummins Engine KTA19GC

**Source Information:**

Site Rating<sup>1</sup> = 314 hp  
 Hours of Operation = 8760 hr/yr  
 Fuel Consumption = 7,877 Btu/hp-hr

**Criteria Pollutant Emissions Calculations:**

Pollutant	Emission Factor	Emissions (lb/hr)	Emissions (TPY)
NO <sub>x</sub> <sup>2</sup>	0.7 g/hp-hr	0.4847	2.1230
CO <sup>2</sup>	2.0 g/hp-hr	1.3849	6.0658
VOC <sup>2</sup>	0.7 g/hp-hr	0.4847	2.1230
SO <sub>2</sub> <sup>3</sup>	5.88E-04 lb/MMBtu	0.0015	0.0064
PM <sup>3</sup>	9.91E-03 lb/MMBtu	0.0245	0.1074

**Example Calculations:**

NO<sub>x</sub> Emissions (lb/hr) = 314 hp \* 0.70 g/hp-hr \* lb/453.6 g = 0.48 lb/hr

NO<sub>x</sub> Emissions (TPY) = 0.48 lb/hr \* 8760 hr/yr \* 1 Ton/2000 lb = 2.12 tpy

<sup>1</sup> De-rated for an elevation of 6820 ft above MSL.

<sup>2</sup> EICS Emissions Performance

<sup>3</sup> Based on AP-42, Fifth Edition, Volume 1, Chapter 3, Section 3.2, Table 3.2-3 Uncontrolled Emission Factors For 4-Stroke Rich-Burn Engines, 7/00.

**BP America Production Company  
Wamsutter Operations Center  
Engine 4  
Oil & Gas Production Facility  
Chapter 6, Section 2 Air Permit Application  
July 2015**

**Description:** 415 HP Caterpillar G379TA

**Source Information:**

Site Rating<sup>1</sup> = 395 hp  
Hours of Operation = 8760 hr/yr  
Fuel Consumption = 7,877 Btu/hp-hr

**Criteria Pollutant Emissions Calculations:**

Pollutant	Emission Factor	Emissions (lb/hr)	Emissions (TPY)
NO <sub>x</sub> <sup>2</sup>	0.7 g/hp-hr	0.6096	2.6699
CO <sup>2</sup>	2.0 g/hp-hr	1.7416	7.6282
VOC <sup>2</sup>	0.7 g/hp-hr	0.6096	2.6699
SO <sub>2</sub> <sup>3</sup>	5.88E-04 lb/MMBtu	0.0018	0.0080
PM <sup>3</sup>	9.91E-03 lb/MMBtu	0.0308	0.1351

**Example Calculations:**

NO<sub>x</sub> Emissions (lb/hr) = 395 hp \* 0.70 g/hp-hr \* lb/453.6 g = 0.61 lb/hr

NO<sub>x</sub> Emissions (TPY) = 0.61 lb/hr \* 8760 hr/yr \* 1 Ton/2000 lb = 2.67 tpy

<sup>1</sup> De-rated for an elevation of 6820 ft above MSL.

<sup>2</sup> DCL America Emissions Statement - Unit 76527

<sup>3</sup> Based on AP-42, Fifth Edition, Volume 1, Chapter 3, Section 3.2, Table 3.2-3 Uncontrolled Emission Factors For 4-Stroke Rich-Burn Engines, 7/00.

**BP America Production Company  
Wamsutter Operations Center  
Engine 5  
Oil & Gas Production Facility  
Chapter 6, Section 2 Air Permit Application  
July 2015**

**Description:** 830 HP Caterpillar G399TA

**Source Information:**

Site Rating<sup>1</sup> = 790 hp  
 Hours of Operation = 8760 hr/yr  
 Fuel Consumption = 7,877 Btu/hp-hr

**Criteria Pollutant Emissions Calculations:**

Pollutant	Emission Factor	Emissions (lb/hr)	Emissions (TPY)
NO <sub>x</sub> <sup>2</sup>	0.7 g/hp-hr	1.2191	5.3398
CO <sup>2</sup>	2.0 g/hp-hr	3.4832	15.2565
VOC <sup>2</sup>	0.7 g/hp-hr	1.2191	5.3398
SO <sub>2</sub> <sup>3</sup>	5.88E-04 lb/MMBtu	0.0037	0.0160
PM <sup>3</sup>	9.91E-03 lb/MMBtu	0.0617	0.2701

**Example Calculations:**

NO<sub>x</sub> Emissions (lb/hr) = 790 hp \* 0.70 g/hp-hr \* lb/453.6 g = 1.22 lb/hr

NO<sub>x</sub> Emissions (TPY) = 1.22 lb/hr \* 8760 hr/yr \* 1 Ton/2000 lb = 5.34 tpy

<sup>1</sup> De-rated for an elevation of 6820 ft above MSL.

<sup>2</sup> DCL America

<sup>3</sup> Based on AP-42, Fifth Edition, Volume 1, Chapter 3, Section 3.2, Table 3.2-3 Uncontrolled Emission Factors For 4-Stroke Rich-Burn Engines, 7/00.

**BP America Production Company  
Wamsutter Operations Center  
Engine 6  
Oil & Gas Production Facility  
Chapter 6, Section 2 Air Permit Application  
July 2015**

**Description:** 215 HP CAT3406NA

**Source Information:**

Site Rating<sup>1</sup> = 205 hp  
Hours of Operation = 8760 hr/yr  
Fuel Consumption = 7,877 Btu/hp-hr

**Criteria Pollutant Emissions Calculations:**

Pollutant	Emission Factor	Emissions (lb/hr)	Emissions (TPY)
NO <sub>x</sub> <sup>2</sup>	0.7 g/hp-hr	0.3158	1.3832
CO <sup>2</sup>	2.0 g/hp-hr	0.9023	3.9520
VOC <sup>2</sup>	0.7 g/hp-hr	0.3158	1.3832
SO <sub>2</sub> <sup>3</sup>	5.88E-04 lb/MMBtu	0.0009	0.0042
PM <sup>3</sup>	9.91E-03 lb/MMBtu	0.0160	0.0700

**Example Calculations:**

NO<sub>x</sub> Emissions (lb/hr) = 205 hp \* 0.70 g/hp-hr \* lb/453.6 g = 0.32 lb/hr

NO<sub>x</sub> Emissions (TPY) = 0.32 lb/hr \* 8760 hr/yr \* 1 Ton/2000 lb = 1.38 tpy

<sup>1</sup> De-rated for an elevation of 6820 ft above MSL.

<sup>2</sup> EICS Emissions Performance

<sup>3</sup> Based on AP-42, Fifth Edition, Volume 1, Chapter 3, Section 3.2, Table 3.2-3 Uncontrolled Emission Factors For 4-Stroke Rich-Burn Engines, 7/00.

**BP America Production Company  
Wamsutter Operations Center  
Engine 7  
Oil & Gas Production Facility  
Chapter 6, Section 2 Air Permit Application  
July 2015**

**Description:** 255 HP CATG3408

**Source Information:**

Site Rating<sup>1</sup> = 243 hp  
 Hours of Operation = 8760 hr/yr  
 Fuel Consumption = 7,877 Btu/hp-hr

**Criteria Pollutant Emissions Calculations:**

Pollutant	Emission Factor	Emissions (lb/hr)	Emissions (TPY)
NO <sub>x</sub> <sup>2</sup>	0.7 g/hp-hr	0.3746	1.6405
CO <sup>2</sup>	2.0 g/hp-hr	1.0701	4.6872
VOC <sup>2</sup>	0.7 g/hp-hr	0.3746	1.6405
SO <sub>2</sub> <sup>3</sup>	5.88E-04 lb/MMBtu	0.0011	0.0049
PM <sup>3</sup>	9.91E-03 lb/MMBtu	0.0189	0.0830

**Example Calculations:**

NO<sub>x</sub> Emissions (lb/hr) = 243 hp \* 0.70 g/hp-hr \* lb/453.6 g = 0.37 lb/hr  
 NO<sub>x</sub> Emissions (TPY) = 0.37 lb/hr \* 8760 hr/yr \* 1 Ton/2000 lb = 1.64 tpy

<sup>1</sup> De-rated for an elevation of 6820 ft above MSL.

<sup>2</sup> DCL America

<sup>3</sup> Based on AP-42, Fifth Edition, Volume 1, Chapter 3, Section 3.2, Table 3.2-3 Uncontrolled Emission Factors For 4-Stroke Rich-Burn Engines, 7/00.

**BP America Production Company  
Wamsutter Operations Center  
Engine 8  
Oil & Gas Production Facility  
Chapter 6, Section 2 Air Permit Application  
July 2015**

**Description:** 625 HP Caterpillar G398TA

**Source Information:**

Site Rating<sup>1</sup> = 595 hp  
 Hours of Operation = 8760 hr/yr  
 Fuel Consumption = 7,877 Btu/hp-hr

**Criteria Pollutant Emissions Calculations:**

Pollutant	Emission Factor	Emissions (lb/hr)	Emissions (TPY)
NO <sub>x</sub> <sup>2</sup>	0.7 g/hp-hr	0.9180	4.0209
CO <sup>2</sup>	2.0 g/hp-hr	2.6229	11.4883
VOC <sup>2</sup>	0.7 g/hp-hr	0.9180	4.0209
SO <sub>2</sub> <sup>3</sup>	5.88E-04 lb/MMBtu	0.0028	0.0121
PM <sup>3</sup>	9.91E-03 lb/MMBtu	0.0464	0.2034

**Example Calculations:**

NO<sub>x</sub> Emissions (lb/hr) = 595 hp \* 0.70 g/hp-hr \* lb/453.6 g = 0.92 lb/hr

NO<sub>x</sub> Emissions (TPY) = 0.92 lb/hr \* 8760 hr/yr \* 1 Ton/2000 lb = 4.02 tpy

<sup>1</sup> De-rated for an elevation of 6820 ft above MSL.

<sup>2</sup> DCL America

<sup>3</sup> Based on AP-42, Fifth Edition, Volume 1, Chapter 3, Section 3.2, Table 3.2-3 Uncontrolled Emission Factors For 4-Stroke Rich-Burn Engines, 7/00.

**BP America Production Company  
Wamsutter Operations Center  
Engine 9  
Oil & Gas Production Facility  
Chapter 6, Section 2 Air Permit Application  
July 2015**

**Description:** 625 HP Caterpillar G398TA

**Source Information:**

Site Rating<sup>1</sup> = 595 hp  
Hours of Operation = 8760 hr/yr  
Fuel Consumption = 7,877 Btu/hp-hr

**Criteria Pollutant Emissions Calculations:**

Pollutant	Emission Factor	Emissions (lb/hr)	Emissions (TPY)
NO <sub>x</sub> <sup>2</sup>	0.7 g/hp-hr	0.9180	4.0209
CO <sup>2</sup>	2.0 g/hp-hr	2.6229	11.4883
VOC <sup>2</sup>	0.7 g/hp-hr	0.9180	4.0209
SO <sub>2</sub> <sup>3</sup>	5.88E-04 lb/MMBtu	0.0028	0.0121
PM <sup>3</sup>	9.91E-03 lb/MMBtu	0.0464	0.2034

**Example Calculations:**

NO<sub>x</sub> Emissions (lb/hr) = 595 hp \* 0.70 g/hp-hr \* lb/453.6 g = 0.92 lb/hr

NO<sub>x</sub> Emissions (TPY) = 0.92 lb/hr \* 8760 hr/yr \* 1 Ton/2000 lb = 4.02 tpy

<sup>1</sup> De-rated for an elevation of 6820 ft above MSL.

<sup>2</sup> DCL America Emissions Statement

<sup>3</sup> Based on AP-42, Fifth Edition, Volume 1, Chapter 3, Section 3.2, Table 3.2-3 Uncontrolled Emission Factors For 4-Stroke Rich-Burn Engines, 7/00.

**BP America Production Company  
Wamsutter Operations Center  
Engine 10  
Oil & Gas Production Facility  
Chapter 6, Section 2 Air Permit Application  
July 2015**

**Description:** 625 HP Caterpillar G398TA

**Source Information:**

Site Rating<sup>1</sup> = 595 hp  
Hours of Operation = 8760 hr/yr  
Fuel Consumption = 7,877 Btu/hp-hr

**Criteria Pollutant Emissions Calculations:**

Pollutant	Emission Factor	Emissions (lb/hr)	Emissions (TPY)
NO <sub>x</sub> <sup>2</sup>	0.7 g/hp-hr	0.9180	4.0209
CO <sup>2</sup>	2.0 g/hp-hr	2.6229	11.4883
VOC <sup>2</sup>	0.7 g/hp-hr	0.9180	4.0209
SO <sub>2</sub> <sup>3</sup>	5.88E-04 lb/MMBtu	0.0028	0.0121
PM <sup>3</sup>	9.91E-03 lb/MMBtu	0.0464	0.2034

**Example Calculations:**

NO<sub>x</sub> Emissions (lb/hr) = 595 hp \* 0.70 g/hp-hr \* lb/453.6 g = 0.92 lb/hr

NO<sub>x</sub> Emissions (TPY) = 0.92 lb/hr \* 8760 hr/yr \* 1 Ton/2000 lb = 4.02 tpy

<sup>1</sup> De-rated for an elevation of 6820 ft above MSL.

<sup>2</sup> DCL America Emissions Statement

<sup>3</sup> Based on AP-42, Fifth Edition, Volume 1, Chapter 3, Section 3.2, Table 3.2-3 Uncontrolled Emission Factors For 4-Stroke Rich-Burn Engines, 7/00.

**BP America Production Company  
Wamsutter Operations Center  
Engine 11  
Oil & Gas Production Facility  
Chapter 6, Section 2 Air Permit Application  
July 2015**

**Description:** 330 HP Caterpillar G379NA

**Source Information:**

Site Rating<sup>1</sup> = 314 hp  
 Hours of Operation = 8760 hr/yr  
 Fuel Consumption = 7,877 Btu/hp-hr

**Criteria Pollutant Emissions Calculations:**

Pollutant	Emission Factor	Emissions (lb/hr)	Emissions (TPY)
NO <sub>x</sub> <sup>2</sup>	0.7 g/hp-hr	0.4847	2.1230
CO <sup>2</sup>	2.0 g/hp-hr	1.3849	6.0658
VOC <sup>2</sup>	0.7 g/hp-hr	0.4847	2.1230
SO <sub>2</sub> <sup>3</sup>	5.88E-04 lb/MMBtu	0.0015	0.0064
PM <sup>3</sup>	9.91E-03 lb/MMBtu	0.0245	0.1074

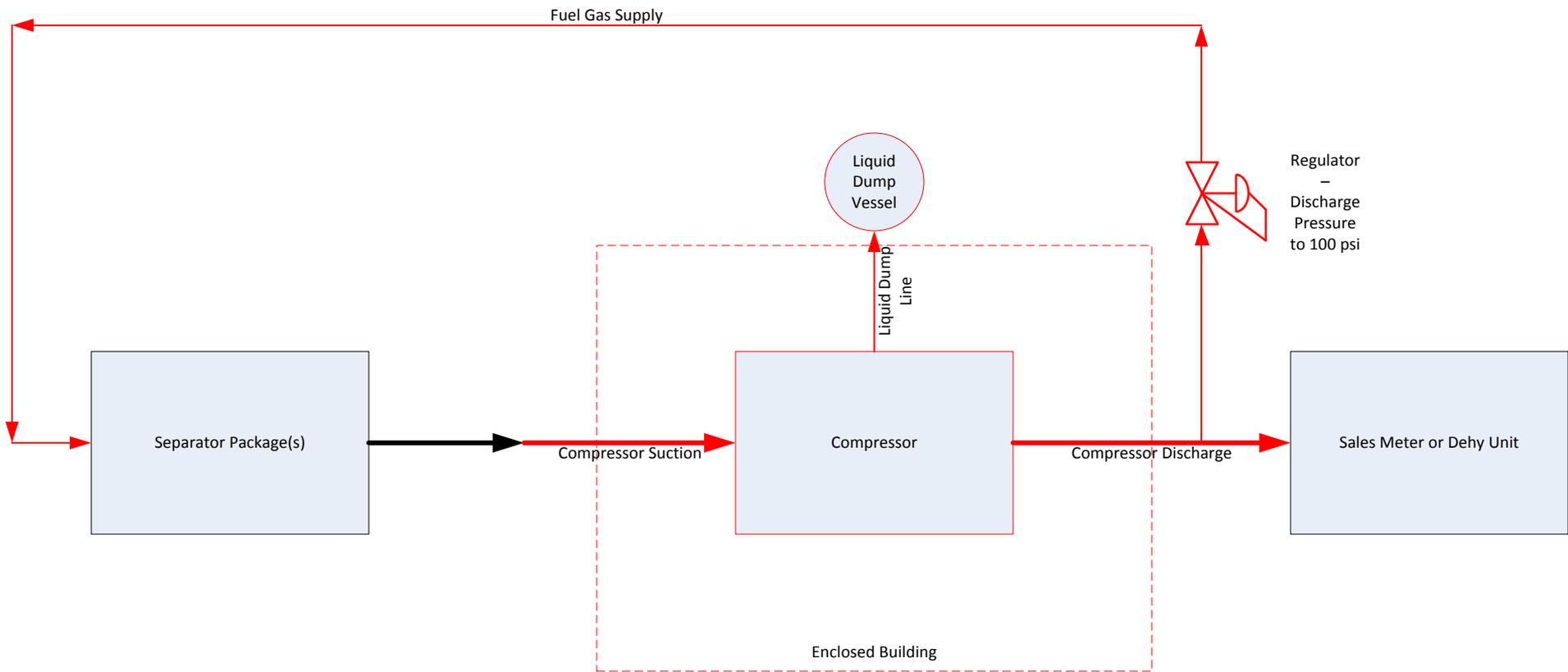
**Example Calculations:**

NO<sub>x</sub> Emissions (lb/hr) = 314 hp \* 0.70 g/hp-hr \* lb/453.6 g = 0.48 lb/hr  
 NO<sub>x</sub> Emissions (TPY) = 0.48 lb/hr \* 8760 hr/yr \* 1 Ton/2000 lb = 2.12 tpy

<sup>1</sup> De-rated for an elevation of 6820 ft above MSL.

<sup>2</sup> DCL America Emissions Statement

<sup>3</sup> Based on AP-42, Fifth Edition, Volume 1, Chapter 3, Section 3.2, Table 3.2-3 Uncontrolled Emission Factors For 4-Stroke Rich-Burn Engines, 7/00.



Sketch PFD – Wamsutter 2015 Compressor Installs



**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 Strategic Pad Compression Fleet

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 Description	Size/Rating	Control Equipment Installation Date
PP1-1	Compressor	380	TBD
PP1-2	Compressor	380	TBD
PP1-3	Compressor	380	TBD
PP1-4	Compressor	415	TBD
PP1-5	Compressor	830	TBD
PP1-6	Compressor	215	TBD
PP1-7	Compressor	255	TBD
PP1-8	Compressor	625	TBD
PP1-9	Compressor	625	TBD
PP1-10	Compressor	625	TBD
PP1-11	Compressor	330	TBD