Potential Emissions Detail

Potentials Established on: Friday, November 19, 2010

Report Generated on: Friday, November 19, 2010

Potential-to-Emit Summary for HUNT 4C1160

Area: 08

State: West Virginia

Criteria Pollutant	Lb/Hr	Lb/Yr	Ton/Yr
Carbon Monoxide	16.42	88,360.54	44.18
Nitrogen Oxides (NOx)	97.21	401,299.54	200.65
PM10	0.42	3,380.68	1.69
Sulfur Dioxide	0.72	72.10	0.04
VOC	3.08	10,971.37	5.49
Hazardous Air Pollutants	**Lb/Hr**	**Lb/Yr**	**Ton/Yr**
Acetaldehyde	0.09	692.37	0.35
Ammonia	0.00	11.91	0.01
Benzene	0.02	184.09	0.09
Ethylbenzene	0.00	9.46	0.00
Ethylene Glycol	0.00	0.06	0.00
Formaldehyde	0.62	4,934.02	2.47
Hexane	0.00	37.77	0.02
Toluene	0.01	88.45	0.04
Xylene (mixed Isomers)	0.00	25.13	0.01
Total HAP	0.76	5,983	2.99
Unregulated	**Lb/Hr**	**Lb/Yr**	**Ton/Yr**
Methane	0.97	8,482.16	4.24

Potential Emissions Detail for HUNT 4C1160

Potentials Established on: November 19, 2010 | Report Generated on: November 19, 2010

Area: 08 **State:** West Virginia

Equipment Category: ENGINE

Emission Point: E01

Unit Name: RECIP ENG/INT COM #01801, Sub Unit: RECIP ENG/INT COM #01801 **Agency ID:** 01801

Description: 2-LEAN

Manufacturer: COOPER-BESSEMER GMV-8STF **Rating:** 1100 hp **SCC:** 20200252, **Regulatory Status:** SIGNIFICANT

Unit Potential Production Basis for Hours

Parameter	Value
Brake Horsepower	1,210
Operating Hours	1.000

Unit Potential Production Basis for Year

Parameter	Value
Brake Horsepower	1,100
Operating Hours	8,760

Chemical	Potential Emissions in Lb/Hour: Emission Factor Reference	Lb.	Potential Emissions in Ton/Year: Emission Factor Reference	TPY	Control
Acetaldehyde	6.83 E-05 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000, @ 8,800 Btu/Hp-hr	0.083	6.83 E-05 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000, @ 8,800 Btu/Hp-hr	0.33	0.00%
Benzene	1.71 E-05 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000, @ 8,800 Btu/Hp-hr	0.021	1.71 E-05 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000, @ 8,800 Btu/Hp-hr	0.08	0.00%
Carbon Monoxide	8.81 E-03 lb/bhp_hr CGT Test Derv. Emission Factor	10.66	4.41 E-03 lb/bhp_hr CGT Test Derv. Emission Factor	21.25	0.00%
Ethylbenzene	9.5 E-07 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000, @ 8,800 Btu/Hp-hr	0.0012	9.5 E-07 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000, @ 8,800 Btu/Hp-hr	0.005	0.00%
Formaldehyde	4.86 E-04 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000 @ 8,800 Btu/Hp-hr	0.59	4.86 E-04 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000 @ 8,800 Btu/Hp-hr	2.34	0.00%
Hexane	3.92 E-06 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000, @ 8,800 Btu/Hp-hr	0.0047	3.92 E-06 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000, @ 8,800 Btu/Hp-hr	0.02	0.00%
Nitrogen Oxides (NOx)	7.75 E-02 lb/bhp_hr CGT Test Derv. Emission Factor	93.78	3.88 E-02 lb/bhp_hr CGT Test Derv. Emission Factor	186.94	0.00%
PM10	3.38 E-04 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000 @ 8,800 Btu/Hp-hr	0.41	3.38 E-04 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000 @ 8,800 Btu/Hp-hr	1.63	0.00%
Sulfur Dioxide	5 E-04 lb/bhp_hr Eng. Calc (20 gr S/100scf)	0.61	6.3 E-06 lb/bhp_hr Eng. Calc (0.25 gr S/100scf)	0.03	0.00%
Toluene	8.47 E-06 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000, @ 8,800 Btu/Hp-hr	0.010	8.47 E-06 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000, @ 8,800 Btu/Hp-hr	0.04	0.00%
VOC	1.06 E-03 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000 @ 8,800 Btu/Hp-hr	1.28	1.06 E-03 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000 @ 8,800 Btu/Hp-hr	5.11	0.00%
Xylene (mixed Isomers)	2.36 E-06 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000, @ 8,800 Btu/Hp-hr	0.0029	2.36 E-06 lb/bhp_hr AP-42 TBL 3.2-1, 7/2000, @ 8,800 Btu/Hp-hr	0.01	0.00%

Potential Emissions Detail for HUNT 4C1160

Potentials Established on: November 19, 2010 | Report Generated on: November 19, 2010

Area: 08 **State:** West Virginia

Equipment Category: ENGINE

Emission Point: G1

Unit Name: RECIP ENG/GEN #018G1, Sub Unit: RECIP ENG/GEN #018G1 **Agency ID:** 018G1

Description: 4-RICH

Manufacturer: LEROI D1000 **Rating:** 132 hp **SCC:** 20200253, **Regulatory Status:** SIGNIFICANT

Unit Potential Production Basis for Hours

Parameter	Value
Brake Horsepower	145
Operating Hours	1.000

Unit Potential Production Basis for Year

Parameter	Value
Brake Horsepower	132
Operating Hours	8,760

Chemical	Potential Emissions in Lb/Hour: Emission Factor Reference	Lb.	Potential Emissions in Ton/Year: Emission Factor Reference	TPY	Control
Acetaldehyde	2.96 E-05 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000, @ 10,600 Btu/Hp-hr	0.0043	2.96 E-05 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000, @ 10,600 Btu/Hp-hr	0.02	0.00%
Benzene	1.67 E-05 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000, @ 10,600 Btu/Hp-hr	0.0024	1.67 E-05 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000, @ 10,600 Btu/Hp-hr	0.01	0.00%
Carbon Monoxide	3.94 E-02 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000, 90-105% @ 10,600 Btu/Hp-hr	5.72	3.94 E-02 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000, 90-105% @ 10,600 Btu/Hp-hr	22.78	0.00%
Ethylbenzene	2.63 E-07 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000, @ 10,600 Btu/Hp-hr	0.0000	2.63 E-07 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000, @ 10,600 Btu/Hp-hr	0.0002	0.00%
Formaldehyde	2.17 E-04 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000 @ 10,600 Btu/Hp-hr	0.032	2.17 E-04 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000 @ 10,600 Btu/Hp-hr	0.13	0.00%
Nitrogen Oxides (NOx)	2.34 E-02 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000, 90-105% @ 10,600 Btu/Hp-hr	3.40	2.34 E-02 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000, 90-105% @ 10,600 Btu/Hp-hr	13.53	0.00%
PM10	1.01 E-04 lb/bhp_hr AP-42 TBL 3.2-3 (filterable), 7/2000 @ 10,600 Btu/Hp-hr	0.015	1.01 E-04 lb/bhp_hr AP-42 TBL 3.2-3 (filterable), 7/2000 @ 10,600 Btu/Hp-hr	0.06	0.00%
Sulfur Dioxide	6.05 E-04 lb/bhp_hr Calc.: 20 gr S/100 scf @ 10,600 Btu/Hp-hr	0.088	7.57 E-06 lb/bhp_hr Calc.: 0.25 gr S/100 scf @ 10,600 Btu/Hp-hr	0.004	0.00%
Toluene	5.91 E-06 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000, @ 10,600 Btu/Hp-hr	0.0009	5.91 E-06 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000, @ 10,600 Btu/Hp-hr	0.003	0.00%
VOC	3.14 E-04 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000 @ 10,600 Btu/Hp-hr	0.046	3.14 E-04 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000 @ 10,600 Btu/Hp-hr	0.18	0.00%
Xylene (mixed Isomers)	2.07 E-06 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000, @ 10,600 Btu/Hp-hr	0.0003	2.07 E-06 lb/bhp_hr AP-42 TBL 3.2-3, 7/2000, @ 10,600 Btu/Hp-hr	0.001	0.00%

Potential Emissions Detail for HUNT 4C1160

Potentials Established on: November 19, 2010 | Report Generated on: November 19, 2010

Area: 08 **State:** West Virginia

Equipment Category: FUGITIVE

Emission Point: FUG

Unit Name: FUGITIVE EMISSIONS, Sub Unit: FUGITIVE EMISSIONS_BLOWDOWNS **Agency ID:** FUG_BD

Description: VOC EMISSIONS FROM BLOWDOWNS

Manufacturer: (N/R) **Rating:** 0 0 **SCC:** , **Regulatory Status:** INSIGNIFICANT

Unit Potential Production Basis for Hours

Parameter	Value
Operating Hours	1.000

Unit Potential Production Basis for Year

Parameter	Value
Operating Hours	8,760

Chemical	Potential Emissions in Lb/Hour: Emission Rate Reference	Lb.	Potential Emissions in Ton/Year: Emission Rate Reference	TPY	Control
VOC	1 E-02 lb/hr Transient Emissions; Blowdowns, Starts, etc.	0.011	1 E-02 lb/hr Transient Emissions; Blowdowns, Starts, etc.	0.05	0.00%

Unit Name: FUGITIVE EMISSIONS, Sub Unit: FUGITIVE EMISSIONS_EQ LK GAS **Agency ID:** FUG_ELG

Description: VOC EMISSIONS FROM EQUIPMENT LEAKS

Manufacturer: (N/R) **Rating:** 0 0 **SCC:** , **Regulatory Status:** INSIGNIFICANT

Unit Potential Production Basis for Hours

Parameter	Value
Count Connectors	280
Count OEL	5.000
Count Pressure Relief Valves	3.000
Count Valves	80
Emission Factor per Compressor Se	2.137
Emission Factor per Connector	0.00079
Emission Factor per OEL	0.06045
Emission Factor per Pressure Relief	0.03346
Emission Factor per Valve	0.00468
Operating Hours	1.000

Unit Potential Production Basis for Year

Parameter	Value
Count Connectors	280
Count OEL	5.000
Count Pressure Relief Valves	3.000
Count Valves	80
Emission Factor per Compressor Se	2.137
Emission Factor per Connector	0.00079
Emission Factor per OEL	0.06045
Emission Factor per Pressure Relief	0.03346
Emission Factor per Valve	0.00468
Operating Hours	8,760

Chemical	Potential Emissions in Lb/Hour: Lb.	Potential Emissions in Ton/Year: TPY	Control
Methane	0.97	4.24	0.00%
VOC	0.030	0.13	0.00%

Potential Emissions Detail for HUNT 4C1160

Potentials Established on: November 19, 2010 | Report Generated on: November 19, 2010

Area: 08 **State:** West Virginia

Equipment Category: HEATER

Emission Point: BL2

Unit Name: HEATING SYSTEM BOILER #2, Sub Unit: HEATING SYSTEM BOILER #2_BLR2 **Agency ID:** BLR2

Description: HEATING SYSTEM BOILER #2

Manufacturer: WEIL-MCLAIN LGB-13 **Rating:** 1.56 mmBtu/hr **SCC:** 10200603, **Regulatory Status:**

Unit Potential Production Basis for Hours

Parameter	Value
MMBTU per Hour	0.42500
Operating Hours	1.000

Unit Potential Production Basis for Year

Parameter	Value
MMBTU per Hour	0.42500
Operating Hours	8,760

Chemical	Potential Emissions in Lb/Hour: Emission Factor Reference	Lb.	Potential Emissions in Ton/Year: Emission Factor Reference	TPY	Control
Ammonia	3.2 E-03 lb/mmbtu FIRE database NG burners 3.2 #/MMscf	0.0014	3.2 E-03 lb/mmbtu FIRE database NG burners 3.2 #/MMscf	0.01	0.00%
Carbon Monoxide	8.24 E-02 lb/mmbtu AP-42 Tbl 1.4-1, small Blrs <100 MMB (7/98)	0.035	8.24 E-02 lb/mmbtu AP-42 Tbl 1.4-1, small Blrs <100 MMB (7/98)	0.15	0.00%
Nitrogen Oxides (NOx)	9.8 E-02 lb/mmbtu AP-42 Tbl 1.4-1, small Blrs <100 MMB (7/98)	0.042	9.8 E-02 lb/mmbtu AP-42 Tbl 1.4-1, small Blrs <100 MMB (7/98)	0.18	0.00%
PM10	1.86 E-03 lb/mmbtu AP-42 Tbl 1.4-2 (filterable) (7/98)	0.0008	1.86 E-03 lb/mmbtu AP-42 Tbl 1.4-2 (filterable) (7/98)	0.003	0.00%
Sulfur Dioxide	5.7 E-02 lb/mmbtu Calc.: 20 gr S/100scf	0.024	7.1 E-04 lb/mmbtu Calc.: 0.25 gr S/100scf	0.001	0.00%
VOC	5.39 E-03 lb/mmbtu AP-42 Tbl 1.4-2 (7/98)	0.0023	5.39 E-03 lb/mmbtu AP-42 Tbl 1.4-2 (7/98)	0.01	0.00%

Area: 08 **State:** West Virginia

Equipment Category: TANK

Emission Point: A06

Unit Name: USED LUBE OIL TANK, Sub Unit: USED LUBE OIL TANK_A06 **Agency ID:** A06

Description: USED OIL, HORIZONTAL, ABOVE GROUND

Manufacturer: ECONOMY TANK N/A **Rating:** 1000 gallon **SCC:** 40301099, **Regulatory Status:** INSIGNIFICANT

Unit Potential Production Basis for Hours

Parameter	Value
Overall tank paint solar absorptance	0.54000
Tank diameter	5.330
Maximum liquid height in tank	6.000
Tank shell height	6.000
Working loss product factor	1.000
Length of tank	6.000
Atmospheric pressure	15
Monthly net throughput	1,000

Unit Potential Production Basis for Year

Parameter	Value
Overall tank paint solar absorptance	0.54000
Tank diameter	5.330
Maximum liquid height in tank	6.000
Tank shell height	6.000
Working loss product factor	1.000
Length of tank	6.000
Atmospheric pressure	15
Monthly net throughput	1,000

Chemical	Potential Emissions in Lb/Hour: EPA Tanks Equations Procedures Lb.	Potential Emissions in Ton/Year: EPA Tanks Equations Procedures TPY	Control
Oils, Misc: Lubricating	0.0000	0.0000	0.00%

Emission Point: A07

Unit Name: LUBE OIL TANK, Sub Unit: LUBE OIL TANK_A07 **Agency ID:** A07

Description: OIL, LUBRICATING, VERTICAL, ABOVE GROUND

Manufacturer: HAMILTON (N/R) **Rating:** 3000 gallon **SCC:** 40301099, **Regulatory Status:** INSIGNIFICANT

Unit Potential Production Basis for Hours

Parameter	Value
Overall tank paint solar absorptance	0.54000
Tank diameter	0.66000
Maximum liquid height in tank	20
Tank shell height	20
Working loss product factor	1.000
Length of tank	20
Atmospheric pressure	15
Monthly net throughput	3,000

Unit Potential Production Basis for Year

Parameter	Value
Overall tank paint solar absorptance	0.54000
Tank diameter	0.66000
Maximum liquid height in tank	20
Tank shell height	20
Working loss product factor	1.000
Length of tank	20
Atmospheric pressure	15
Monthly net throughput	4,200

Chemical	Potential Emissions in Lb/Hour: EPA Tanks Equations Procedures Lb.	Potential Emissions in Ton/Year: EPA Tanks Equations Procedures TPY	Control
Oils, Misc: Lubricating	0.0000	0.0000	0.00%

Area: 08 **State:** West Virginia

Equipment Category: TANK

Emission Point: A08

Unit Name: PIPELINE LIQUIDS TANK, Sub Unit: PIPELINE LIQUIDS TANK_A08 **Agency ID:** A08

Description: PIPELINE LIQUIDS, HORIZONTAL, ABOVE GROUND

Manufacturer: ECONOMY (N/R) **Rating:** 8000 gallon **SCC:** 40301099, **Regulatory Status:** INSIGNIFICANT

Unit Potential Production Basis for Hours

Parameter	Value
Overall tank paint solar absorptance	0.54000
Tank diameter	0.66000
Maximum liquid height in tank	14
Tank shell height	14
Working loss product factor	1.000
Length of tank	14
Atmospheric pressure	15
Monthly net throughput	3,000

Unit Potential Production Basis for Year

Parameter	Value
Overall tank paint solar absorptance	0.54000
Tank diameter	0.66000
Maximum liquid height in tank	14
Tank shell height	14
Working loss product factor	1.000
Length of tank	14
Atmospheric pressure	15
Monthly net throughput	83,820

Chemical	Potential Emissions in Lb/Hour: EPA Tanks Equations Procedures Lb.	Potential Emissions in Ton/Year: EPA Tanks Equations Procedures TPY	Control
Pipeline Liquid (vp 0.5)	1.70	0.01	0.00%

Emission Point: C01

Unit Name: GLYCOL TANK, Sub Unit: GLYCOL TANK_C01 **Agency ID:** C01

Description: MONOETHYLENE GLYCOL, VERTICAL, ABOVE GROUND

Manufacturer: (N/R) **Rating:** 2000 gallon **SCC:** 40301099, **Regulatory Status:** INSIGNIFICANT

Unit Potential Production Basis for Hours

Parameter	Value
Overall tank paint solar absorptance	0.17000
Tank diameter	8.500
Maximum liquid height in tank	5.000
Tank shell height	5.000
Working loss product factor	1.000
Length of tank	5.000
Atmospheric pressure	15
Monthly net throughput	2,000

Unit Potential Production Basis for Year

Parameter	Value
Overall tank paint solar absorptance	0.17000
Tank diameter	8.500
Maximum liquid height in tank	5.000
Tank shell height	5.000
Working loss product factor	1.000
Length of tank	5.000
Atmospheric pressure	15
Monthly net throughput	2,000

Chemical	Potential Emissions in Lb/Hour: EPA Tanks Equations Procedures Lb.	Potential Emissions in Ton/Year: EPA Tanks Equations Procedures TPY	Control
Ethylene Glycol	0.0018	0.0000	0.00%

Area: 08 **State:** West Virginia

Equipment Category: TANK

Emission Point: C02

Unit Name: WATER MIXTURE TANK, Sub Unit: WATER MIXTURE TANK_C02 **Agency ID:** C02

Description: VERTICAL, ABOVE GROUND

Manufacturer: (N/R) **Rating:** 2000 gallon **SCC:** 40301099, **Regulatory Status:** INSIGNIFICANT

Unit Potential Production Basis for Hours

Parameter	Value
Overall tank paint solar absorptance	0.17000
Tank diameter	8.500
Maximum liquid height in tank	5.000
Tank shell height	5.000
Working loss product factor	1.000
Length of tank	5.000
Atmospheric pressure	15
Monthly net throughput	2,000

Unit Potential Production Basis for Year

Parameter	Value
Overall tank paint solar absorptance	0.17000
Tank diameter	8.500
Maximum liquid height in tank	5.000
Tank shell height	5.000
Working loss product factor	1.000
Length of tank	5.000
Atmospheric pressure	15
Monthly net throughput	2,000

Chemical	Potential Emissions in Lb/Hour: EPA Tanks Equations Procedures Lb.	Potential Emissions in Ton/Year: EPA Tanks Equations Procedures TPY	Control
Ethylene Glycol	0.0018	0.0000	0.00%

Emission Point: C03

Unit Name: WATER MIXTURE TANK, Sub Unit: WATER MIXTURE TANK_C03 **Agency ID:** C03

Description: VERTICAL, ABOVE GROUND

Manufacturer: (N/R) **Rating:** 1000 gallon **SCC:** 40301099, **Regulatory Status:** INSIGNIFICANT

Unit Potential Production Basis for Hours

Parameter	Value
Overall tank paint solar absorptance	0.54000
Tank diameter	3.000
Maximum liquid height in tank	20
Tank shell height	20
Working loss product factor	1.000
Length of tank	20
Atmospheric pressure	15
Monthly net throughput	1,000

Unit Potential Production Basis for Year

Parameter	Value
Overall tank paint solar absorptance	0.54000
Tank diameter	3.000
Maximum liquid height in tank	20
Tank shell height	20
Working loss product factor	1.000
Length of tank	20
Atmospheric pressure	15
Monthly net throughput	1,000

Chemical	Potential Emissions in Lb/Hour: EPA Tanks Equations Procedures Lb.	Potential Emissions in Ton/Year: EPA Tanks Equations Procedures TPY	Control
Ethylene Glycol	0.0012	0.0000	0.00%