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January 6, 2017

VIA EMAIL AND U.S. MAIL

Ms. Sara Rosiek
Director
Office of Planning, Zoning and Community Development
Fourth Floor Courthouse
61 East Main Street
Uniontown, PA 15401

Re: Laurel Mountain Midstream Operating, LLC
Springhill Compressor Station
ZHB 10-20R

Dear Ms. Rosiek:

On behalf of Laurel Mountain Midstream Operating, LLC, please find enclosed for filing the quarterly records required pursuant to condition number 4 of the above-captioned approval that were due on December 31, 2016. I apologize for missing the due date by one week as I was out of the office for the holidays.

Additionally, we have reviewed Mr. Rosenberg's December 22, 2016 letter to you wherein he sets forth a number of personal opinions and erroneous conclusions concerning the adequacy of Laurel Mountain's last quarterly report and compliance with the conditions of approval. We do not believe it is necessary (or possible) to respond to every perceived deficiency in Mr. Rosenberg's letter. However, in an effort to provide some clarity and avoid similar objections in the future, this letter briefly responds to a number of Mr. Rosenberg's comments.

Laurel Mountain has installed the sound wall as required by condition number 2. An inspector from your office conducted a site visit on October 7, 2016 to confirm that this condition has been satisfied. Laurel Mountain is currently working on satisfying the remaining conditions, including the Emergency Response Plan/Evacuation Plan as required by condition number 5, which is not due until February 5, 2017.

With regard to condition number 4, Mr. Rosenberg opines that Laurel Mountain is required to submit a DVD of video files of FLIR imagery. The specific condition at issue states: "*Copies* of any and all LDAR 'FLIR' (or equivalent technology) imaging taken pursuant to the BAQ-GPA/GP-5 section 'REQUIREMENTS FOR EQUIPMENT LEAKS' for the same reporting period." Laurel Mountain's Pennsylvania Department of Protection ("DEP") GP5

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permit does not require Laurel Mountain to record or submit FLIR video imagery. Please refer to SECTION H: REQUIREMENTS FOR EQUIPMENT LEAKS of the GP5 permit for further clarification on the actual requirements. Laurel Mountain does not have, and is not required to have FLIR video imagery.

Mr. Rosenberg further opines that the quarterly report contains data from the wrong period and that the throughput numbers are implausibly identical from one month to the next. The numbers are identical because the report is actual 2015 annual data that is divided by 12, which is the method that is accepted by DEP.

It is important to note that all of the information that Laurel Mountain submits to the County is the same information that Laurel Mountain submits to DEP to demonstrate compliance with its air quality permit.

If you have any questions or comments, please let me know at your earliest convenience.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Shawn N. Gallagher', with a long horizontal flourish extending to the right.

Shawn N. Gallagher

Encls.

cc: Wendy O'Brien
Laurel Mountain Midstream Operating, LLC

LMM Springhill Station Volumes 4Q 2016

Date	Station Outlet Volume (mscf)	Fuel (mscf)	Gas Loss (mscf) (compressor and filter vessel blowdowns)	Station Inlet Volume (mscf)
10/1/2016	22859.8	478.5		23338.3
10/2/2016	22792.4	477.9		23270.2
10/3/2016	22793.9	466.9		23260.8
10/4/2016	23042.5	466.5		23509.0
10/5/2016	22625.6	481.4		23107.0
10/6/2016	22514.7	480.4		22995.1
10/7/2016	22447.1	474.9		22922.0
10/8/2016	22333.6	476.0		22809.6
10/9/2016	22299.6	480.4		22780.0
10/10/2016	21879.7	438.1		22317.7
10/11/2016	22144.7	449.8		22594.4
10/12/2016	22176.6	469.0		22645.7
10/13/2016	22154.0	468.2		22622.2
10/14/2016	22063.9	457.3		22521.2
10/15/2016	22041.0	468.2		22509.2
10/16/2016	21993.8	474.3		22468.1
10/17/2016	21913.2	475.7		22388.8
10/18/2016	21541.1	470.9		22012.0
10/19/2016	21966.3	469.9		22436.1
10/20/2016	15093.6	345.8		15439.4
10/21/2016	21012.1	435.5		21447.5
10/22/2016	22241.6	481.8		22723.3
10/23/2016	21701.5	476.4		22177.9
10/24/2016	22034.5	477.7		22512.2
10/25/2016	22058.1	457.6		22515.7
10/26/2016	22545.7	472.0		23017.8
10/27/2016	22519.7	471.6		22991.3
10/28/2016	21521.0	452.6		21973.7
10/29/2016	22853.2	480.8		23334.0
10/30/2016	22273.3	477.6		22750.9
10/31/2016	22261.5	464.4	130	22855.9
11/1/2016	22159.5	462.2		22621.7
11/2/2016	22456.6	470.4		22927.0
11/3/2016	22350.6	472.1		22822.8
11/4/2016	22249.1	486.9		22736.0
11/5/2016	22368.6	479.6		22848.2
11/6/2016	22298.7	469.8		22768.6
11/7/2016	22217.9	471.4		22689.4
11/8/2016	22053.1	451.9		22505.0
11/9/2016	22340.7	474.7		22815.4
11/10/2016	22292.3	483.5		22775.8
11/11/2016	22194.2	472.2		22666.4
11/12/2016	22160.9	475.5		22636.4
11/13/2016	22064.0	479.1		22543.1
11/14/2016	21853.4	471.7		22325.0
11/15/2016	22012.8	474.6		22487.4

LMM Springhill Station Volumes 4Q 2016

Date	Station Outlet Volume (mscf)	Fuel (mscf)	Gas Loss (mscf) (compressor and filter vessel blowdowns)	Station Inlet Volume (mscf)
11/16/2016	22055.8	472.5		22528.3
11/17/2016	21991.1	479.6		22470.7
11/18/2016	21953.6	478.4		22432.0
11/19/2016	21943.9	480.6		22424.6
11/20/2016	21881.4	488.3		22369.8
11/21/2016	21813.5	464.8		22278.4
11/22/2016	21858.3	459.9		22318.2
11/23/2016	21039.4	451.1		21490.5
11/24/2016	20040.7	449.3		20490.0
11/25/2016	21815.4	474.8		22290.2
11/26/2016	21592.0	455.9		22047.9
11/27/2016	21815.8	448.4		22264.2
11/28/2016	21943.1	448.2		22391.3
11/29/2016	21872.7	461.7		22334.3
11/30/2016	21157.6	467.4	25	21650.0
12/1/2016	21342.4	476.5		21818.9
12/2/2016	20368.2	446.1		20814.3
12/3/2016	22168.0	482.7		22650.7
12/4/2016	21837.1	473.7		22310.8
12/5/2016	21861.1	470.9		22332.0
12/6/2016	21922.6	461.1		22383.7
12/7/2016	21887.8	456.3		22344.1
12/8/2016	21955.5	473.8		22429.4
12/9/2016	21412.9	464.5		21877.4
12/10/2016	21882.3	456.8		22339.2
12/11/2016	21947.3	456.3		22403.6
12/12/2016	21808.0	466.4		22274.4
12/13/2016	21825.8	471.5		22297.3
12/14/2016	21773.2	463.2		22236.5
12/15/2016	21745.4	478.4		22223.9
12/16/2016	21648.1	481.5		22129.6
12/17/2016	20987.0	461.6		21448.6
12/18/2016	20923.3	460.8		21384.1
12/19/2016	20787.1	469.2		21256.3
12/20/2016	21506.0	457.6		21963.5
12/21/2016	21655.1	460.9		22116.1
12/22/2016	14546.8	319.1		14865.9
12/23/2016	18774.9	379.6		19154.5
12/24/2016	21386.8	457.8		21844.6
12/25/2016	21802.0	473.4		22275.4
12/26/2016	21396.9	470.3		21867.2
12/27/2016	21919.8	478.2		22398.1
12/28/2016	21991.7	483.5		22475.2
12/29/2016	21950.1	477.4		22427.5
12/30/2016	21779.6	483.8		22263.3
12/31/2016	21584.3	476.2	475	22535.5

**Laurel Mountain Midstream Operating, LLC
2015 Emissions Inventory**

SAMPLE EMISSION CALCULATIONS

The general equation for emission estimation is:

$$E = A \times EF \times (1-ER/100)$$

where:

E = emissions,

A = activity rate,

EF = emission factor, and

ER = overall emission reduction efficiency, %.

Engine specific stack test results and dehydrator-specific modeling results (GRI-GLYCalc 4.0) were used where available; otherwise, engineering estimates (blowdown, pneumatics, compressor rod packing), vendor data, or EPA AP-42 emission factors were used, as applicable.

Engine Emissions

The CO emissions from a **1,380 bhp CAT G3516B Compressor Engine** (e.g., Cantaral CS, CE-04) were determined as follows:

$$6,765 \text{ hrs/yr} \times 0.124 \text{ lb/hr}^* \times 1 \text{ ton}/2,000 \text{ lb} = 0.42 \text{ tpy}$$

(*EF from Stack Test, downstream of air pollution control)

Reboiler Emissions

The NO_x emissions from a **2.67 MMBtu/hr Reboiler** (e.g., Herminie CS, BLR-02E) were determined as follows:

$$8,720 \text{ hrs/yr} \times 2.67 \text{ MMBtu/hr} \times 100 \text{ lb/MMscf}^* \times 1 \text{ scf}/1,020 \text{ Btu} \times 1 \text{ ton}/2,000 \text{ lb} = 1.14 \text{ tpy}$$

(*EF from AP-42 Table 1.4-1, 07/98, Uncontrolled)

Produced Water Storage Tank Emissions

The VOC emissions from **Two (2) 475 bbl Produced Water Storage Tanks** (e.g., Shamrock CS, TK-01 and -02) were determined as follows:

$$15,840 \text{ bbl/yr} \times 0.0390 \text{ lb/bbl}^* \times 1 \text{ ton}/2,000 \text{ lb} = 0.31 \text{ tpy}$$

(*EF from EPA-450/3-85-001a – “VOC Emissions Wastewater Systems”)

Glycol Dehydrator Still Vent/Flash Tank Vent Emissions

The VOC emissions from a **6 MMscfd Dehydrator** (e.g., Joseph CS, DEHY-01) were determined as follows:

$$4,127 \text{ hrs/yr} \times 0.21 \text{ lb/hr}^* \times 1 \text{ ton}/2,000 \text{ lb} = 0.43 \text{ tpy}$$

(*EF from GRI-GLYCalc 4.0 w/ actual operating parameters)

Compressor Blowdown Emissions

The VOC emissions from **Blowdown (BD)** of a **1,340 bhp Compressor** (e.g., Springhill CS, CE-02) were determined as follows:

$$55 \text{ BDs/yr} \times 8,335 \text{ scf/BD} \times 90.64 \text{ lb/MMscf}^* \times 1\text{MM}/1,000,000 \times 1 \text{ ton}/2,000 \text{ lb} = 0.02 \text{ tpy}$$

(*EF from Extended Gas Analysis)

Pigging Emissions

The VOC emissions from **Pigging Operations** (e.g., Clyde North CS, PIG) were determined as follows:

$$12 \text{ Pig Ops/yr} \times 58 \text{ scf/Pig Op} \times 65.67 \text{ lb/MMscf}^* \times 1\text{MM}/1,000,000 \times 1 \text{ ton}/2,000 \text{ lb} = 0.00002 \text{ tpy}$$

(*EF from Extended Gas Analysis)

Pneumatic Devices Emissions

The VOC emissions from **Pneumatic Devices** (e.g., Salem CS, PNE) were determined as follows:

$$2 \text{ low bleed devices} \times 1.39 \text{ scf/hr/device}^* \times 8,760 \text{ hr/yr} \times 128.43 \text{ lb/MMscf}^{**} \times 1\text{MM}/1,000,000 \times 1 \text{ ton}/2,000 \text{ lb} = 0.00156 \text{ tpy}$$
$$2 \text{ high bleed devices} \times 37.30 \text{ scf/hr/device}^* \times 8,760 \text{ hr/yr} \times 128.43 \text{ lb/MMscf}^{**} \times 1\text{MM}/1,000,000 \times 1 \text{ ton}/2,000 \text{ lb} = 0.042 \text{ tpy}$$
$$35 \text{ intermittent bleed devices} \times 13.50 \text{ scf/hr/device}^* \times 8,760 \text{ hr/yr} \times 128.43 \text{ lb/MMscf}^{**} \times 1\text{MM}/1,000,000 \times 1 \text{ ton}/2,000 \text{ lb} = 0.266 \text{ tpy}$$

(*EF from 40CFR98 Subpart W, **EF from Extended Gas Analysis)

$$\text{Total VOC emissions} = 0.00156 \text{ tpy} + 0.042 \text{ tpy} + 0.266 \text{ tpy} = 0.31 \text{ tpy}$$

Truck Loadout Emissions

The VOC emissions from **Truck Loadout Operations** (e.g., Lake Wilhelm, TLO) were determined as follows:

$$150 \text{ bbl/yr} \times 1.59 \text{ lb/Mgal}^* \times \text{Mgal}/1,000 \text{ gal} \times 42 \text{ gal/bbl} \times 1 \text{ ton}/2,000 \text{ lb} = 0.005 \text{ tpy}$$

(*EF from EPA AP-42, Section 5.2 Transportation And Marketing Of Petroleum Liquids)

Compressor Rod Packing and Crankcase Emissions

The VOC emissions from Compressor Rod Packing and Engine Crankcase (e.g., Townville CS, CRP and ECC) were determined as follows:

Rod Packing:

$$15 \text{ scf/cyl/hr}^* \times 4 \text{ cyl/comp} \times 15\% \text{ contingency} \times 8,509 \text{ hr/yr} \times 1,854.93 \text{ lb/MMscf}^{**} \times 1\text{MM}/1,000,000 \times 1 \text{ ton}/2,000 \text{ lb} = 0.54 \text{ tpy}$$

(*Rod packing leak rate from equipment manufacturer, **EF from Extended Gas Analysis)

Crankcase:

$$1.25 \text{ scf/bhp-hr} \times 1,340 \text{ bhp} \times 8,509 \text{ hr/yr} \times 14.09 \text{ lb/MMscf}^{**} \times 1\text{MM}/1,000,000 \times 1 \text{ ton}/2,000 \text{ lb} = 0.10 \text{ tpy}$$

$$\text{Total VOC emissions} = 0.54 \text{ tpy} + 0.10 \text{ tpy} = 0.64 \text{ tpy}$$

Process Piping Fugitive Emissions

The VOC emissions from Process Piping Fugitives (e.g., Union City CS, FUG – Valves, Connectors, etc.) were determined as follows:

- $1,474 \text{ connectors}^* \times 2.0\text{E-}04 \text{ kg/hr/connector} \times 2.204 \text{ lb/kg} \times 8,760 \text{ hr/yr} \times 3.44 \text{ lb VOC}/100 \text{ lb VOC}^{**} \times 1 \text{ ton}/2,000 \text{ lb} = 0.10 \text{ tpy}$
- $240 \text{ flanges}^* \times 3.9\text{E-}04 \text{ kg/hr/flange} \times 2.204 \text{ lb/kg} \times 8,760 \text{ hr/yr} \times 3.44 \text{ lb VOC}/100 \text{ lb VOC}^{**} \times 1 \text{ ton}/2,000 \text{ lb} = 0.03 \text{ tpy}$
- $28 \text{ Open Ended Lines (OEL)}^* \times 2.0\text{E-}03 \text{ kg/hr/OEL} \times 2.204 \text{ lb/kg} \times 8,760 \text{ hr/yr} \times 3.44 \text{ lb VOC}/100 \text{ lb VOC}^{**} \times 1 \text{ ton}/2,000 \text{ lb} = 0.02 \text{ tpy}$
- $514 \text{ valves}^* \times 4.5\text{E-}03 \text{ kg/hr/connector} \times 2.204 \text{ lb/kg} \times 8,760 \text{ hr/yr} \times 3.44 \text{ lb VOC}/100 \text{ lb VOC}^{**} \times 1 \text{ ton}/2,000 \text{ lb} = 0.77 \text{ tpy}$
- $60 \text{ others}^* \times 8.8\text{E-}03 \text{ kg/hr/other} \times 2.204 \text{ lb/kg} \times 8,760 \text{ hr/yr} \times 3.44 \text{ lb VOC}/100 \text{ lb VOC}^{**} \times 1 \text{ ton}/2,000 \text{ lb} = 0.18 \text{ tpy}$

(*Component count from GRI-HAPCalc for compressor stations, **EF from Extended Gas Analysis)

$$\text{Total VOC emissions} = 0.10 \text{ tpy} + 0.03 \text{ tpy} + 0.02 \text{ tpy} + 0.77 \text{ tpy} + 0.18 \text{ tpy} = 1.09 \text{ tpy}$$

Potentially Applicable
AP-42 and GHG EMISSION FACTORS
(Preferentially use test data or vendor data where available)

Pollutant		GAS-FIRED ENGINE			GAS-FIRED TURBINE		
		AP-42 Table 3.2-1; 3.2-2; 3.2-3 07/00			AP-42 Table 3.1-1; 3.1-2a; 3.1-3 04/00		
		2SLB lb/MMBtu	4SLB lb/MMBtu	4SRB lb/MMBtu	Uncontrolled lb/MMBtu	Water Injection lb/MMBtu	Lean Pre-Mix# lb/MMBtu
CRITERIA	NOX (≥ 90% Load)	3.17E+00	4.08E+00	2.21E+00	3.20E-01	1.30E-01	9.90E-02
	CO (≥ 90% Load)	3.86E-01	3.17E-01	3.72E+00	8.20E-02	3.00E-02	1.50E-02
	THC (TOC)	1.64E+00	1.47E+00	3.58E-01	1.10E-02	1.10E-02	1.10E-02
	NMHC (THC-CH4)	1.90E-01	2.20E-01	1.28E-01	2.40E-03	2.40E-03	2.40E-03
	NMNEHC (NMHC-C2H6)	1.19E-01	1.15E-01	5.76E-02	2.10E-03	2.10E-03	2.10E-03
	VOC	1.20E-01	1.18E-01	2.96E-02	2.10E-03	2.10E-03	2.10E-03
	SO2*** (2,000 gr-S/MMscf)	5.88E-04	5.88E-04	5.88E-04	3.40E-03	3.40E-03	3.40E-03
	PM10/2.5 (Filter+Cond)	4.83E-02	9.99E-03	1.94E-02	6.60E-03	6.60E-03	6.60E-03
HAPs	Acetaldehyde	7.76E-03	8.36E-03	2.79E-03	4.00E-05	4.00E-05	4.00E-05
	Acrolein	7.78E-03	5.14E-03	2.63E-03	6.40E-06	6.40E-06	6.40E-06
	Benzene	1.94E-03	4.40E-04	1.59E-03	1.20E-05	1.20E-05	9.10E-07
	Ethylbenzene	1.08E-04	3.97E-05	2.48E-05	3.20E-05	3.20E-05	3.20E-05
	Formaldehyde (HCHO)	5.52E-02	5.28E-02	2.05E-02	7.10E-04	7.10E-04	2.00E-05
	n-Hexane	4.45E-04	1.11E-03	—	—	—	—
	Methanol (MeOH)	2.48E-03	2.50E-03	3.08E-03	—	—	—
	Toluene	9.63E-04	4.08E-04	5.59E-04	1.30E-04	1.30E-04	1.30E-04
	TMP, 2,2,4- (i-Octane)	8.46E-04	2.50E-04	—	—	—	—
	Xylenes	2.68E-04	1.84E-04	1.95E-04	6.40E-05	6.40E-05	6.40E-05
	Other HAPs	1.72E-02	1.44E-02	6.36E-03	5.97E-05	1.06E-04	1.06E-04
GHG	CO2**** (GWP=1)	1.17E+02	1.17E+02	1.17E+02	1.17E+02	1.17E+02	1.17E+02
	CH4 (GWP=25)	1.45E+00	1.25E+00	2.30E-01	8.60E-03	8.60E-03	8.60E-03
	N2O (GWP=298)	2.20E-04	2.20E-04	2.20E-04	3.00E-03	3.00E-03	3.00E-03
	CO2e	1.53E+02	1.48E+02	1.23E+02	1.18E+02	1.18E+02	1.18E+02

(#Lean Pre-Mix - aka: Dry Low Emissions (DLE or DLN) and SoLoNox)

Pollutant		GAS-FIRED EXTERNAL COMBUSTION			FLARE	DIESEL ENGINE
		AP-42 Table 1.4-1; 1.4-2; 1.4-3 (<100 MMBtu/hr) 07/98			13.5-1 04/15	3.3-1; 3.3-2 10/96
		Uncontrolled lb/MMBtu	LoNox Burners lb/MMBtu	Flue Gas Recirc lb/MMBtu	Combustion lb/MMBtu	Uncontrolled lb/MMBtu
CRITERIA	NOX	9.80E-02	4.90E-02	3.14E-02	6.80E-02	4.41E+00
	CO	8.24E-02	8.24E-02	8.24E-02	3.10E-01	9.50E-01
	THC (TOC)	1.08E-02	1.08E-02	1.08E-02	—	3.60E-01
	NMHC (THC-CH4)	8.53E-03	8.53E-03	8.53E-03	≥98%	3.53E-01
	NMNEHC (NMHC-C2H6)	5.49E-03	5.49E-03	5.49E-03	Destruction and Removal Efficiency	3.50E-01
	VOC (NMNEHC+HCHO)	5.56E-03	5.56E-03	5.56E-03	—	3.60E-01
	SO2 (2,000 gr-S/MMscf)	5.88E-04	5.88E-04	5.88E-04	5.88E-04	2.90E-01
	PM10/2.5 (Filter+Condense)	7.45E-03	7.45E-03	7.45E-03	7.45E-03	3.10E-01
HAPs	Benzene	2.06E-06	2.06E-06	2.06E-06	—	9.33E-04
	Ethylbenzene	—	—	—	—	—
	HCHO (Formaldehyde)	7.35E-05	7.35E-05	7.35E-05	—	1.18E-03
	n-Hexane	1.76E-03	1.76E-03	1.76E-03	—	—
	Methanol (MeOH)	—	—	—	—	—
	Toluene	3.33E-06	3.33E-06	3.33E-06	—	4.09E-04
	2,2,4-TMP (i-Octane)	—	—	—	—	—
	Xylenes	—	—	—	—	2.85E-04
Other HAPs	1.86E-06	1.86E-06	1.86E-06	—	1.05E-03	
GHG	CO2 (GWP=1)	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.64E+02
	CH4 (GWP=25)	2.25E-03	2.25E-03	2.25E-03	98% DRE	6.61E-03
	N2O (GWP=298)	2.16E-03	6.27E-04	6.27E-04	2.16E-03	1.32E-03
	CO2e	1.18E+02	1.18E+02	1.18E+02	1.18E+02	1.65E+02

40 CFR 98 - DEFAULT EMISSION FACTORS				
Fuel Type	Table C-1 to Subpart C of Part 98		Table C-2 to Subpart C of Part 98	
	Default HHV	Carbon Dioxide lb CO2/MMBtu	Methane lb CH4/MMBtu	Nitrous Oxide lb N2O/MMBtu
Fuel Oil No. 2 (Diesel)	0.138 MMBtu/gal	163.05	6.61E-03	1.32E-03
Propane	0.091 MMBtu/gal	138.60	6.61E-03	1.32E-03
Natural Gas	1.026 Btu/scf	116.98	2.20E-03	2.20E-04

Conversion Factors
<http://www.onlineconversion.com/>

1.0 lb =	453.592 g
1.0 kg =	2.205 lb
1.0 hp =	2,544.433 Btu/hr
1.0 hp =	745.700 Watt
1.0 kW =	3,412.142 Btu/hr
1.0 kW-hr =	1,340 hp-hr
1.0 cf =	7.481 gal
1.0 gal H2O =	8.338 lb
1.0 cf H2O =	62.371 gal
1.0 m =	3.281 ft
1.0 km =	0.621 mi
1.0 acre =	43,560.174 ft ²
1.0 °F =	(°C*9/5)+32
1.0 °R =	°F+459.67
1.0 % =	10,000 ppm
UGC (stp) =	379.48 scf/lb-mol

Global Warming Potential (100 Yr) (GWP)		
Table A-1 to Subpart A of Part 98		
CO2	CH4*	N2O#
1.00	25.00	298.00

#Revised by EPA on 11/29/13

*Converted Ext Comb Emission Factors to lb/MMBtu by dividing lb/MMscf by AP-42 default HHV of 1,020 Btu/scf.

**Converted GHG Emission Factors to lb/MMBtu by multiplying kg/MMBtu by 2.2046 lb/kg.

***Assumes 100% conversion of fuel sulfur to SOX (2,000 gr/MMscf).

****Assumes 99.5% conversion of fuel carbon to CO2 for natural gas.

APMS Source ID - Source Name	Heaters/Reboilers Hours	Total MMBtu/hr	Number of Units
201 - HEATERS/REBOILERS	8,688.00	0.25	1
201 - HEATERS/REBOILERS	3,672.00	0.75	1

APMS Source ID - Source Name	Unit Type	Number of Units	Total Hours Operated (hrs)	Controlled (Y/N)	Control Type	Total Hours of Controlled Operation (hrs)
301 - TANKS/VESSELS	Tank	4	8,760	N		

APMS Source ID - Source Name	Gas Processed (MM)	Rehydration Unit Being Tabled (MMSCFD)	Average Operating Hours (hrs)	Average Flow Rate(gpm)	Controlled (Y/N)	Control Type	Hours of Controlled Operation (hrs)
401 - DEHY 1 (25 MMSCFD)	4,723,840	25	8,688	1.33	N		
402 - DEHY 2 (40 MMSCFD)	3,194,460	40	3,672	2.47	N		

APMS Source ID - Source Name	Gas Processed (MM)	Condensate Processed (MM)	Unit Type	Number of Devices (#)	Hours Operated (hrs)	Controlled (Y/N)	Control Type	Total Hours of Controlled Operation (hrs)
501 - PNEUMATIC DEVICES	0	0	Controllers	73	8,760	N		

APMS Source ID - Source Name	Number of Blowdowns (#)	Reason of Blowdown	Average Blowdown Rate (gph)	Average Blowdown Length (hrs)	Controlled (Y/N)	Control Type	Total Hours of Controlled Operation (hrs)
601 - VENTING/BLOWDOWNS	40	Startup, Shutdown, and Maintenance (Electric En	7,485	1.00	N		
601 - VENTING/BLOWDOWNS	20	Startup, Shutdown, and Maintenance	8,328	1.00	N		
601 - VENTING/BLOWDOWNS	25	Startup, Shutdown, and Maintenance	8,328	1.00	N		
601 - VENTING/BLOWDOWNS	25	Startup, Shutdown, and Maintenance	8,577	1.00	N		
601 - VENTING/BLOWDOWNS	26	Startup, Shutdown, and Maintenance	8,577	1.00	N		

Component Type	Fluid	Component Count	Operating (days/year)	See Emission Calculations
Connector	Gas	1,474	365	See DEP Calculations
Flanges	Gas	240	365	See DEP Calculations
Open Ended Lin	Gas	28	365	See DEP Calculations
Valves	Gas	514	365	See DEP Calculations
Other	Gas	60	365	See DEP Calculations
				See DEP Calculations

Input Form For: 2015	Tax ID/Plant Code: 26-4578063-7
LAUREL MTN MIDSTREAM OPR LLC/SPRINGHILL COMP STA	PF ID: 719219

Region: SOUTHWESTERN **County:** Fayette **Municipality:** Springhill Twp
SIC: 1389 - Mining - Oil And Gas Field Services, Nec
NAICS: 211111 - Crude Petroleum and Natural Gas Extraction

Contact	Name	Address	Telephone
FIRM	D Baker	Park Place Corp Ctr 2, 2000 Commerce Dr, Pittsburgh, PA - 15275	412-787-4296
LOCAD		585 Hope Hollow Rd, Lake Lynn, PA - 15451	--
CONS	W Konkel	864 Windsor Ct, Santa Barbara, CA - 93111	805-964-7597
MAILA		2000 Commerce Dr, Park Pl Corp Ctr 2, Pittsburgh, PA - 15275	--
PRMT	D Baker	2000 Commerce Dr, Park Place Corp 2, Pittsburgh, PA - 15275	412-787-4296
REOFF	D Haefelin	Park Place Corp Ctr 2, 2000 Commerce Dr, Pittsburgh, PA - 15275	--

FACILITY LOCATION INFORMATION

Map: - **Latitude:** 39 deg, 45 min, 06.04 sec N **UTM Coordinates:** North: 4400.59
Elevation(Ft): **Longitude:** -79 deg, 52 min, 34.36 sec W **Zone:** 17 **East:** 596.28

**FACILITY POLLUTANT SUMMARY
(SUM OF INDIVIDUAL AND MISCELLANEOUS SOURCES)
EMISSION ESTIMATES (0.0 TONS/YEAR)**

Ammonia	0.0000
CO	9.6249
Carbon Dioxide	9,648.9153
Lead	0.0000
Methane	511.4542
NOX	18.2223
Nitrous Oxide	0.0230
PM-CON	0.8081
PM10	0.8194
PM2.5	0.8194
SOX	0.0060
VOC	13.7154
2,2,4-Trimethylpentane	0.0161
Acetaldehyde	0.5389
Benzene	0.0281
Ethyl Benzene	0.0026
Formaldehyde	5.9122
Hexane	0.0759
Polycyclic Organic Matter	0.0223
Toluene	0.0263
Xylenes (Isomers And Mixture)	0.0119

FUEL USAGE SUMMARY

Fuel Type	Total Use
Natural Gas	164177.11 MMBTU

Input Form For: 2015	Tax ID/Plant Code: 26-4578063-7
LAUREL MTN MIDSTREAM OPR LLC/SPRINGHILL COMP STA	PF ID: 719219

SUB FACILITIES INCLUDED

Type	SF	Name
FML	FML01	Natural Gas Line
PRO	101	Cat G3616le Eng2 (1340 Bhp)
PRO	102	Cat G3616le Eng 3 (1340bhp)
PRO	103	Cat G3516b Eng 3 (1380 Bhp)
PRO	104	Cat G3516b Eng 4 (1380 Bhp)
PRO	201	Heaters/Reboilers
PRO	301	Tanks/Vessels
PRO	401	Dehy 1 (25 Mmscfd)
PRO	402	Dehy 2 (40 Mmscfd)
PRO	501	Pneumatic Devices
PRO	601	Venting/Blowdowns
PRO	701	Fugitives
PRO	801	Pigging Operations

Fuel Location: FML01	Natural Gas Line	SF Type: FML
Date Installed:	Fuel Stored: Natural Gas	Capacity:

Sources fed in 2015:

101	CAT G3616LE ENG2 (1340 BHP)
102	CAT G3616LE ENG 3 (1340BHP)
103	CAT G3516B ENG 3 (1380 BHP)
104	CAT G3516B ENG 4 (1380 BHP)

2015 Fuel Tests:

Date Collected: 06/11/2015 **% Ash:** 0.00 **% Sulfur:** 0.00 **BTU(Lb/Gal/CuFt):** 1020

Input Form For: 2015 Tax ID/Plant Code: 26-4578063-7
 LAUREL MTN MIDSTREAM OPR LLC/SPRINGHILL COMP STA PF ID: 719219

Sub Facility: 101 Cat G3616le Eng2 (1340 Bhp)

SF Type: PRO

Material:

Fuel: Natural Gas

Fuel Data Based on FML: FML01

SCC: 20200254 - Internal Comb Engines; Industrial; Natural Gas; Lean Burn 4-Cycle Burned

Monthly Throughputs in MMBTU	
SCHEDULE 1	JAN: 7,577.36
Date Effective: 01/01/2015	FEB: 7,577.36
Date End: 06/30/2015	MAR: 7,577.36
Total Days: 181	APR: 7,577.36
Total Hours: 4100	MAY: 7,577.36
Days Per Week: 7	JUN: 7,577.36

Actual Emission Estimates (Tons/Yr) For Emission Fees And Emission Statements:

Pollutant	CAS	Emission Amt (0.0 TPY)	Calculation Method	Use Factor
Ammonia	7664417	0.0000	NO FACTOR AVAILABLE	
CO	630080	8.1797	CO. STACK TEST APPROVED BY DEP	
* Carbon Dioxide	124389	2,497.2060	AP-42 LATEST AVAILABLE	
Lead	7439921	0.0000	NO FACTOR AVAILABLE	
* Methane	74828	28.3773	AP-42 LATEST AVAILABLE	
NOX	10102440	8.0567	CO. STACK TEST APPROVED BY DEP	
* Nitrous Oxide	10024972	0.0050	AP-42 LATEST AVAILABLE	
PM-CON		0.2250	AP-42 LATEST AVAILABLE	
* PM10		0.2267	AP-42 LATEST AVAILABLE	
PM2.5		0.2267	AP-42 LATEST AVAILABLE	
SOX	7446095	0.0012	AP-42 LATEST AVAILABLE	
VOC		5.6787	SEE COMMENT	
Formaldehyde	50000	2.6856	SEE COMMENT	

* SCC Factor Exists

Input Form For: 2015 Tax ID/Plant Code: 26-4578063-7
 LAUREL MTN MIDSTREAM OPR LLC/SPRINGHILL COMP STA PF ID: 719219

Sub Facility: 102 Cat G3616le Eng 3 (1340bhp)

SF Type: PRO

Material:

Fuel: Natural Gas

Fuel Data Based on FML: FML01

SCC: 20200254 - Internal Comb Engines; Industrial; Natural Gas; Lean Burn 4-Cycle Burned

Monthly Throughputs in MMBTU	
SCHEDULE 1	JAN: 8,017.00
Date Effective: 01/01/2015	FEB: 8,017.00
Date End: 06/30/2015	MAR: 8,017.00
Total Days: 181	APR: 8,017.00
Total Hours: 4338	MAY: 8,017.00
Days Per Week: 7	JUN: 8,017.00

Actual Emission Estimates (Tons/Yr) For Emission Fees And Emission Statements:

Pollutant	CAS	Emission Amt (0.0 TPY)	Calculation Method	Use Factor
Ammonia	7664417	0.0000	NO FACTOR AVAILABLE	
CO	630080	0.3471	CO. STACK TEST APPROVED BY DEP	
* Carbon Dioxide	124389	2,642.2102	AP-42 LATEST AVAILABLE	
Lead	7439921	0.0000	NO FACTOR AVAILABLE	
* Methane	74828	30.0251	AP-42 LATEST AVAILABLE	
NOX	10102440	6.3772	CO. STACK TEST APPROVED BY DEP	
* Nitrous Oxide	10024972	0.0053	AP-42 LATEST AVAILABLE	
PM-CON		0.2380	AP-42 LATEST AVAILABLE	
* PM10		0.2399	AP-42 LATEST AVAILABLE	
PM2.5		0.2399	AP-42 LATEST AVAILABLE	
SOX	7446095	0.0013	AP-42 LATEST AVAILABLE	
VOC		6.0084	SEE COMMENT	
Formaldehyde	50000	2.8415	SEE COMMENT	

* SCC Factor Exists

Bureau of Air Quality

Emission Inventory Production Report

Input Form For: 2015 Tax ID/Plant Code: 26-4578063-7
 LAUREL MTN MIDSTREAM OPR LLC/SPRINGHILL COMP STA PF ID: 719219

Sub Facility: 103 Cat G3516b Eng 3 (1380 Bhp)

SF Type: PRO

Material:

Fuel: Natural Gas

Fuel Data Based on FML: FML01

SCC: 20200254 - Internal Comb Engines; Industrial; Natural Gas; Lean Burn 4-Cycle Burned

Monthly Throughputs in MMBTU	
SCHEDULE 1	JUL: 4,765.50
Date Effective: 07/01/2015	AUG: 4,765.50
Date End: 12/31/2015	SEP: 4,765.50
Total Days: 184	OCT: 4,765.50
Total Hours: 2504	NOV: 4,765.50
Days Per Week: 7	DEC: 4,765.50

Actual Emission Estimates (Tons/Yr) For Emission Fees And Emission Statements:

Pollutant	CAS	Emission Amt (0.0 TPY)	Calculation Method	Use Factor
Ammonia	7664417	0.0000	NO FACTOR AVAILABLE	
CO	630080	0.1878	CO. STACK TEST APPROVED BY DEP	
* Carbon Dioxide	124389	1,797.7858	SEE COMMENT	
Lead	7439921	0.0000	NO FACTOR AVAILABLE	
* Methane	74828	17.8469	AP-42 LATEST AVAILABLE	
NOX	10102440	1.4898	CO. STACK TEST APPROVED BY DEP	
* Nitrous Oxide	10024972	0.0031	AP-42 LATEST AVAILABLE	
PM-CON		0.1415	AP-42 LATEST AVAILABLE	
* PM10		0.1426	AP-42 LATEST AVAILABLE	
PM2.5		0.1426	AP-42 LATEST AVAILABLE	
SOX	7446095	0.0007	AP-42 LATEST AVAILABLE	
VOC		0.2879	SEE COMMENT	
2,2,4-Trimethylpentane	540841	0.0019	AP-42 LATEST AVAILABLE	
Benzene	71432	0.0033	AP-42 LATEST AVAILABLE	
Ethyl Benzene	100414	0.0003	AP-42 LATEST AVAILABLE	
Formaldehyde	50000	0.1252	CO. STACK TEST APPROVED BY DEP	
Hexane	110543	0.0082	AP-42 LATEST AVAILABLE	
Toluene	108883	0.0030	AP-42 LATEST AVAILABLE	
Xylenes (Isomers And Mixture)	1330207	0.0014	AP-42 LATEST AVAILABLE	

* SCC Factor Exists

Input Form For: 2015	Tax ID/Plant Code: 26-4578063-7
LAUREL MTN MIDSTREAM OPR LLC/SPRINGHILL COMP STA	PF ID: 719219

Sub Facility: 104 Cat G3516b Eng 4 (1380 Bhp)

SF Type: PRO

Material:

Fuel: Natural Gas

Fuel Data Based on FML: FML01

SCC: 20200254 - Internal Comb Engines; Industrial; Natural Gas; Lean Burn 4-Cycle Burned

Monthly Throughputs in MMBTU	
SCHEDULE 1	JUL: 6,181.60
Date Effective: 07/01/2015	AUG: 6,181.60
Date End: 12/31/2015	SEP: 6,181.60
Total Days: 184	OCT: 6,181.60
Total Hours: 3248	NOV: 6,181.60
Days Per Week: 7	DEC: 6,181.60

Actual Emission Estimates (Tons/Yr) For Emission Fees And Emission Statements:

Pollutant	CAS	Emission Amt (0.0 TPY)	Calculation Method	Use Factor
Ammonia	7664417	0.0000	NO FACTOR AVAILABLE	
CO	630080	0.2598	CO. STACK TEST APPROVED BY DEP	
* Carbon Dioxide	124389	2,332.0137	SEE COMMENT	
Lead	7439921	0.0000	NO FACTOR AVAILABLE	
* Methane	74828	23.1503	AP-42 LATEST AVAILABLE	
NOX	10102440	1.9650	CO. STACK TEST APPROVED BY DEP	
* Nitrous Oxide	10024972	0.0041	AP-42 LATEST AVAILABLE	
PM-CON		0.1835	AP-42 LATEST AVAILABLE	
* PM10		0.1850	AP-42 LATEST AVAILABLE	
PM2.5		0.1850	AP-42 LATEST AVAILABLE	
SOX	7446095	0.0010	AP-42 LATEST AVAILABLE	
VOC		0.3086	SEE COMMENT	
2,2,4-Trimethylpentane	540841	0.0024	AP-42 LATEST AVAILABLE	
Benzene	71432	0.0042	AP-42 LATEST AVAILABLE	
Ethyl Benzene	100414	0.0004	AP-42 LATEST AVAILABLE	
Formaldehyde	50000	0.1786	CO. STACK TEST APPROVED BY DEP	
Hexane	110543	0.0107	AP-42 LATEST AVAILABLE	
Toluene	108883	0.0039	AP-42 LATEST AVAILABLE	
Xylenes (Isomers And Mixture)	1330207	0.0018	AP-42 LATEST AVAILABLE	

* SCC Factor Exists

Input Form For: 2015	Tax ID/Plant Code: 26-4578063-7
LAUREL MTN MIDSTREAM OPR LLC/SPRINGHILL COMP STA	PF ID: 719219

Sub Facility: 201 Heaters/Reboilers **SF Type:** PRO
Material:
Fuel: **Fuel Data Based on FML:**
SCC: 31000299 - Industrial Processes; Oil And Gas Prod; Natural Gas Prod; Other Not Classified

Monthly Throughputs in MMCF			
SCHEDULE 1	JAN:	0.40	JUL: 0.40
Date Effective: 01/01/2015	FEB:	0.40	AUG: 0.40
Date End: 12/31/2015	MAR:	0.40	SEP: 0.40
Total Days: 365	APR:	0.40	OCT: 0.40
Total Hours: 8760	MAY:	0.40	NOV: 0.40
Days Per Week: 7	JUN:	0.40	DEC: 0.40

Actual Emission Estimates (Tons/Yr) For Emission Fees And Emission Statements:

Pollutant	CAS	Emission Amt (0.0 TPY)	Calculation Method	Use Factor
Ammonia	7664417	0.0000	NO FACTOR AVAILABLE	
CO	630080	0.2028	AP-42 LATEST AVAILABLE	
Carbon Dioxide	124389	289.7647	AP-42 LATEST AVAILABLE	
Lead	7439921	0.0000	NO FACTOR AVAILABLE	
Methane	74828	0.0056	AP-42 LATEST AVAILABLE	
NOX	10102440	0.2415	AP-42 LATEST AVAILABLE	
Nitrous Oxide	10024972	0.0053	AP-42 LATEST AVAILABLE	
PM-CON		0.0138	AP-42 LATEST AVAILABLE	
* PM10		0.0184	AP-42 LATEST AVAILABLE	
PM2.5		0.0184	AP-42 LATEST AVAILABLE	
SOX	7446095	0.0014	AP-42 LATEST AVAILABLE	
VOC		0.0135	AP-42 LATEST AVAILABLE	
2,2,4-Trimethylpentane	540841	0.0000	NO FACTOR AVAILABLE	
Benzene	71432	0.0000	NO FACTOR AVAILABLE	
Ethyl Benzene	100414	0.0000	NO FACTOR AVAILABLE	
Formaldehyde	50000	0.0002	AP-42 LATEST AVAILABLE	
Hexane	110543	0.0043	AP-42 LATEST AVAILABLE	
Toluene	108883	0.0000	NO FACTOR AVAILABLE	
Xylenes (Isomers And Mixture)	1330207	0.0000	NO FACTOR AVAILABLE	

* SCC Factor Exists

Input Form For: 2015	Tax ID/Plant Code: 26-4578063-7
LAUREL MTN MIDSTREAM OPR LLC/SPRINGHILL COMP STA	PF ID: 719219

Sub Facility: 301 Tanks/Vessels

SF Type: PRO

Material:

Fuel:

Fuel Data Based on FML:

SCC: 31000214 - Natural Gas Prod, Natural Gas Liquid Storage Tank

Monthly Throughputs in BBL				
SCHEDULE 1	JAN:	88.00	JUL:	88.00
Date Effective: 01/01/2015	FEB:	88.00	AUG:	88.00
Date End: 12/31/2015	MAR:	88.00	SEP:	88.00
Total Days: 365	APR:	88.00	OCT:	88.00
Total Hours: 8760	MAY:	88.00	NOV:	88.00
Days Per Week: 7	JUN:	88.00	DEC:	88.00

Actual Emission Estimates (Tons/Yr) For Emission Fees And Emission Statements:

Pollutant	CAS	Emission Amt (0.0 TPY)	Calculation Method	Use Factor
Ammonia	7664417	0.0000	NO FACTOR AVAILABLE	
CO	630080	0.0000	NO FACTOR AVAILABLE	
Carbon Dioxide	124389	0.0000	NO FACTOR AVAILABLE	
Lead	7439921	0.0000	NO FACTOR AVAILABLE	
Methane	74828	0.2617	SEE COMMENT	
NOX	10102440	0.0000	NO FACTOR AVAILABLE	
Nitrous Oxide	10024972	0.0000	NO FACTOR AVAILABLE	
PM-CON		0.0000	NO FACTOR AVAILABLE	
PM10		0.0000	NO FACTOR AVAILABLE	
PM2.5		0.0000	NO FACTOR AVAILABLE	
SOX	7446095	0.0000	NO FACTOR AVAILABLE	
* VOC		0.0207	SEE COMMENT	
2,2,4-Trimethylpentane	540841	0.0000	NO FACTOR AVAILABLE	
Benzene	71432	0.0000	NO FACTOR AVAILABLE	
Ethyl Benzene	100414	0.0000	NO FACTOR AVAILABLE	
Formaldehyde	50000	0.0000	NO FACTOR AVAILABLE	
Hexane	110543	0.0000	NO FACTOR AVAILABLE	
Toluene	108883	0.0000	NO FACTOR AVAILABLE	
Xylenes (Isomers And Mixture)	1330207	0.0000	NO FACTOR AVAILABLE	

* SCC Factor Exists

Input Form For: 2015	Tax ID/Plant Code: 26-4578063-7
LAUREL MTN MIDSTREAM OPR LLC/SPRINGHILL COMP STA	PF ID: 719219

Sub Facility: 401 Dehy 1 (25 Mmscfd)

SF Type: PRO

Material:

Fuel:

Fuel Data Based on FML:

SCC: 31000304 - Natural Gas Processing ;Glycol Dehydrator (See Also 31000301-31000303) 31000303
 Natural Gas

Monthly Throughputs in MMCF				
SCHEDULE 1	JAN:	393.65	JUL:	393.65
Date Effective: 01/01/2015	FEB:	393.65	AUG:	393.65
Date End: 12/31/2015	MAR:	393.65	SEP:	393.65
Total Days: 365	APR:	393.65	OCT:	393.65
Total Hours: 8760	MAY:	393.65	NOV:	393.65
Days Per Week: 7	JUN:	393.65	DEC:	393.65

Actual Emission Estimates (Tons/Yr) For Emission Fees And Emission Statements:

Pollutant	CAS	Emission Amt (0.0 TPY)	Calculation Method	Use Factor
Ammonia	7664417	0.0000	NO FACTOR AVAILABLE	
CO	630080	0.0000	NO FACTOR AVAILABLE	
Carbon Dioxide	124389	0.0000	NO FACTOR AVAILABLE	
Lead	7439921	0.0000	NO FACTOR AVAILABLE	
Methane	74828	79.1564	SEE COMMENT	
NOX	10102440	0.0000	NO FACTOR AVAILABLE	
Nitrous Oxide	10024972	0.0000	NO FACTOR AVAILABLE	
PM-CON		0.0000	NO FACTOR AVAILABLE	
* PM10		0.0000	NO FACTOR AVAILABLE	
PM2.5		0.0000	NO FACTOR AVAILABLE	
SOX	7446095	0.0000	NO FACTOR AVAILABLE	
VOC		0.2871	SEE COMMENT	
2,2,4-Trimethylpentane	540841	0.0000	NO FACTOR AVAILABLE	
Benzene	71432	0.0000	NO FACTOR AVAILABLE	
Ethyl Benzene	100414	0.0000	NO FACTOR AVAILABLE	
Formaldehyde	50000	0.0000	NO FACTOR AVAILABLE	
Hexane	110543	0.0000	NO FACTOR AVAILABLE	
Toluene	108883	0.0000	NO FACTOR AVAILABLE	
Xylenes (Isomers And Mixture)	1330207	0.0000	NO FACTOR AVAILABLE	

* SCC Factor Exists

Input Form For: 2015 Tax ID/Plant Code: 26-4578063-7
 LAUREL MTN MIDSTREAM OPR LLC/SPRINGHILL COMP STA PF ID: 719219

Sub Facility: 402 Dehy 2 (40 Mmscfd)

SF Type: PRO

Material:

Fuel:

Fuel Data Based on FML:

SCC: 31000304 - Natural Gas Processing ;Glycol Dehydrator (See Also 31000301-31000303) 31000303
 Natural Gas

Monthly Throughputs in MMCF		
SCHEDULE 1	JUL:	532.41
Date Effective: 07/01/2015	AUG:	532.41
Date End: 12/31/2015	SEP:	532.41
Total Days: 184	OCT:	532.41
Total Hours: 3672	NOV:	532.41
Days Per Week: 4	DEC:	532.41

Actual Emission Estimates (Tons/Yr) For Emission Fees And Emission Statements:

Pollutant	CAS	Emission Amt (0.0 TPY)	Calculation Method	Use Factor
Ammonia	7664417	0.0000	NO FACTOR AVAILABLE	
CO	630080	0.0000	NO FACTOR AVAILABLE	
Carbon Dioxide	124389	0.0000	NO FACTOR AVAILABLE	
Lead	7439921	0.0000	NO FACTOR AVAILABLE	
Methane	74828	63.8126	SEE COMMENT	
NOX	10102440	0.0000	NO FACTOR AVAILABLE	
Nitrous Oxide	10024972	0.0000	NO FACTOR AVAILABLE	
PM-CON		0.0000	NO FACTOR AVAILABLE	
* PM10		0.0000	NO FACTOR AVAILABLE	
PM2.5		0.0000	NO FACTOR AVAILABLE	
SOX	7446095	0.0000	NO FACTOR AVAILABLE	
VOC		0.2330	SEE COMMENT	

* SCC Factor Exists

Input Form For: 2015	Tax ID/Plant Code: 26-4578063-7
LAUREL MTN MIDSTREAM OPR LLC/SPRINGHILL COMP STA	PF ID: 719219

Sub Facility: 501 Pneumatic Devices

SF Type: PRO

Material:

Fuel:

Fuel Data Based on FML:

SCC: 31000299 - Industrial Processes; Oil And Gas Prod; Natural Gas Prod; Other Not Classified

Monthly Throughputs in CF				
SCHEDULE 1	JAN:	0.00	JUL:	0.00
Date Effective: 01/01/2015	FEB:	0.00	AUG:	0.00
Date End: 12/31/2015	MAR:	0.00	SEP:	0.00
Total Days: 365	APR:	0.00	OCT:	0.00
Total Hours: 8760	MAY:	0.00	NOV:	0.00
Days Per Week: 7	JUN:	0.00	DEC:	0.00

Actual Emission Estimates (Tons/Yr) For Emission Fees And Emission Statements:

Pollutant	CAS	Emission Amt (0.0 TPY)	Calculation Method	Use Factor
Ammonia	7664417	0.0000	NO FACTOR AVAILABLE	
CO	630080	0.0000	NO FACTOR AVAILABLE	
Carbon Dioxide	124389	1.9810	SEE COMMENT	
Lead	7439921	0.0000	NO FACTOR AVAILABLE	
Methane	74828	177.7009	SEE COMMENT	
NOX	10102440	0.0000	NO FACTOR AVAILABLE	
Nitrous Oxide	10024972	0.0000	NO FACTOR AVAILABLE	
PM-CON		0.0000	NO FACTOR AVAILABLE	
* PM10		0.0000	NO FACTOR AVAILABLE	
PM2.5		0.0000	NO FACTOR AVAILABLE	
SOX	7446095	0.0000	NO FACTOR AVAILABLE	
VOC		0.3915	SEE COMMENT	
2,2,4-Trimethylpentane	540841	0.0000	NO FACTOR AVAILABLE	
Benzene	71432	0.0000	NO FACTOR AVAILABLE	
Ethyl Benzene	100414	0.0000	NO FACTOR AVAILABLE	
Formaldehyde	50000	0.0000	NO FACTOR AVAILABLE	
Hexane	110543	0.0000	NO FACTOR AVAILABLE	
Toluene	108883	0.0000	NO FACTOR AVAILABLE	
Xylenes (Isomers And Mixture)	1330207	0.0000	NO FACTOR AVAILABLE	

* SCC Factor Exists

Input Form For: 2015	Tax ID/Plant Code: 26-4578063-7
LAUREL MTN MIDSTREAM OPR LLC/SPRINGHILL COMP STA	PF ID: 719219

Sub Facility: 601 Venting/Blowdowns

SF Type: PRO

Material:

Fuel:

Fuel Data Based on FML:

SCC: 31000299 - Industrial Processes; Oil And Gas Prod; Natural Gas Prod; Other Not Classified

Monthly Throughputs in MMCF			
SCHEDULE 1	JAN:	0.10	JUL: 0.10
Date Effective: 01/01/2015	FEB:	0.10	AUG: 0.10
Date End: 12/31/2015	MAR:	0.10	SEP: 0.10
Total Days: 365	APR:	0.10	OCT: 0.10
Total Hours: 8760	MAY:	0.10	NOV: 0.10
Days Per Week: 7	JUN:	0.10	DEC: 0.10

Actual Emission Estimates (Tons/Yr) For Emission Fees And Emission Statements:

Pollutant	CAS	Emission Amt (0.0 TPY)	Calculation Method	Use Factor
Ammonia	7664417	0.0000	NO FACTOR AVAILABLE	
CO	630080	0.0000	NO FACTOR AVAILABLE	
Carbon Dioxide	124389	0.3143	SEE COMMENT	
Lead	7439921	0.0000	NO FACTOR AVAILABLE	
Methane	74828	28.1967	SEE COMMENT	
NOX	10102440	0.0000	NO FACTOR AVAILABLE	
Nitrous Oxide	10024972	0.0000	NO FACTOR AVAILABLE	
PM-CON		0.0000	NO FACTOR AVAILABLE	
* PM10		0.0000	NO FACTOR AVAILABLE	
PM2.5		0.0000	NO FACTOR AVAILABLE	
SOX	7446095	0.0000	NO FACTOR AVAILABLE	
VOC		0.0621	SEE COMMENT	
2,2,4-Trimethylpentane	540841	0.0000	NO FACTOR AVAILABLE	
Benzene	71432	0.0000	NO FACTOR AVAILABLE	
Ethyl Benzene	100414	0.0000	NO FACTOR AVAILABLE	
Formaldehyde	50000	0.0000	NO FACTOR AVAILABLE	
Hexane	110543	0.0000	NO FACTOR AVAILABLE	
Toluene	108883	0.0000	NO FACTOR AVAILABLE	
Xylenes (Isomers And Mixture)	1330207	0.0000	NO FACTOR AVAILABLE	

* SCC Factor Exists

Input Form For: 2015	Tax ID/Plant Code: 26-4578063-7
LAUREL MTN MIDSTREAM OPR LLC/SPRINGHILL COMP STA	PF ID: 719219

Sub Facility: 701 Fugitives

SF Type: PRO

Material:

Fuel:

Fuel Data Based on FML:

SCC: 31000220 - Natural Gas Production ;All Equip Leak Fugitives (Valves, Flanges, Connections, Seals, Drains) Natural Gas

Monthly Throughputs in CF				
SCHEDULE 1	JAN:	0.00	JUL:	0.00
Date Effective: 01/01/2015	FEB:	0.00	AUG:	0.00
Date End: 12/31/2015	MAR:	0.00	SEP:	0.00
Total Days: 365	APR:	0.00	OCT:	0.00
Total Hours: 8760	MAY:	0.00	NOV:	0.00
Days Per Week: 7	JUN:	0.00	DEC:	0.00

Actual Emission Estimates (Tons/Yr) For Emission Fees And Emission Statements:

Pollutant	CAS	Emission Amt (0.0 TPY)	Calculation Method	Use Factor
Hexane	110543	0.0000	NO FACTOR AVAILABLE	
Toluene	108883	0.0000	NO FACTOR AVAILABLE	
Xylenes (Isomers And Mixture)	1330207	0.0000	NO FACTOR AVAILABLE	
Ammonia	7664417	0.0000	NO FACTOR AVAILABLE	
CO	630080	0.0000	NO FACTOR AVAILABLE	
Carbon Dioxide	124389	0.3351	AP-42 LATEST AVAILABLE	
Lead	7439921	0.0000	NO FACTOR AVAILABLE	
Methane	74828	30.0639	AP-42 LATEST AVAILABLE	
NOX	10102440	0.0000	NO FACTOR AVAILABLE	
Nitrous Oxide	10024972	0.0000	NO FACTOR AVAILABLE	
PM-CON		0.0000	NO FACTOR AVAILABLE	
* PM10		0.0000	NO FACTOR AVAILABLE	
PM2.5		0.0000	NO FACTOR AVAILABLE	
SOX	7446095	0.0000	NO FACTOR AVAILABLE	
VOC		0.0672	AP-42 LATEST AVAILABLE	
2,2,4-Trimethylpentane	540841	0.0000	NO FACTOR AVAILABLE	
Benzene	71432	0.0000	NO FACTOR AVAILABLE	
Ethyl Benzene	100414	0.0000	NO FACTOR AVAILABLE	
Formaldehyde	50000	0.0000	NO FACTOR AVAILABLE	

* SCC Factor Exists

Input Form For: 2015	Tax ID/Plant Code: 26-4578063-7
LAUREL MTN MIDSTREAM OPR LLC/SPRINGHILL COMP STA	PF ID: 719219

Sub Facility: 801 Pigging Operations

SF Type: PRO

Material:

Fuel:

Fuel Data Based on FML:

SCC: 31000299 - Industrial Processes; Oil And Gas Prod; Natural Gas Prod; Other Not Classified

Monthly Throughputs in CF				
SCHEDULE 1	JAN:	603.00	JUL:	603.00
Date Effective: 01/01/2015	FEB:	603.00	AUG:	603.00
Date End: 12/31/2015	MAR:	603.00	SEP:	603.00
Total Days: 365	APR:	603.00	OCT:	603.00
Total Hours: 8760	MAY:	603.00	NOV:	603.00
Days Per Week: 7	JUN:	603.00	DEC:	603.00

Actual Emission Estimates (Tons/Yr) For Emission Fees And Emission Statements:

Pollutant	CAS	Emission Amt (0.0 TPY)	Calculation Method	Use Factor
Ammonia	7664417	0.0000	NO FACTOR AVAILABLE	
CO	630080	0.0000	NO FACTOR AVAILABLE	
Carbon Dioxide	124389	0.0017	SEE COMMENT	
Lead	7439921	0.0000	NO FACTOR AVAILABLE	
Methane	74828	0.1490	SEE COMMENT	
NOX	10102440	0.0000	NO FACTOR AVAILABLE	
Nitrous Oxide	10024972	0.0000	NO FACTOR AVAILABLE	
PM-CON		0.0000	NO FACTOR AVAILABLE	
* PM10		0.0000	NO FACTOR AVAILABLE	
PM2.5		0.0000	NO FACTOR AVAILABLE	
SOX	7446095	0.0000	NO FACTOR AVAILABLE	
VOC		0.0003	SEE COMMENT	
2,2,4-Trimethylpentane	540841	0.0000	NO FACTOR AVAILABLE	
Benzene	71432	0.0000	NO FACTOR AVAILABLE	
Ethyl Benzene	100414	0.0000	NO FACTOR AVAILABLE	
Formaldehyde	50000	0.0000	NO FACTOR AVAILABLE	
Hexane	110543	0.0000	NO FACTOR AVAILABLE	
Toluene	108883	0.0000	NO FACTOR AVAILABLE	
Xylenes (Isomers And Mixture)	1330207	0.0000	NO FACTOR AVAILABLE	

* SCC Factor Exists

Input Form For: 2015	Tax ID/Plant Code: 26-4578063-7
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OTHER MISCELLANEOUS SUB FACILITY EMISSIONS (Criteria/ HAPs/ Non-Criteria)

SF (Optional Name)	Pollutant	CAS	Emission Amt (0.0 TPY)	Calc. Method
	Methane	74828	32.7080	SEE COMMENT
	Carbon Dioxide	124389	87.3027	SEE COMMENT

NOTE: Most pollutants need to be reported if greater than 0.5 TPY. The following pollutants need to be reported if greater than the amounts listed:

Polychlorobiphenols (PCB)	0.01 TPY
Lead (Pb)	0.01 TPY
Polycyclic Organic Mater (POM)	0.01 TPY
Dioxins (submit Lbs/Yr only)	0.02 TPY
Furans (submit Lbs/Yr only)	0.02 Lbs/Yr
Mercury (Hg):	
Coal fired electric generating units (EGU)	0.0001 TPY
Non-coal fired EGUs	0.0005 TPY
All other sub facilities	0.01 TPY

Input Form For: 2015	Tax ID/Plant Code: 26-4578063-7
LAUREL MTN MIDSTREAM OPR LLC/SPRINGHILL COMP STA	PF ID: 719219

NOTES

From: Rhonda Zawaski **Date:** 04/22/2016
Subject: Emissions
Message:
NMNEHC, and HCHO data is from Vendor Data.

VOC is sum of NMNEHC and HCHO. NMNEHC and HCHO use vendor data in calculations.

From: Rhonda Zawaski **Date:** 04/22/2016
Subject: Emissions
Message:
CO2 is from Vendor Data.

HCHO data is from a stack test.

VOC is sum of NMNEHC and HCHO. NMNEHC uses stack test data in calculations. HCHO uses vendor data in calculations.

From: Rhonda Zawaski **Date:** 04/22/2016
Subject: Emissions
Message:
CO2 is from Vendor Data.

HCHO data is from a stack test.

VOC is sum of NMNEHC and HCHO. NMNEHC uses stack test data in calculations. HCHO uses vendor data in calculations.

From: Rhonda Zawaski **Date:** 04/22/2016
Subject: Emissions
Message:
Emissions calculated using EPA-450/3-85-001a & "Volatile Organic Compound Emissions from Petroleum Refinery Wastewater Systems - Background Information for Proposed Standards"

From: Rhonda Zawaski **Date:** 04/22/2016
Subject: Emissions
Message:
Emissions calculated from GRI-GLYCalc.

From: Rhonda Zawaski **Date:** 04/22/2016
Subject: Emissions
Message:
Emissions calculated from EPA Subpart W factors

From: Rhonda Zawaski **Date:** 04/22/2016
Subject: Emissions
Message:
Emissions calculated using engineering judgment

From: Rhonda Zawaski **Date:** 04/22/2016
Subject: Emissions
Message:
Emissions calculated using engineering judgment

