Emission Sources – Maximum Allowable Emission Rates

Permit Number 21918

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
F-M2A	Sulfolene Handling	SO_2	4.88	10.88
		VOC	2.99	6.67
Cooling Towers				
F-CT1	Main Cooling Tower	VOC	0.68	1.02
		H_2S	0.68	1.02
		PM	0.12	0.25
		PM_{10}	0.12	0.25
		$PM_{2.5}$	0.05	0.12
F-CT2	Unit 5 Cooling Tower	VOC	0.13	0.55
		PM	0.05	0.05
		PM_{10}	0.05	0.05
		$PM_{2.5}$	0.02	0.02
Flares				
FL-1	North Flare (H_2S)	VOC	10.07	26.83
		H_2S	4.26	5.84
		NO_x	11.47	18.75
		SO_2	411.90	558.80
		CO	24.19	37.38
FL-2	South Flare (HC)	VOC	53.00	44.25
		H_2S	0.80	0.19
		NO_x	3.27	3.46
		SO_2	75.18	17.70
		CO	16.69	31.32
FL-1/FL-2	Flare Sub-cap	VOC	63.06	73.13
		H_2S	5.06	5.84
		NO_x	14.74	22.21
		SO_2	487.08	558.86
		CO	40.88	68.70

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Fugitives				
F-SP5	Railcar Cleaning Fugitives (5)	VOC	0.07	0.08
F-MPU	MPU Fugitives (5)	VOC	4.59	20.11
		SO_2	0.07	0.29
F-CPU	CPU Fugitives (5)	VOC	16.38	71.76
		H_2S	1.98	8.68
F-BLD	Blending Fugitives (5)	VOC	5.35	23.43
F-SHP	Shipping Fugitives (5)	VOC	5.95	26.07
Wastewater				
FWW3	WW Final Separator	VOC	0.35	0.01
FWW6	WW Unit 5 Oil/Water Separator	VOC	0.14	< 0.01
FWW	Wastewater Systems	VOC	17.27	0.88
		Exempt Solvents	< 0.01	< 0.01
Heaters				
H-2	CPU Dutch Oven	VOC	0.01	0.06
		NO_x	0.26	1.13
		CO	0.22	0.95
		PM	0.02	0.09
		PM10	0.02	0.09
		PM2.5	0.02	0.09
H-3	CPU East Downtherm Furnace	VOC	0.18	0.78
		NO_x	3.24	14.18
		CO	2.72	11.91
		PM	0.25	1.08
		PM10	0.25	1.08
		PM2.5	0.25	1.08

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Vents				
M2A1	Sulfolene Flaker Scrubber RTO	VOC	0.51	2.14
		NO_x	0.86	3.59
		SO_2	0.05	0.20
		CO	5.89	24.56
		PM	0.01	0.05
		PM10	0.01	0.05
		PM2.5	0.01	0.05
M2A1 MSS	Sulfolene Flaker Scrubber RTO MSS	VOC	0.12	0.02
		NO_x	0.86	0.18
		SO_2	< 0.01	<0.01
		CO	5.89	1.22
		PM	0.01	<0.01
		PM10	0.01	<0.01
		PM2.5	0.01	<0.01
M2D	Sulfolane Sludge Tank Vent	VOC	< 0.01	< 0.01
M2E	Sulfolane Sludge Filter	VOC	< 0.01	< 0.01
C2A	CPU H2S Vent Stack	VOC	0.01	0.03
		H_2S	0.47	2.08
C2B	CPU Soltrol Coolant	VOC	0.20	0.88
		H_2S	0.20	0.88
Loading				
SP1	Dock 2 Drum Loading Vent	VOC	35.03	3.47
SP2	Dock 2 Tank Vent	VOC	11.03	0.71
SP3	Mercaptan Dock Scrubber	VOC	0.65	0.93
SP4	Dock 1 Small Packaging	VOC	2.70	0.59
SP3A	Rail Loading	VOC	12.88	12.55
SP5B DRUM	Drum Filling	VOC	9.28	0.06
SP5B1	Truck Spot 1	VOC	0.18	0.62
SP5B3	Truck Spot 3	VOC	0.17	1.09

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SP5B4	Truck Spot 4	VOC	2.36	8.02
S5B5	Truck Spot 5	VOC	2.36	2.87
SP5B6	Truck Spot 6	VOC	2.00	0.71
SP5BU5	Unit 5.1 Truck Bay 1-4	VOC	1.25	7.71
SP5B15	Truck Spot 15	VOC	2.36	2.87
SP5C	Vapor Combustor	VOC	1.49	4.29
		NO_x	1.49	1.35
		CO	0.75	0.67
		PM	0.06	0.04
		PM10	0.06	0.04
		PM2.5	0.06	0.04
SP6B	Dock 1 Cylinder	VOC	9.69	1.94
M2B	SO_2 Unloading Hose Vent	SO_2	0.64	0.03
Internal Floating Roof Tanks				
TE-03	Tank Storage	VOC	0.19	0.28
TE-04	Tank Storage	VOC	0.19	0.28
TE-05	Tank Storage	VOC	0.21	0.10
TF-04	Tank Storage	VOC	0.23	0.50
TF-09	Tank Storage	VOC	0.20	0.30
TH-06	Tank Storage	VOC	0.63	1.65
TH-20	Tank Storage	VOC	0.01	0.01
Fixed Roof Atmospheric Tanks				
TB-31	Storage Tank	VOC	0.27	0.01
TB-32	Storage Tank	VOC	0.01	0.01
TB-33	Storage Tank	VOC	0.33	0.01
TB-40	Storage Tank	VOC	0.07	0.01
TB-41	Storage Tank	VOC	0.05	0.01
TB-42	Storage Tank	VOC	0.02	0.01
TB-44	Storage Tank	VOC	0.05	0.01
TB-48	Storage Tank	VOC	0.02	0.01
TB-52	Storage Tank	VOC	0.17	0.01
TB-53	Storage Tank	VOC	0.01	0.01

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TB-54	Storage Tank	VOC	0.06	0.03
TD-13	Storage Tank	VOC	0.01	0.01
TE-01	Storage Tank	VOC	9.63	1.83
TE-02	Storage Tank	VOC	9.63	1.97
TE-06	Storage Tank	VOC	9.63	1.28
TF-01	Storage Tank	VOC	0.33	0.47
TF-02	Storage Tank	VOC	1.09	0.75
TF-03	Storage Tank	VOC	0.33	0.29
TF-05	Storage Tank	VOC	0.23	0.07
TF-06	Storage Tank	VOC	0.06	0.04
TF-07	Storage Tank	VOC	0.06	0.04
TF-08	Storage Tank	VOC	0.33	0.25
TF-10	Storage Tank	VOC	0.33	0.27
TF-11	Storage Tank	VOC	0.17	0.04
TF-12	Storage Tank	VOC	0.13	0.16
TF-13	Storage Tank	VOC	0.04	0.01
TF-14	Storage Tank	VOC	0.01	0.01
TF-23	Storage Tank	VOC	3.34	0.29
TF-24	Storage Tank	VOC	0.17	0.02
TF-28	Storage Tank	VOC	0.17	0.01
TH-01	Storage Tank	VOC	0.04	0.01
TH-03	Storage Tank	VOC	0.01	0.01
TH-04	Storage Tank	VOC	0.33	0.05
TH-08	Storage Tank	VOC	0.02	0.01
TI-08	Storage Tank	VOC	0.07	0.02
TJ-36	Storage Tank	VOC	0.01	0.01
TJ-37	Storage Tank	VOC	0.01	0.01
TL-01	Storage Tank	VOC	0.28	0.02
TL-02	Storage Tank	VOC	0.01	< 0.01
TL-03	Storage Tank	VOC	0.14	0.41
T-95-4106	Downtherm Holding KO Pot	VOC	< 0.01	< 0.01
Maintenance				

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F-MNT	Maintenance	VOC	3.00	0.80
MSS	MSS Activities	VOC	34.79	1.60
		H_2S	0.01	< 0.01
		SO_2	0.03	< 0.01
PCD	Portable Control Devices	VOC	< 0.01	< 0.01
		NOx	< 0.01	< 0.01
		CO	< 0.01	< 0.01

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
CO - carbon monoxide
H_2S - hydrogen sulfide
(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with applicable special conditions and permit application representations.

Date: March 10, 2023