

Emission Sources - Maximum Allowable Emission Rates

Permit Number 22059

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)
FI-01	Fume Incinerator (9)	VOC	0.35	0.33
		NO _x	1.20	2.42
		SO ₂	12.68	7.95
		CO	1.01	2.03
		H ₂ S	0.04	0.04
		PM	0.09	0.18
		PM ₁₀	0.09	0.18
		PM _{2.5}	0.09	0.18
FI-02	Fume Incinerator (6)	VOC	1.30	1.65
		NO _x	2.85	5.57
		SO ₂	0.18	0.61
		CO	2.40	4.68
		PM	0.22	0.42
		PM ₁₀	0.22	0.42
		PM _{2.5}	0.22	0.42
		HCl	0.01	0.01
HO-15	Hot Oil Heater	PM	0.18	0.78
		PM ₁₀	0.18	0.78
		PM _{2.5}	0.18	0.78
		VOC	0.13	0.57
		NO _x	0.36	1.58
		SO ₂	0.01	0.06
		CO	7.20	31.54
HHO-15	Hot Oil Surge Vent	VOC	0.87	0.05
FL-177	Standby Flare Service when FI-01 or FI-02 is not in operation (6)(9)	NO _x	6.06	1.94

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		CO	14.47	3.87
		SO ₂	13.12	7.86
		VOC	30.00	4.31
		H ₂ S	0.09	0.03
		HCl	< 0.01	< 0.01
	Flare MSS Service	NO _x	0.32	0.18
		CO	2.75	1.50
		VOC	0.03	0.01
		SO ₂	0.01	0.01
15	Standby Flare with a maximum service of 720 hours per year (8)	VOC	0.80	0.29
POLY-FL-1	Flare (7)	VOC	5.48	11.59
		NO _x	0.21	1.65
		CO	0.85	3.29
OF-3	Plate and Frame Filter	VOC	2.99	7.23
FUG-PF31	Filter Fugitives	VOC	0.58	2.04
FUG-PF32	Filter Fugitives	VOC	0.58	
FUG-PF33	Filter Fugitives	VOC	0.58	
FUG-PF34	Filter Fugitives	VOC	0.58	
L-10	Storage Tank	VOC	0.70	0.01
		HCl	0.31	0.01
Q-2	Storage Tank	VOC	0.05	0.01
S-33 (FIN Q-5)	Water Scrubber	VOC	5.37	0.12
S-70	Sulfur Scrubber S-52	H ₂ S	0.05	0.01
		SO ₂	0.34	0.02
BH-02	Lime Silo (Baghouse)	PM	0.09	0.38
		PM ₁₀	0.04	0.19
		PM _{2.5}	0.01	0.01
BH-03	Filter Aide Unloading (Baghouse)	PM	1.55	0.22
		PM ₁₀	0.31	0.05

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		PM _{2.5}	0.06	0.01
BH-04	Baghouse Filter	PM	0.09	0.38
		PM ₁₀	0.04	0.19
		PM _{2.5}	0.01	0.04
DC-HW-2	Baghouse Filter	PM	0.08	0.07
		PM ₁₀	0.04	0.04
		PM _{2.5}	0.01	0.01
DC-BBU1/2	Baghouse Filter	PM	0.01	0.03
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
MSS-177	177 Unit Planned MSS	VOC	11.86	0.13
		HCl	0.01	0.01
CT-11	Cooling Tower	VOC	0.10	0.44
		PM	0.04	0.17
		PM ₁₀	0.03	0.11
		PM _{2.5}	0.01	0.01
CT-14	Cooling Tower	VOC	0.28	0.99
		PM	0.11	0.38
		PM ₁₀	0.07	0.25
		PM _{2.5}	0.01	0.01
C-57	Storage Tank	VOC	0.24	0.01
177-CT-1	Storage Tank	VOC	0.52	0.01
177-CT-2	Storage Tank	NaClO	0.04	0.01
177-CT-3	Storage Tank	H ₂ SO ₄	0.01	0.01
177-Sample	Drum Loading	VOC	0.15	0.01
H-77LR	Loading	VOC	0.26	0.01
K-1LR	Loading	VOC	0.19	0.01
L-6LR	Loading	VOC	0.19	0.01
177-FUG	177 Unit Fugitive Emissions (5)	VOC	4.30	18.83
		H ₂ S	0.02	0.08

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- (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.
 - NO_x - total oxides of nitrogen
 - SO₂ - sulfur dioxide
 - PM - particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}
 - PM₁₀ - particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}
 - PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 - CO - carbon monoxide
 - H₂S - hydrogen sulfide
 - HCl - hydrogen chloride
 - NaClO - sodium hypochlorite
- (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 the applicable special condition(s) and permit application representations.
- (6) Emissions are for Unit 177 contribution only. The emissions are in addition to those authorized for the Emission Point through Permit 669.
- (7) Emissions are for Unit 177 contribution only. The emissions are in addition to those authorized for the Emission Point through Permit 22056.
- (8) Emissions are for Unit 177 contribution only. The emissions are in addition to those authorized for the Emission Point through Permit 22095.
- (9) Emissions are for Unit 177 contribution only. The emissions are in addition to those authorized for the Emission Point through Permit 102761.

Date: June 5, 2018