Emission Sources - Maximum Allowable Emission Rates

Permit Number 71546

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)
116-FUG	116 Unit Fugitives (5)	VOC	0.78	3.44
		HCl	0.10	0.41
		Cl_2	0.04	0.19
		CS_2	0.01	0.02
FL-105	Flare (6)	H_2S	0.08	0.04
		SO_2	12.76	4.52
		VOC	0.79	1.09
		NO_x	0.18	0.45
		CO	1.29	2.85
		CS_2	0.07	0.01
FL-105	Flare (7)	H_2S	0.04	0.01
		SO_2	9.31	1.82
		VOC	0.51	0.18
		NO_x	0.16	0.37
		CO	1.14	2.17
		CS_2	0.07	0.01
S-12	Scrubber	PM	1.58	0.13
		PM_{10}	0.47	0.04
		$PM_{2.5}$	0.16	0.01
		VOC	10.25	0.11
		HCl	<0.01	<0.01

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P & F-8	Plate and Frame Filter	VOC	0.11	0.29
AM-5	Amine Storage	VOC	0.05	0.01
AM-6	Amine Storage	VOC	0.58	0.01
AM-10	Amine Storage	VOC	0.58	0.01
AM-11	Amine Storage	VOC	0.58	0.01
AM-15	Amine Storage	VOC	0.58	0.01
AM-16	Amine Storage	VOC	0.58	0.01
FO-12	Flush Oil Storage	VOC	0.01	0.01
FO-13	Flush Oil Storage	VOC	0.01	0.01
FO-26	Flush Oil Storage	VOC	0.01	0.01
FO-29	Flush Oil Storage	VOC	0.01	0.01
PE-1-Bag	Baghouse	PM	0.05	0.01
		PM_{10}	0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
S-10	Caustic Absorber	VOC	1.54	0.46
		HCl	0.02	0.02
		PM	0.20	0.03
		PM_{10}	0.11	0.02
		$PM_{2.5}$	0.02	0.01
S-11	Caustic Absorber	VOC	5.38	0.86
		HCl	0.02	0.02
		PM	0.20	0.03
		PM_{10}	0.11	0.02
		$PM_{2.5}$	0.02	0.01
WO-9	Waste Oil Storage	VOC	0.01	0.01

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12PF	PF Filter 1	VOC	0.08	0.28
14PF	PF Filter 2	VOC	0.08	0.22
15PF	PF Filter 3	VOC	0.17	0.35
16PF	PF Filter 4	VOC	0.21	0.39
17PF	PF Filter 5	VOC	0.04	0.11
18PF	PF Filter 6	VOC	0.17	0.35
NPF	PF Filter North	VOC	0.18	0.18
SPF	PF Filter South	VOC	0.18	0.18
MSS-116	Planned Maintenance Emissions	VOC	2.03	0.11
		HCl	0.01	0.01
FO-50	Flush Oil Storage	VOC	0.01	0.01
9PF	Plate and Frame Filter	VOC	0.11	0.29
S-44	Scrubber	VOC	1.80	0.25
		HCl	0.08	<0.01
S-45	Scrubber	VOC	7.27	0.18
		HCl	0.02	0.01
D-28	Storage Tank	VOC	0.46	0.05
S-37	Scrubber	VOC	0.15	0.01
S-50	Scrubber	VOC	11.93	0.70
		HCl	0.02	0.01
S-PB3	Scrubber	VOC	2.98	0.17
		HCl	0.01	0.01
5-MT	Heater	PM	0.08	0.14
		PM_{10}	0.08	0.14
		$PM_{2.5}$	0.08	0.14

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		SO_2	0.01	0.01
		NO_x	0.50	0.95
		CO	0.83	1.59
		VOC	0.06	0.10
3-MT	Heater	PM	0.06	0.18
		PM_{10}	0.06	0.18
		$PM_{2.5}$	0.06	0.18
		SO_2	0.01	0.01
		NO_x	0.08	0.24
		CO	0.65	1.98
		VOC	0.04	0.13
6-MT	Heater	PM	0.06	0.09
		PM_{10}	0.06	0.09
		$PM_{2.5}$	0.06	0.09
		SO_2	0.01	0.01
		NO_x	0.08	0.12
		CO	0.66	0.96
		VOC	0.04	0.06
HO-5	Tank Vent	VOC	0.01	0.01
HO-8	Tank Vent	VOC	0.01	0.01
HO-10	Tank Vent	VOC	0.01	0.01
HO-12	Tank Vent	VOC	0.01	0.01
MT-5	Tank Vent	VOC	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

SC-FI-04, SC-FI-08	Thermal Oxidizers /Absorbers	NOx (8)	3.23	9.54
		NOx (9)	2.77	8.15
		VOC	4.40	6.77
		SO_2	0.03	0.08
		CO	3.80	11.17
		HCl	2.29	3.16
		PM	0.34	1.00
		PM_{10}	0.34	1.00
		$PM_{2.5}$	0.34	1.00
S-67	Scrubber	VOC	1.42	0.18
		HCl	0.01	0.01
		PM	0.02	0.01
		PM_{10}	0.02	0.01
		$PM_{2.5}$	0.02	0.01
D-243	Tank	VOC	2.96	0.13
FO-53	Tank	VOC	0.01	0.01
FO-54	Tank	VOC	0.01	0.01
PF-60	Plate and Frame Filter	VOC	0.73	--
PF-61	Plate and Frame Filter	VOC	0.73	--
PF-62	Plate and Frame Filter	VOC	0.73	--
	Plate and Frame Filter Cap	VOC	--	0.74
BP-01	Broken Package Pot	VOC	0.01	0.01
AM-17	Amine Weigh Tank	VOC	0.01	0.01

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DUST-3	Filter Aide	PM	0.08	0.37
		PM_{10}	0.02	0.07
		$PM_{2.5}$	0.01	0.02
BA-Baghouse	Boric Acid Baghouse	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	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
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
HCl - hydrogen chloride
Cl_2 - chlorine
CS_2 - carbon disulfide
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 the applicable special condition(s) and permit application representations.
(6) Flare emission rates are effective while the PF-10 vessel emissions are routed to the flare (EPN FL-105) for control.
(7) Flare emission rates are effective after the PF-10 vessel emissions are routed to the Thermal Oxidizers/Absorbers (EPNs SC-FI-04 and SC-FI-08) for control.
(8) NO_X emission rates are effective until the burners in the Thermal Oxidizers FI-04 and FI-08 are replaced.
(9) NO_X emission rates are effective after the burners in the Thermal Oxidizers FI-04 and FI-08 are replaced.

Date: March 26, 2019