

Emission Sources - Maximum Allowable Emission Rates

Permit Number 9074

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)
94	PCE Barge Unloading Fugitives (5)	PCE	1.18	0.06
96	PCE Tank Truck and Ship Unloading Fugitives (5)	PCE	0.24	1.03
102	Storage Tank No. 1	PCE	0.87	0.18
		CCl ₄	1.05	0.67
103	Storage Tank No. 2	PCE	0.89	0.22
		CCl ₄	1.05	0.67
TANK CAP	Tank Cap	CCl ₄	1.05	0.67
TK-MSS	CCl ₄ Tank MSS	CCl ₄	4.03	0.20
119	GEN-119	NO _x	8.07	0.21
		CO	0.52	0.01
		SO ₂	<0.01	<0.01
		VOC	0.18	<0.01
		PM	0.08	<0.01
		PM ₁₀	0.08	<0.01
		PM _{2.5}	0.08	<0.01
120R	Emergency Generator No. 1	NO _x	8.07	0.21
		CO	0.52	0.01
		SO ₂	<0.01	<0.01
		VOC	0.18	<0.01
		PM	0.08	<0.01
		PM ₁₀	0.08	<0.01
		PM _{2.5}	0.08	<0.01

Emission Sources - Maximum Allowable Emission Rates

121	Caustic Scrubber	HCl	0.01	0.03
		Cl ₂	0.20	<0.01
		FC	86.10	26.07
122	HCl Scrubber	HCl	0.02	0.09
		FC	1.21	4.03
123	Fugitives (5)	HCl	0.01	0.06
124	Fugitives (5)	HCl	0.39	1.70
126	Fugitives (5)	HCl	0.07	0.30
166	H ₂ O ₂ Storage Tank	H ₂ O ₂	0.32	<0.01
175	Fugitives (5)	FC	1.90	8.47
179	Cooling Tower	PM	0.90	3.95
		PM ₁₀	0.90	3.95
		PM _{2.5}	0.90	3.95
		FC	1.51	3.31
186	Neutralizer Vent	FC	0.27	1.20
187	Fugitives (5)	FC	3.03	13.27
		HF	0.05	0.24
		HCl	0.03	0.15
		VCM	0.10	0.43
189	Sniff Scrubber Stack	FC	0.01	0.01
		HCl	0.01	<0.01
		HF	0.01	<0.01
192	Thermal Converter Stack	NO _x	0.94	4.12
		CO	0.11	0.50
		SO ₂	0.14	0.61
		VOC	0.26	0.77
		PM	0.08	0.33
		PM ₁₀	0.08	0.33
		PM _{2.5}	0.08	0.33

Emission Sources - Maximum Allowable Emission Rates

		FC	0.49	1.92
		Benzene	<0.01	<0.01
		VCM	<0.01	<0.01
		HF	0.27	1.03
		HCl	0.29	0.76
		Cl ₂	0.01	0.04
		CHCl ₃	<0.01	<0.01
		CCl ₄	0.14	0.13
		1,2-Dichloroethane	<0.01	<0.01
192-MSS	Thermal Converter MSS Operations	FC	51.05	0.72
		NO _x	23.83	8.01
		CO	14.51	4.88
		SO ₂	0.40	0.13
		VOC	16.35	0.13
		PM	0.23	1.01
		PM ₁₀	0.23	1.01
		PM _{2.5}	0.23	1.01
		HF	0.37	0.07
		HCl	0.36	0.07
		Cl ₂	<0.01	<0.01
		PCE	<0.01	<0.01
		CHCl ₃	<0.01	<0.01
		C ₂ Cl ₆	<0.01	<0.01
		CCl ₄	0.26	<0.01
		1,2-Dichloroethane	0.01	<0.01
193	Fugitives (5)	FC	9.10	39.84
		Benzene	<0.01	<0.01
		HCl	0.02	0.10
		VCM	0.07	0.31

Emission Sources - Maximum Allowable Emission Rates

193-AqHCl	Fugitives (5)	HCl	0.03	0.14
194	Emergency Generator No. 3	NO _x	18.26	0.15
		CO	3.93	0.03
		SO ₂	1.28	0.01
		VOC	1.49	0.01
		PM	1.28	0.01
		PM ₁₀	1.28	0.01
		PM _{2.5}	1.28	0.01
197	Carbon Canister No. 2	FC	12.50	2.74
		HF	0.03	0.01
		Cl ₂	0.80	0.17
		HCl	8.04	1.76
198	FUG-198	FC	0.25	1.11
210	Emergency Fire Pump No. 1	NO _x	5.50	0.14
		CO	1.20	0.03
		SO ₂	0.38	<0.01
		VOC	0.45	0.01
		PM	0.39	<0.01
		PM ₁₀	0.39	<0.01
		PM _{2.5}	0.39	<0.01
215	Emergency Fire Pump No. 2	NO _x	11.60	0.30
		CO	2.50	0.07
		SO ₂	0.81	0.02
		VOC	0.94	0.03
		PM	0.81	0.02
		PM ₁₀	0.81	0.02
		PM _{2.5}	0.81	0.02
237	Hot Air Heater	NO _x	0.75	3.30
		CO	0.63	2.77

Emission Sources - Maximum Allowable Emission Rates

		SO ₂	0.43	1.89
		VOC	0.04	0.18
		PM	0.06	0.25
		PM ₁₀	0.06	0.25
244R	Emergency Generator No. 2	NO _x	8.07	0.21
		CO	0.52	0.01
		SO ₂	<0.01	<0.01
		VOC	0.18	<0.01
		PM	0.08	<0.01
		PM ₁₀	0.08	<0.01
		PM _{2.5}	0.08	<0.01
245	Fugitives (5)	FC	6.16	27.00
		HF	0.12	0.53
		HCl	0.04	0.19
		Cl ₂	0.02	0.07
		PCE	0.27	1.20
247	Spray Scrubber	HF	0.11	0.04
		HCl	1.00	0.10
		Cl ₂	0.11	0.23
		FC	56.44	5.98
247-MSS	Spray Scrubber Stack MSS	FC	3.10	0.01
		CO	60.00	17.28
		VOC	1.00	<0.01
		HF	0.19	0.05
FUG-FEBED	Iron bed Change-outs	VOC	0.58	<0.01
		CHCl ₃	0.02	<0.01
		CCl ₄	1.09	0.01
		1,2-Dichloroethane	0.09	<0.01
SITE	VESSBREAK	VOC	74.71	0.44

Emission Sources - Maximum Allowable Emission Rates

		FC	2183.42	4.40
		PCE	0.86	<0.01
		HF	0.017	<0.01
		HCl	0.25	<0.01
		Cl ₂	0.02	<0.01
		CHCl ₃	0.02	<0.01
		C ₂ Cl ₆	<0.01	<0.01
		CCl ₄	1.70	0.04
		1,2- Dichloroethane	0.09	<0.01
SITE	LINEBREAK	VOC	4.67	0.23
		FC	2.93	0.30
		PCE	0.36	0.04
		HF	<0.01	<0.01
		HCl	<0.01	<0.01
		Cl ₂	<0.01	<0.01
		CHCl ₃	0.26	<0.01
		C ₂ Cl ₆	0.52	<0.01
		CCl ₄	0.34	<0.01
		1,2- Dichloroethane	0.22	<0.01
SITE	SPRAYCLN	VOC	5.40	2.70
CATLOAD	Catalyst Loading	PM	0.71	0.01
		PM ₁₀	0.71	0.01
		PM _{2.5}	0.71	0.01
CATVAC	Catalyst Unloading	PM	0.51	0.01
		PM ₁₀	0.51	0.01
		PM _{2.5}	0.51	0.01
SILICAVAC	Silica Gel Unloading	PM	0.51	0.04
		PM ₁₀	0.51	0.04
		PM _{2.5}	0.51	0.04

Emission Sources - Maximum Allowable Emission Rates

245-MSS	Fugitives	FC	4.77	0.09
DRY-1	Sitewide Drying Emissions	VOC	0.16	< 0.01
		FC	0.14	< 0.01
		PCE	0.06	< 0.01
FUG-DRY-1	Sitewide Drying Fugitive Emissions (5)	VOC	0.11	0.47
		FC	0.11	0.47
		PCE	0.03	0.14
302	Fugitive Emissions	FC	5.13	22.44
		HF	0.12	0.52
		HCl	0.08	0.35
		Cl ₂	0.05	0.21
		PCE	<0.01	<0.01
		CHCl ₃	0.03	0.12
		VOC	0.81	3.57
303-MSS	Earth Unit Carbon Beds – MSS	FC	37.70	0.91
		VOC	0.33	0.01
		PCE	<0.01	<0.01
		CHCl ₃	<0.01	<0.01
		C ₂ Cl ₆	<0.01	<0.01
		CCl ₄	0.37	0.02
		1,2- Dichloroethane	0.02	<0.01
304	Emergency Generator #4 Diesel Tank	VOC	0.02	<0.01
305	Emergency Generator #4	NO _x	8.07	0.21
		CO	0.52	0.01
		SO ₂	<0.01	<0.01
		VOC	0.18	<0.01
		PM	0.08	<0.01
		PM ₁₀	0.08	<0.01
		PM _{2.5}	0.08	<0.01

Emission Sources - Maximum Allowable Emission Rates

306	FUG-306 Fugitive Emissions	VOC	2.13	9.32
		PCE	<0.01	0.02
		CHCl ₃	<0.01	0.03
		C ₂ Cl ₆	<0.01	0.03
		CCl ₄	1.23	5.38
		1,2- Dichloroethane	0.06	0.25
307	Cooling Tower	FC	0.51	1.12
		VOC	0.24	0.52
		PM	0.50	2.19
		PM ₁₀	0.50	2.19
		PM _{2.5}	0.50	2.19
		CCl ₄	0.08	0.18
		1,2- Dichloroethane	0.01	0.02
308	Wastewater System	FC	0.03	0.13
		VOC	<0.01	<0.01
		CHCl ₃	0.02	0.07
		CCl ₄	<0.01	<0.01
		1,2- Dichloroethane	<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 |
| PCE | - perchloroethylene |
| HCl | - hydrogen chloride |
| Cl ₂ | - chlorine |
| FC | - fluorocarbons |
| H ₂ O ₂ | - hydrogen peroxide |
| HF | - hydrogen fluoride |
| VCM | - vinyl chloride monomer |
| CHCl ₃ | - chloroform |

Emission Sources - Maximum Allowable Emission Rates

C_2Cl_6 - hexachloroethane
 CCl_4 - carbon tetrachloride

- (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.

Date: June 9, 2022