

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	1.66	0.06
96	PCE Tank Truck and Ship Unloading Fugitives (5)	PCE	0.17	0.74
102	PCE or CCl ₄ Storage Tank No. 1	PCE	0.87	0.18
		CCl ₄	1.05	0.67
		VOC (6)	1.05	0.67
103	PCE or CCl ₄ Storage Tank No. 2	PCE	0.89	0.22
		CCl ₄	1.05	0.67
		VOC (6)	1.05	0.67
TANK CAP	Tank Cap (TK-102 and TK-103)	CCl ₄	1.05	0.67
		VOC (6)	1.05	0.67
TK-MSS	PCE or CCl ₄ Tank MSS (TK-102 and TK-103)	CCl ₄	4.03	0.20
		VOC (6)	4.03	0.20
119	West Aq HCl 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

Emission Sources - Maximum Allowable Emission Rates

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
121	Caustic Scrubber	HCl	0.01	0.03
		Cl ₂	0.20	<0.01
		FC	86.10	26.07
		VOC (6)	85.58	23.80
122	Aq HCl Scrubber	HCl	0.02	0.09
		FC	1.21	4.03
		VOC (6)	0.25	0.95
123	Fugitives (5)	HCl	0.01	0.06
124	Aq. HCl Fugitives (5)	HCl	0.39	1.71
126	Fugitives (5)	HCl	0.07	0.30
166	H ₂ O ₂ Storage Tank	H ₂ O ₂	0.30	<0.01
175	Fugitives (5)	FC	1.45	6.35
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
		VOC (6)	0.59	1.29
186	Neutralizer Vent	FC	0.27	1.20

Emission Sources - Maximum Allowable Emission Rates

187	Fugitives (5)	FC	1.85	8.10
		HF	0.05	0.21
		HCl	0.03	0.15
		VCM	0.10	0.43
		VOC (6)	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 (6)	0.93	2.96
		PM	0.08	0.33
		PM ₁₀	0.08	0.33
		PM _{2.5}	0.08	0.33
		FC	0.52	2.05
		Benzene	<0.01	<0.01
		VCM	<0.01	<0.01
		HF	0.28	1.07
		HCl	0.30	0.82
		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

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

Emission Sources - Maximum Allowable Emission Rates

0.49				
		NO _x	0.94	4.10
		CO	0.11	0.50
		SO ₂	0.14	0.61
		VOC (6)	2.42	0.74
		PM	0.08	0.33
		PM ₁₀	0.08	0.33
		PM _{2.5}	0.08	0.33
		HF	1.17	0.22
		HCl	0.60	0.12
		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	6.75	29.52
		Benzene	<0.01	<0.01
		HCl	0.02	0.10
		VCM	0.05	0.21
		VOC (6)	0.31	1.36
193-AqHCl	Aq. HCl Fugitives (5)	HCl	0.03	0.14

Emission Sources - Maximum Allowable Emission Rates

194	Emergency Generator No. 3	NO _x	18.26	0.49
		CO	3.93	0.10
		SO ₂	<0.01	<0.01
		VOC	1.49	0.04
		PM	1.28	0.03
		PM ₁₀	1.28	0.03
		PM _{2.5}	1.28	0.03
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
		VOC (6)	12.50	2.74
198	FUG-198	FC	0.24	1.06
215	Emergency Fire Pump No. 2	NO _x	11.80	0.31
		CO	2.50	0.07
		SO ₂	<0.01	<0.01
		VOC	0.95	0.03
		PM	0.84	0.02
		PM ₁₀	0.84	0.02
		PM _{2.5}	0.84	0.02
237	Hot Air Heater	NO _x	0.75	3.30
		CO	0.63	2.77
		SO ₂	0.11	0.47
		VOC	0.04	0.18
		PM	0.06	0.25
		PM ₁₀	0.06	0.25
		PM _{2.5}	0.06	0.25
244R	Emergency Generator No. 2	NO _x	8.07	0.21
		CO	0.52	0.01

Emission Sources - Maximum Allowable Emission Rates

		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	3.74	16.39
		HF	0.12	0.53
		HCl	0.04	0.19
		Cl ₂	0.02	0.07
		PCE	0.16	0.68
		VOC (6)	1.37	6.01
247	Spray Scrubber Stack	HF	0.11	0.04
		HCl	1.00	0.10
		Cl ₂	0.11	0.23
		FC	56.44	5.98
		VOC (6)	56.44	5.98
247-MSS	Spray Scrubber Stack MSS	FC	3.10	0.01
		CO	60.00	17.28
		VOC (6)	4.10	0.02
		HF	0.19	0.05
FUG-FEBED	Iron bed Change-outs	VOC (6)	1.78	0.02
		CHCl ₃	0.02	<0.01
		CCl ₄	1.09	0.01
		1,2-Dichloroethane	0.09	<0.01

Emission Sources - Maximum Allowable Emission Rates

SITE	VESSBREAK (MSS – Residual from Vessel Openings)	VOC (6)	175.93	4.21
		FC	173.00	4.14
		PCE	0.14	<0.01
		HF	0.02	<0.01
		HCl	0.03	<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 (MSS – Residual from Line Breaks)	VOC (6)	5.15	0.10
		FC	0.82	0.06
		PCE	0.37	0.04
		HF	<0.01	<0.01
		HCl	<0.01	<0.01
		Cl ₂	0.02	<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 (MSS – Spray Cleaners, Degreasers, and Lubricants)	VOC	5.40	2.70
CATLOAD	MSS - Catalyst Loading	PM	0.70	0.01
		PM ₁₀	0.32	0.01
		PM _{2.5}	0.05	<0.01
CATVAC	MSS - Catalyst Unloading	PM	0.51	0.01
		PM ₁₀	0.51	0.01
		PM _{2.5}	0.51	0.01
SILICAVAC	MSS - Silica Gel Unloading	PM	0.51	0.04

Emission Sources - Maximum Allowable Emission Rates

		PM ₁₀	0.51	0.04
		PM _{2.5}	0.51	0.04
245-MSS	MSS – Container Conversions	FC	4.77	0.09
		VOC (6)	4.77	0.09
DRY-1	Sitewide Drying Emissions	VOC (6)	0.17	<0.01
		FC	0.17	<0.01
		PCE	0.06	<0.01
FUG-DRY-1	Sitewide Drying Fugitive Emissions (5)	VOC (6)	0.05	0.21
		FC	0.05	0.21
		PCE	0.01	0.06
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 (6)	4.29	18.81
303-MSS	Earth Unit Carbon Beds – MSS	FC	37.70	0.91
		VOC (6)	30.23	0.74
		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	0.05	<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

Emission Sources - Maximum Allowable Emission Rates

		PM	0.08	<0.01
		PM ₁₀	0.08	<0.01
		PM _{2.5}	0.08	<0.01
306	FUG-306 Fugitive Emissions	VOC (6)	3.43	15.02
		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 (6)	0.81	1.77
		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 (6)	0.05	0.20
		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 |

Emission Sources - Maximum Allowable Emission Rates

HF	-	hydrogen fluoride
VCM	-	vinyl chloride monomer
CHCl ₃	-	chloroform
C ₂ Cl 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.
- (6) Speciated VOC emissions and fluorocarbon (FC emissions) which are also VOC (not all FC emissions are VOC) are included in the emission rate associated with the Air Contaminant Name VOC.

Date: August 7, 2023