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	PCE Storage Tank No. 1	PCE	0.87	0.18
103	PCE Storage Tank No. 2	PCE	0.87	0.18
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/TOC	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	<0.01
		Cl_2	0.20	<0.01
		FC	88.90	19.47
122	HCl Scrubber	HCl	0.02	0.09
		FC	1.21	4.03
123	Fugitives (5)	HCl	0.01	0.06

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124	Fugitives (5)	HCl	0.39	1.70
126	Fugitives (5)	HCl	0.07	0.30
166	H_2O_2 Storage Tank	H_2O_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
		VOC	0.02	0.07
		FC	1.49	6.55
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	0.75	3.29
		CO	0.09	0.40
		SO_2	0.10	0.44
		VOC	0.06	0.25
		PM	0.05	0.23
		PM_{10}	0.05	0.23
		$PM_{2.5}$	0.05	0.23
		FC	0.63	2.76
		Benzene	<0.01	<0.01
		PCE	<0.01	<0.01
		VCM	<0.01	<0.01
		HF	0.33	1.45

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		HCl	0.16	0.71
		Cl_2	<0.01	<0.01
192-MSS	Thermal Converter MSS Operations	FC	50.96	0.70
		NO_x	23.83	8.01
		CO	14.51	4.88
		SO_2	0.40	0.13
		VOC	16.24	0.13
		PM	0.23	1.01
		PM_{10}	0.23	1.01
		$PM_{2.5}$	0.23	1.01
		HF	0.32	0.06
		HCl	0.03	0.01
		CL_2	<0.01	<0.01
		PCE	<0.01	<0.01
		$CHCl_3$	<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
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

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		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
231	Therminol Heater	NO_x	3.64	15.94
		CO	3.06	13.39
		SO_2	2.08	9.11
		VOC	0.20	0.88
		PM	0.28	1.21
		PM_{10}	0.28	1.21
237	Hot Air Heater	NO_x	0.75	3.30
		CO	0.63	2.77
		SO_2	0.43	1.89
		VOC	0.04	0.18
		PM	0.06	0.25
		PM_{10}	0.06	0.25

Emission Sources - Maximum Allowable Emission Rates

244R	Emergency Generator No. 2	NO_x	8.07	0.21
		CO	0.52	0.01
		SO_2	<0.01	<0.01
		VOC/TOC	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	<0.01
SITE	VESSBREAK	VOC	73.49	0.42
		FC	2183.96	4.40
		PCE	0.86	< 0.01
SITE	LINEBREAK	VOC	2.64	0.23
		FC	8.05	0.42
		PCE	0.73	0.05
		HF	<0.01	<0.01
		HCl	<0.01	<0.01
		Cl_2	<0.01	<0.01

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		$CHCl_3$	0.26	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
245-MSS	Fugitives	VOC	4.77	0.01
		FC	4.77	0.08
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	4.93	21.58
		HF	0.10	0.45
		HCl	0.05	0.21
		Cl_2	0.02	0.08
		PCE	<0.01	<0.01
		$CHCl_3$	0.03	0.12
		VOC	1.67	7.33
303-MSS	Earth Unit Carbon Beds – MSS	FC	34.79	0.84
		VOC	0.16	<0.01
		HF	0.05	<0.01

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		Cl_2	0.08	<0.01
		HCl	0.01	<0.01
304	Emergency Generator #4 Diesel Tank	VOC	0.02	<0.01
305	Emergency Generator #4	NO_x	1.98	0.05
		CO	3.44	0.09
		SO_2	<0.01	<0.01
		VOC	0.19	<0.01
		PM	0.02	<0.01
		PM_{10}	0.02	<0.01
		$PM_{2.5}$	0.02	<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
TOC - total organic carbon
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_2O_2 - hydrogen peroxide
HF - hydrogen fluoride
VCM - vinyl chloride monomer
$CHCl_3$ - chloroform
(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: December 16 , 2016