Emission Sources - Maximum Allowable Emission Rates

Permit Number 19041

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)
OC5S201H	EDC Cracking Furnace F-201 (6)	VOC	0.51	2.22
		NO_x	5.64	23.47
		CO	8.72	19.09
		SO_2	0.06	0.24
		PM	0.66	2.91
		PM_{10}	0.66	2.91
		$PM_{2.5}$	0.66	2.91
OC5S202H	EDC Cracking Furnace F-202 (6)	VOC	0.51	2.22
		NO_x	5.64	23.47
		CO	8.72	19.09
		SO_2	0.06	0.24
		PM	0.66	2.91
		PM_{10}	0.66	2.91
		$PM_{2.5}$	0.66	2.91
OC5S203H	EDC Cracking Furnace F-203 (6)	VOC	0.51	2.22
		NO_x	5.64	23.47
		CO	8.72	19.09
		SO_2	0.06	0.24
		PM	0.66	2.91
		PM_{10}	0.66	2.91
		$PM_{2.5}$	0.66	2.91
OC5S204H	EDC Cracking	VOC	0.51	2.22

Emission Sources - Maximum Allowable Emission Rates

		NO_x	5.64	23.47
		CO	8.72	19.09
		SO_2	0.06	0.24
		PM	0.66	2.91
		PM_{10}	0.66	2.91
		$PM_{2.5}$	0.66	2.91
OC5SV403	Boiler No. 1, FTB-401 (THROX I)	VOC	0.56	2.41
		NO_x	5.09	22.29
		CO	4.64	20.24
		SO_2	0.01	0.05
		PM	0.85	3.74
		PM_{10}	0.85	3.74
		$PM_{2.5}$	0.85	3.74
		Cl_2	0.97	4.27
		HCl	0.53	2.32
OC5SV404	Boiler No. 2, FTB-402 (THROX II)	VOC	0.56	2.41
		NO_x	5.09	22.29
		CO	4.64	20.24
		SO_2	0.01	0.05
		PM	0.85	3.74
		PM_{10}	0.85	3.74
		$PM_{2.5}$	0.85	3.74
		Cl_2	0.97	4.27
		HCl	0.53	2.32
OC5S01	Thermal Oxidizer	VOC	0.22	0.97
		NO_x	0.73	3.19
		CO	1.48	6.48

Emission Sources - Maximum Allowable Emission Rates

		SO_2	1.18	5.19
		PM	0.72	3.15
		PM_{10}	0.72	3.15
		$PM_{2.5}$	0.72	3.15
		Cl_2	1.88	8.23
		HCl	1.36	5.95
		NVOC	0.01	0.05
OC5S02	Thermal Oxidizer	VOC	0.22	0.97
		NO_x	0.73	3.19
		CO	1.48	6.48
		SO_2	1.18	5.19
		PM	0.72	3.15
		PM_{10}	0.72	3.15
		$PM_{2.5}$	0.72	3.15
		Cl_2	1.88	8.23
		HCl	1.36	5.95
		NVOC	0.01	0.05
OC5SP296	Scrubber SP-296 is used to control emissions from decoking of cracking furnaces	VOC	0.07	0.33
		PM	0.20	1.00
		PM_{10}	0.20	1.00
		$PM_{2.5}$	0.20	1.00
OC5LR1	Unloading Rack	VOC	0.01	0.04
OC5LR2	Loading/Unloading	VOC	0.01	0.03
OC5FU1	Fugitive Area 1 (5)	VOC	0.27	1.18
		HCl	0.11	0.48
		MeCl	0.09	0.39
OC5FU2	Fugitive Area 2 (5)	VOC	0.15	0.66
		HCl	0.08	0.36

Emission Sources - Maximum Allowable Emission Rates

		MeCl	0.01	0.04
OC5FU3	Fugitive Area 3 (5)	VOC	0.44	1.90
		HCl	0.15	0.66
		MeCl	0.04	0.19
OC5FU4	Fugitive Area 4 (5)	VOC	0.78	3.43
		HCl	0.81	3.56
		MeCl	0.01	0.04
OC5FU5	Fugitive Area 5 (5)	VOC	0.37	1.60
		Cl_2	0.01	0.03
		HCl	0.07	0.30
		MeCl	0.03	0.13
OC5FU6	Fugitive Area 6 (5)	VOC	0.19	0.85
		HCl	0.08	0.36
		MeCl	0.01	0.04
OC5FU7	Fugitive Area 7 (5)	VOC	0.42	1.79
		HCl	0.02	0.10
OC5CT1	Cooling Tower 320	VOC	0.24	1.02
OC5CT4	Cooling Tower 2320	VOC	0.40	1.68
OC5V1	Fabric Filter	PM	0.04	0.01
		PM_{10}	0.04	0.01
		$PM_{2.5}$	0.04	0.01
B15FU2	Fugitives (5)(6)	HCl	0.08	0.34
OC9FU4	Fugitives (5)	VOC	0.22	0.95

(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
NVOC - non-VOC hydrocarbons
NO_x - total oxides of nitrogen
CO - carbon monoxide
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$

Emission Sources - Maximum Allowable Emission Rates

$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
Cl_2 - chlorine
HCl - hydrogen chloride
MeCl - methylene chloride

(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) Emission rates are only those associated with this plant. Previously authorized emissions from this emission source can be found on the maximum allowable emission rates table of Permit Numbers 5339 and 5661.

Date: August 24, 2016