Emission Sources - Maximum Allowable Emission Rates

Permit Number 4943B

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)
DPV-002	T6254 Sump	EDC	0.01	0.01
		VOC	0.02	0.02
DPV-003	F6201 Furnace	NO_x	2.45	(6)
		CO	3.01	(6)
		SO_2	0.04	(6)
		PM	0.52	(6)
		PM_{10}	0.52	(6)
		$PM_{2.5}$	0.52	(6)
		VOC	0.37	(6)
DPV-004	F6202 Furnace	NO_x	2.45	(6)
		CO	3.01	(6)
		SO_2	0.04	(6)
		PM	0.52	(6)
		PM_{10}	0.52	(6)
		$PM_{2.5}$	0.52	(6)
		VOC	0.37	(6)
DPV-005	F6203 Furnace	NO_x	2.45	(6)
		CO	3.01	(6)
		SO_2	0.04	(6)
		PM	0.52	(6)
		PM_{10}	0.52	(6)
		$PM_{2.5}$	0.52	(6)
		VOC	0.37	(6)

Emission Sources - Maximum Allowable Emission Rates

DPV-017	F6204 Furnace	NO_x	5.18	(6)
		CO	5.86	(6)
		SO_2	0.04	(6)
		PM	0.52	(6)
		PM_{10}	0.52	(6)
		$PM_{2.5}$	0.52	(6)
		VOC	0.37	(6)
Total annual allowables for all four cracking furnaces		NO_x	---	52.68
		CO	---	62.62
		SO_2	---	0.68
		PM	---	8.68
		PM_{10}	---	8.68
		$PM_{2.5}$	---	8.68
		VOC	---	6.28
DPV-006	Decoke Vessel V6212	CO	43.64	(7)
		VOC	2.17	(7)
		PM	1.11	(7)
		PM_{10}	1.11	(7)
		$PM_{2.5}$	1.11	(7)
		HCl	0.80	(7)
DPV-007	Decoke Vessel V6214	CO	43.64	(7)
		VOC	2.17	(7)
		PM	1.11	(7)
		PM_{10}	1.11	(7)
		$PM_{2.5}$	1.11	(7)
		HCl	0.80	(7)
Total annual allowables for the decoking emissions		CO	---	12.56
		VOC	---	0.62

Emission Sources - Maximum Allowable Emission Rates

		PM	---	0.32
		PM_{10}	---	0.32
		$PM_{2.5}$	---	0.32
		HCl	---	0.23
DPV-010	T6151 Tank	VOC	0.01	0.01
DPV-011	T6259 Tank	VOC	0.01	0.01
DPV-013	C1704 Scrubber	HCl	0.01	0.05
DPV-014	T1790 Tank and Scrubber	HCl	0.01	0.01
DPV-015	A1750 Incinerator	NO_x	1.40	6.13
		CO	5.42	4.35
		CO (8)	50.00	(8)
		VOC	0.85	0.25
		PM (9)	2.84	7.66
		PM_{10} (9)	2.84	7.66
		$PM_{2.5}$ (9)	2.84	7.66
		Cl_2/HCl	6.44	23.83
		SO_2	0.02	0.10
DPV-016	A1770 Incinerator	NO_x	1.40	6.13
		CO	5.42	4.35
		CO (8)	50.00	(8)
		VOC	0.85	0.25
		PM (9)	2.84	7.66
		PM_{10} (9)	2.84	7.66
		$PM_{2.5}$ (9)	2.84	7.66
		Cl_2/HCl	6.44	23.83
		SO_2	0.02	0.10
DPV-019	T6255 Tank	NaOH	0.01	0.01
F-DPV-01	VCM Plant Fugitives (5)	EDC	2.73	11.95
		VCM	0.34	1.49

Emission Sources - Maximum Allowable Emission Rates

		VOC	4.55	19.93
		HCl	0.08	0.34
		Cl_2	0.02	0.09
F-DPV-02	Incinerator Fugitives (5)	EDC	0.04	0.17
		VOC	0.16	0.70
F-DPV-03	VCM Storage Fugitives (5)	VCM	0.91	3.99
DPV-025	Cooling Tower	VOC	19.97	3.68
		PM	0.50	1.10
		PM_{10}	0.20	0.88
		$PM_{2.5}$	0.01	0.01
		Cl_2	0.01	0.01
DPV-028	Lube Oil Tank	VOC	0.01	0.01
F-DPV-MSS	Maintenance, Startup and Shutdown on VCM process spheres	VCM	81.93	0.33

(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
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 $PM_{2.5}$
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
NaOH - sodium hydroxide
Cl_2 - chlorine
HCl - hydrogen chloride
EDC - ethylene dichloride
VCM - vinyl chloride monomer

(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) Total annual emissions for all four cracking furnaces are limited to the combined allowables listed under “Total annual allowables for all four cracking furnaces.”
(7) Total annual emissions for the decoking vessels are limited to the combined allowables listed under “Total annual allowables for the decoking emissions.
(8) Stack concentrations of CO may exceed 100 ppmv corrected to 7 percent oxygen during start-up, shutdown, and transition events.
(9) The total long-term PM_{10} allowable for both incinerators is 13.84 tpy. In order to allow increased operational flexibility, either incinerator may emit more than 6.92 tpy as long as both incinerators together emit no more than 13.84 tpy.

Emission Sources - Maximum Allowable Emission Rates

Date: June 13, 2022