Emission Sources - Maximum Allowable Emission Rates

Permit Number 146950

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)
49-36-1	Hot Oil Heater 1	NO_x	12.08	15.79
		CO	11.42	48.56
		VOC	1.71	7.29
		PM	2.37	10.07
		PM_{10}	2.37	10.07
		$PM_{2.5}$	2.37	10.07
		SO_2	4.39	18.66
		NH_3	1.40	5.59
77-36-1	Hot Oil Heater 1	NO_x	12.08	14.16
		CO	11.42	48.55
		VOC	1.71	7.29
		PM	2.37	10.07
		PM_{10}	2.37	10.07
		$PM_{2.5}$	2.37	10.07
		SO_2	4.39	18.66
		NH_3	1.40	5.85
77-36-2	Hot Oil Heater 2	NO_x	12.08	14.66
		CO	11.42	48.55
		VOC	1.71	7.29
		PM	2.37	10.07
		PM_{10}	2.37	10.07
		$PM_{2.5}$	2.37	10.07
		SO_2	4.39	18.66
		NH_3	1.40	5.85

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47-95-1	Lean DEA Storage Tank	VOC	1.17	0.01
48-95-1	Lean DEA Storage Tank	VOC	1.17	0.01
49-95-1	Lean DEA Storage Tank	VOC	1.17	0.01
47-95-2	Fresh DEA Storage Tank	VOC	0.72	0.01
48-95-2	Fresh DEA Storage Tank	VOC	0.72	0.01
49-95-2	Fresh DEA Storage Tank	VOC	0.72	<0.01
47-95-3	Fresh MEA Storage Tank	VOC	<0.01	<0.01
48-95-3	Fresh MEA Storage Tank	VOC	<0.01	<0.01
49-95-3	Fresh MEA Storage Tank	VOC	<0.01	<0.01
49-95-D1	Diesel Storage Tank - 1	VOC	0.05	<0.01
49-95-D2	Diesel Storage Tank - 2	VOC	0.05	<0.01
78-95-1	Diesel Storage Tank – 1	VOC	0.05	<0.01
78-95-2	Diesel Storage Tank – 2	VOC	0.05	<0.01
49-95-WW	Wastewater Storage Tank	VOC	61.35	0.38
49-95-SC	Spent Caustic Storage Tank	VOC	0.01	<0.01
78-95-WW	Wastewater Storage Tank	VOC	61.35	0.38
78-95-SC	Spent Caustic Storage Tank	VOC	0.01	<0.01
49-36-003	Thermal Oxidizer	NO_x	2.38	10.42
		CO	2.97	13.02
		VOC	1.18	5.15
		PM	0.30	1.29
		PM_{10}	0.30	1.29
		$PM_{2.5}$	0.30	1.29
		H_2S	<0.01	0.01
		SO_2	2.70	11.83
77-36-003	Thermal Oxidizer	NO_x	4.96	21.72
		CO	6.20	27.15

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		VOC	2.72	11.93
		PM	0.62	2.70
		PM_{10}	0.62	2.70
		$PM_{2.5}$	0.62	2.70
		SO_2	5.68	24.86
		H_2S	<0.01	0.01
78-61-47	Routine Flare (various)	NO_x	4.81	11.25
		CO	9.61	22.44
		VOC	14.91	17.41
		SO_2	0.02	0.05
49-N-TLOAD	Truck Car Loading	VOC	0.19	0.08
		NH_3	0.01	<0.01
N-TLOAD	Truck Car Loading	VOC	0.19	0.08
49-22-47	Cooling Tower	VOC	0.62	2.73
		PM	0.41	0.98
		PM_{10}	0.41	0.98
		$PM_{2.5}$	0.12	0.37
78-22-47	Cooling Tower	VOC	1.25	5.46
		PM	0.82	1.95
		PM_{10}	0.82	1.95
		$PM_{2.5}$	0.23	0.73
49-32-47	Firewater Pump 1	NOx	1.40	0.11
		CO	0.90	0.07
		VOC	0.08	0.01
		PM	0.08	0.01

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	0.08	0.01
		$PM_{2.5}$	0.08	0.01
		SO_2	0.59	0.05
49-32-48	Firewater Pump 2	NO_x	1.40	0.11
		CO	0.90	0.07
		VOC	0.08	0.01
		PM	0.08	0.01
		PM_{10}	0.08	0.01
		$PM_{2.5}$	0.08	0.01
		SO_2	0.59	0.05
78-32-47	Firewater Pump 1	NO_x	1.40	0.11
		CO	0.90	0.07
		VOC	0.08	0.01
		PM	0.08	0.01
		PM_{10}	0.08	0.01
		$PM_{2.5}$	0.08	0.01
		SO_2	0.59	0.05
78-32-48	Firewater Pump 2	NO_x	1.40	0.11
		CO	0.90	0.07
		VOC	0.08	0.01
		PM	0.08	0.01
		PM_{10}	0.08	0.01
		$PM_{2.5}$	0.08	0.01
		SO_2	0.59	0.05
49-N-FUG	Fugitives(5)	VOC	1.54	6.75
N-FUG	Fugitives(5)	VOC	1.53	6.68
49-N-MSS	Train 4 MSS Activities	NO_x	443.39	2.03
		CO	885.18	4.05
		VOC	2459.22	10.78
		SO_2	1.89	0.01

Emission Sources - Maximum Allowable Emission Rates

N-MSS	MSS Activities	NO_x	443.39	8.32
		CO	885.18	16.62
		VOC	2498.15	47.44
		SO_2	1.93	0.04

(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
NH3 - ammonia
H2S - hydrogen sulfide
(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: February 13, 2019