

Emission Sources - Maximum Allowable Emission Rates

Permit Number 73193

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)
TK-1	Tank 1	VOC	5.04	0.12
TK-2	Tank 2	VOC	5.03	0.24
TK-7	Tank 7	VOC	5.04	0.16
TK-9	Tank 9	VOC	5.04	0.10
TK-10	Tank 10	VOC	5.04	0.18
TK-11	Tank 11	VOC	5.03	0.26
TK-12	Tank 12	VOC	5.04	0.09
TK-14	Tank 14	VOC	5.03	0.26
TK-19	Tank 19	VOC	5.61	0.32
TK-41	Tank 41	VOC	5.61	0.18
TK-54	Tank 54	VOC	5.63	0.55
TK-55	Tank 55	VOC	5.63	0.56
TK-56	Tank 56	VOC	6.00	0.59
TK-58	Tank 58	VOC	5.63	0.56
TK-88	Tank 88	VOC	5.64	0.13
TK-93	Tank 93	VOC	0.14	<0.01
TK-508	Tank 508	VOC	10.39	0.87
DRUMHEAT	Heated Drums	VOC	0.02	0.47
		Polyphosphoric Acid	<0.01	<0.01
CT NORTH	North Cooling Tower	VOC (5)	0.06	0.28
		PM	7.51	32.88
		PM ₁₀	0.03	0.12
		PM _{2.5}	0.03	0.12

Emission Sources - Maximum Allowable Emission Rates

CT SOUTH	South Cooling Tower	VOC (5)	0.04	0.17
		PM	4.5	19.73
		PM ₁₀	0.02	0.07
		PM _{2.5}	0.02	0.07
OILHEAT	Hot Oil Heater	NO _x	0.25	0.18
		CO	0.21	0.15
		VOC	0.01	0.01
		PM	0.02	0.01
		PM ₁₀	0.02	0.01
		PM _{2.5}	0.02	0.01
		SO ₂	0.01	<0.01
FUG	Nalco Plant-Wide Fugitives (5)	VOC	3.37	14.79
LOADFUG	Loading Loss Fugitives	VOC	<0.01	<0.01
BOILER-1	Boiler 1	VOC	0.05	0.20
		NO _x	0.82	3.61
		CO	0.69	3.03
		SO ₂	0.01	0.02
		PM	0.06	0.27
		PM ₁₀	0.06	0.27
		PM _{2.5}	0.06	0.27
BOILER-2	Boiler 2	VOC	0.05	0.20
		NO _x	0.82	3.61
		CO	0.69	3.03
		SO ₂	0.01	0.02
		PM	0.06	0.27
		PM ₁₀	0.06	0.27
		PM _{2.5}	0.06	0.27
FWTRPMP	Firewater Pump Engine	VOC	0.08	<0.01

Emission Sources - Maximum Allowable Emission Rates

		NO _x	2.08	0.10
		CO	0.31	0.02
		SO ₂	0.72	0.04
		PM	0.05	<0.01
		PM ₁₀	0.05	<0.01
		PM _{2.5}	0.05	<0.01
TO-1	Thermal Oxidizer	VOC	1.54	0.34
		NO _x	0.75	3.26
		CO	0.63	2.74
		SO ₂	15.77	1.11
		PM	0.06	0.25
		PM ₁₀	0.06	0.25
		PM _{2.5}	0.06	0.25
		HCl	0.12	0.01
FL-1	Back-up Flare to Thermal Oxidizer	VOC	30.00	3.24
		NO _x	3.31	1.98
		CO	28.36	17.02
		SO ₂	15.77	1.09
		HCl	0.12	0.01
FUGMSS	Line Break	VOC	2.65	0.28
	Tank Maintenance	VOC	6.92	1.87
	SO ₂ Tank Maintenance	VOC	0.01	<0.01
		SO ₂	<0.01	<0.01
	NH ₃ Tank Maintenance	VOC	<0.01	<0.01
		NH ₃	0.01	0.01
	Hot Oil Heater Drum Filling	VOC	<0.01	<0.01
	Vacuum Truck Loading	VOC	0.06	<0.01
	Aerosol	VOC	6.90	0.35

Emission Sources - Maximum Allowable Emission Rates

	Degreasing/Lubricants			
FT-01	Frac Tank 01	VOC	1.77	0.25
		Inorganic	0.71	0.10
FT-02	Frac Tank 02	VOC	1.77	0.25
		Inorganic	0.71	0.10
FT-03	Frac Tank 03	VOC	1.77	0.25
		Inorganic	0.71	0.10
FT-04	Frac Tank 04	VOC	1.77	0.25
		Inorganic	0.71	0.10
FT-05	Frac Tank 05	VOC	1.77	0.25
		Inorganic	0.71	0.10
2014LDPBR1	Truck Loading	VOC	0.60	0.29
TK801	Tank 801	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK802	Tank 802	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK803	Tank 803	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK804	Tank 804	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK805	Tank 805	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK806	Tank 806	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK807	Tank 807	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK808	Tank 808	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK809	Tank 809	VOC	2.84	12.68

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		Inorganic	0.71	0.10
TK810	Tank 810	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK811	Tank 811	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK812	Tank 812	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK813	Tank 813	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK814	Tank 814	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK815	Tank 815	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK816	Tank 816	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK817	Tank 817	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK818	Tank 818	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK819	Tank 819	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK820	Tank 820	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK821	Tank 821	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK822	Tank 822	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK823	Tank 823	VOC	1.77	0.25
		Inorganic	0.71	0.10

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TK824	Tank 824	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK825	Tank 825	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK826	Tank 826	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK827	Tank 827	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK828	Tank 828	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK829	Tank 829	VOC	1.77	0.25
		Inorganic	0.71	0.10
TK830	Tank 830	VOC	1.77	0.25
		Inorganic	0.71	0.10
TKLOAD	Tank Truck Loading from Storage Tank	VOC	0.88	1.01
		Inorganic	0.35	0.40
TRLOAD	Treater Truck Loading from Storage Tanks	VOC	0.88	1.01
		Inorganic	0.35	0.40
TTLOAD1	Small Tote Loading from Storage Tanks	VOC	0.88	1.01
		Inorganic	0.35	0.40
TTLOAD2	Large Tote Loading from Storage Tanks	VOC	0.88	1.01
		Inorganic	0.35	0.40
TTLOAD3	Tote to Tote Loading	VOC	0.88	1.01
		Inorganic	0.35	0.40
FUG2	WellChem Fugitive Equipment Leaks	VOC	0.23	1.01

(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

SO₂ - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented

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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
HCl	- hydrochloric acid
NH ₃	- ammonia

- (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: May 29, 2018