

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 2341

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. 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 *	
			lb/hr	TPY **
P1001	HOT OIL HEATER B-301	CO	1.74	3.58
		NO _x	4.28	13.17
		PM ₁₀	0.16	0.32
		SO ₂	0.01	0.03
		VOC	0.11	0.23
P4001	HOT OIL HEATER B-401	CO	1.03	2.12
		NO _x	1.95	4.13
		PM ₁₀	0.09	0.19
		SO ₂	0.01	0.02
		VOC	0.07	0.14
P5002	HOT OIL HEATER B-501	CO	2.65	4.75
		NO _x	3.30	6.40
		PM ₁₀	0.24	0.43
		SO ₂	0.02	0.03
		VOC	0.17	0.32
P3001	HOT OIL HEATER B-601	CO	0.36	0.74
		NO _x	0.43	0.88
		PM ₁₀	0.03	0.07
		SO ₂	0.01	0.01
		VOC	0.02	0.05
P3002	HOT OIL HEATER B-602	CO	0.36	0.74
		NO _x	0.65	1.37
		PM ₁₀	0.03	0.07
		SO ₂	0.01	0.01
		VOC	0.02	0.05

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
P3003	HOT OIL HEATER B-603	CO	1.03	2.12
		NO _x	2.06	5.35
		PM ₁₀	0.09	0.19
		SO ₂	0.01	0.02
		VOC	0.07	0.14
P3022	HOT OIL HEATER B-604	CO	0.21	0.42
		NO _x	0.30	0.63
		PM ₁₀	0.02	0.04
		SO ₂	0.01	0.01
		VOC	0.01	0.03
P6003	HOT OIL HEATER B-690	CO	2.67	8.83
		NO _x	4.05	12.60
		PM ₁₀	0.62	1.71
		SO ₂	0.02	0.06
		VOC	0.69	1.81
P2001	HOT OIL HEATER B-701	CO	1.10	4.32
		NO _x	3.31	11.49
		PM ₁₀	0.10	0.39
		SO ₂	0.01	0.03
		VOC	0.07	0.28
P7004	HOT OIL HEATER B-778	CO	0.87	3.72
		NO _x	1.43	6.06
		PM ₁₀	0.21	0.88
		SO ₂	0.02	0.07
		VOC	0.15	0.64
P7001	HOT OIL HEATER B-790	CO	3.08	5.66
		NO _x	3.67	6.73
		PM ₁₀	0.28	0.51
		SO ₂	0.01	0.03
		VOC	0.24	0.43
P1003	STEAM BOILER B-503	CO	3.52	8.30
		NO _x	5.42	11.28

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			lb/hr	TPY **
		PM ₁₀	0.88	3.12
		SO ₂	0.02	0.04
		VOC	0.28	0.74
P1004	STEAM BOILER B-505	CO	3.39	8.22
		NO _x	5.94	15.93
		PM ₁₀	0.73	3.03
		SO ₂	0.02	0.04
		VOC	0.26	0.73
P1005	STEAM BOILER B-506	CO	3.33	7.93
		NO _x	5.97	15.88
		PM ₁₀	0.66	2.67
		SO ₂	0.02	0.04
		VOC	0.25	0.69
P2002	STEAM BOILER B-507	CO	3.02	6.20
		NO _x	5.58	11.82
		PM ₁₀	0.27	0.56
		SO ₂	0.02	0.04
		VOC	0.20	0.41
P2003	STEAM BOILER B-508	CO	3.02	6.20
		NO _x	3.59	7.38
		PM ₁₀	0.27	0.56
		SO ₂	0.02	0.04
		VOC	0.20	0.41
P3023	CHEMICAL HOT BOX	VOC (5)	1.35	1.21
P1016	E-307 VAC PUMP J-320	VOC	0.06	0.27
P1017	E-308 VAC PUMP J-321	VOC	0.20	0.91
P1018	E-306 VAC PUMP J-820	VOC	2.66	12.29
P1006	E-309 STEAM JET V-309	VOC	0.20	0.91
P1007	E-310 STEAM JET V-310	VOC	0.10	0.42

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
P1008	E-311 STEAM JET V-311	VOC	0.06	0.28
P3014	FLARE X-601	VOC	12.08	1.85
		NO _x	0.03	0.13
		CO	0.26	1.12
		SO ₂	0.01	0.01
P3015	FLARE X-602	VOC	1.69	0.20
		NO _x	1.15	0.04
		CO	9.80	0.39
		SO ₂	0.01	0.01
P4004	FLARE X-401	VOC	11.26	4.70
		NO _x	0.07	0.32
		CO	0.58	2.70
		SO ₂	0.01	0.01
P6001	FLARE X-695	VOC	10.06	16.31
		NO _x	0.34	1.37
		CO	2.23	8.84
		SO ₂	0.73	0.41
PX501	FLARE X-501	VOC	3.71	0.27
		NO _x	0.56	2.23
		CO	4.36	13.53
		SO ₂	0.01	0.01
P7002	FLARE X-794	VOC	4.47	1.98
		NO _x	1.67	1.25
		CO	11.06	10.03
		SO ₂	0.01	0.01
P1024	COOLING TOWER W-501	VOC	0.15	0.66
P5004	COOLING TOWER W-502	VOC	0.17	0.74
P5005	COOLING TOWER W-503	VOC	0.17	0.74
P5006	COOLING TOWER W-503A	VOC	0.08	0.37

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
WW001	ENCL. SUMP SKIMMER F-530	VOC	0.02	0.01
WW002	WW COLLECTION SUMP	VOC	0.01	0.01
WW003	WW SURGE TANK F-1001	VOC	0.01	0.02
P1019	BAGHOUSE R-301	PM	0.10	0.37
		VOC	0.01	0.01
P1010	STORAGE TANK F-320A	VOC	2.59	0.08
P1020	STORAGE TANK F-322A	VOC	0.36	0.02
T1001	STORAGE TANK F-402	VOC	0.54	0.80
P1011	STORAGE TANK F-403	VOC (5)	2.50	0.03
T1003	STORAGE TANK F-405	VOC	0.89	0.74
T1004	STORAGE TANK F-408	VOC	2.38	0.07
T1005	STORAGE TANK F-409	VOC (5)	1.45	0.03
P1012	STORAGE TANK F-414	VOC	0.13	0.01
P1013	STORAGE TANK F-504	VOC	6.58	0.04
T1006	STORAGE TANK F-505	VOC (5)	0.83	0.94
P5001	STORAGE TANK F-560	VOC	1.75	0.30
T5008	STORAGE TANK F-580	VOC (5)	8.95	0.35
T5009	STORAGE TANK F-581	VOC	0.20	0.06
T5010	STORAGE TANK F-582	VOC	0.01	0.01
T3001	STORAGE TANK F-606	VOC	5.16	0.61

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
T3002	STORAGE TANK F-607	VOC	2.65	0.14
T3003	STORAGE TANK F-608	VOC	0.72	0.26
P3006	STORAGE TANK F-608A	VOC	0.37	0.03
P3007	STORAGE TANK F-608B	VOC	0.26	0.03
T3004	STORAGE TANK F-609	VOC	0.13	0.10
P3008	STORAGE TANK F-609A	VOC	0.61	0.05
P3009	STORAGE TANK F-609B	VOC	0.79	0.07
P3010	STORAGE TANK F-611A	VOC (5)	2.09	0.51
T1009	STORAGE TANK F-612	VOC	2.15	0.08
T4001	STORAGE TANK F-612A	VOC	22.21	1.00
T4002	STORAGE TANK F-612AA	VOC	19.66	1.51
T2001	STORAGE TANK F-612B	VOC	6.47	0.98
T3005	STORAGE TANK F-612C	VOC	0.19	0.15
P3011	STORAGE TANK F-613	VOC	0.01	0.01
T3006	STORAGE TANK F-615	VOC	2.31	0.42
T3007	STORAGE TANK F-615A	VOC	2.95	0.42
P3013	STORAGE TANK F-616B	VOC (5)	2.27	0.06
T3008	STORAGE TANK F-617	VOC	1.64	0.06
T4004	STORAGE TANK F-618	VOC	2.96	0.07
T4005	STORAGE TANK F-619	VOC	0.63	0.31

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY **
T4006	STORAGE TANK F-620	VOC	1.23	0.48
T4007	STORAGE TANK F-621	VOC	0.09	0.01
T4008	STORAGE TANK F-640	VOC	3.05	0.01
T4009	STORAGE TANK F-641	VOC	0.02	0.01
T4010	STORAGE TANK F-642	VOC	0.07	0.02
T4011	STORAGE TANK F-643	VOC (5)	7.88	1.37
T4012	STORAGE TANK F-644	VOC	0.25	0.21
T4013	STORAGE TANK F-645	VOC	0.01	0.01
T5003	STORAGE TANK F-650	VOC	12.29	1.89
P6005	STORAGE TANK F-651	VOC	0.01	0.03
T5007	STORAGE TANK F-653	VOC	0.01	0.01
P6002	STORAGE TANK F-691	VOC	2.20	0.04
T1010	STORAGE TANK F-702	VOC	0.03	0.01
T1012	STORAGE TANK F-704	VOC	1.07	0.07
T1013	STORAGE TANK F-705	VOC	0.21	0.01
T2003	STORAGE TANK F-706	VOC	0.04	0.01
T2004	STORAGE TANK F-707	VOC	1.56	0.05
T2005	STORAGE TANK F-708	VOC	0.69	0.27
T2006	STORAGE TANK F-713	VOC	0.03	0.04
T5001	STORAGE TANK F-718	VOC	0.10	0.02

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
T5002	STORAGE TANK F-719	VOC	0.10	0.02
T5005	STORAGE TANK F-721	VOC	0.15	0.12
T2007	STORAGE TANK F-722	VOC	0.10	0.01
T2008	STORAGE TANK F-723	VOC	0.09	0.02
T2009	STORAGE TANK F-724	VOC	1.05	0.83
T2011	STORAGE TANK F-726	VOC	0.57	0.01
T2012	STORAGE TANK F-727	VOC	0.88	0.04
T2013	STORAGE TANK F-728	VOC	2.22	0.04
T2014	STORAGE TANK F-729	VOC	0.91	0.05
P2004	STORAGE TANK F-730	VOC	5.53	0.25
T0010	STORAGE TANK F-738	VOC	0.01	0.01
T3009	STORAGE TANK F-741	VOC	0.20	0.06
T3010	STORAGE TANK F-742	VOC	0.06	0.08
T3011	STORAGE TANK F-743	VOC	0.51	0.09
T3024	STORAGE TANK F-746	VOC	3.11	0.01
T6001	STORAGE TANK F-751	VOC	1.53	0.02
T6003	STORAGE TANK F-754	VOC	1.55	0.01
T6007	STORAGE TANK F-755	VOC	0.64	0.39
T6004	STORAGE TANK F-775	VOC	8.14	0.74
T6005	STORAGE TANK F-785	VOC	0.60	0.75

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
T6008	STORAGE TANK F-796	VOC	0.27	0.04
P7007	STORAGE TANK F-797	VOC	0.62	0.05
P7006	STORAGE TANK F-799	VOC	7.75	0.11
P8003	STORAGE TANK F-832	VOC	3.25	0.13
P8004	STORAGE TANK F-861	VOC	0.01	0.01
LT001	TRUCK LOADING RACK A	VOC (6)	15.45	2.90
		VOC	0.20	0.04
LT002	TRUCK LOADING RACK B	VOC	1.25	0.01
LT003	TRUCK LOADING RACK C	VOC (6)	11.92	0.19
		VOC	0.16	<0.01
LT004	TRUCK LOADING RACK D	VOC	0.19	0.01
LT005	TRUCK LOADING RACK E	VOC (6)	15.45	1.05
		VOC	0.20	0.01
LT006	TRUCK LOADING RACK F	VOC	0.26	0.01
LT007	TRUCK LOADING RACK G	VOC	5.12	0.06
LT008	TRUCK LOADING RACK H	VOC	0.39	0.09
LT009	TRUCK LOADING RACK I	VOC	0.39	0.11
LR001	RAILCAR LOADING, TRACK 1, SPOT 1	VOC	0.14	0.01
LR002	RAILCAR LOADING, TRACK 1, SPOT 2	VOC	0.01	0.01
LR003	RAILCAR LOADING, TRACK 2, SPOT 6	VOC	3.40	0.04

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
LR004	RAILCAR LOADING, TRACK 2, SPOT 7	VOC (6) VOC	12.54 0.00	1.20 0.00
LR005	RAILCAR LOADING, TRACK 2, SPOT 8	VOC	0.68	0.02
LR006	RAILCAR LOADING, TRACK 3, SPOT 9	VOC	1.17	0.02
LR013	F-700	VOC	0.01	0.01
LR014	LOADING SCRUBBER	VOC	0.05	0.01
LR015	DRUMMING PLANT	VOC	4.33	0.07
P1025	PLANT 1 WW SUMP	VOC	0.01	0.01
P2005	PLANT 2 WW SUMP	VOC	0.01	0.01
P3024	PLANT 3 WW SUMP	VOC	0.01	0.01
P4005	PLANT 4 WW SUMP	VOC	0.01	0.01
P5007	PLANT 5 WW SUMP	VOC	0.01	0.01
P6004	PLANT 6 WW SUMP	VOC	0.01	0.01
P7003	PLANT 7 WW SUMP	VOC	0.01	0.01
P1026	MAIN WASTEWATER SUMP	VOC	0.01	0.01
P1027	CARBON FINES WW SUMP	VOC	0.01	0.01
P1028	DRUMMING PLT. WW SUMP	VOC	0.01	0.01
F1001	PLANT FUGITIVES (4)	VOC	7.17	32.12
P1029	FIRE WATER DIESEL PUMP emissions resulting from testing of equipment (38 hours per year)	CO NO _x PM ₁₀	2.75 12.77 0.91	0.05 0.24 0.02

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
		SO ₂	0.85	0.02
		VOC	1.03	0.02
P1030	FIRE WATER DIESEL PUMP	CO	2.75	0.05
	emissions resulting from testing	NO _x	12.77	0.24
	of equipment (38 hours per year)	PM ₁₀	0.91	0.02
		SO ₂	0.85	0.02
		VOC	1.03	0.02
P1031	WASTEWATER DIESEL PUMP	CO	0.19	0.07
		NO _x	2.98	1.07
		PM ₁₀	0.18	0.06
		SO ₂	0.17	0.06
		VOC	0.21	0.07
P1032	WASTEWATER DIESEL PUMP	CO	0.07	0.02
		NO _x	4.38	1.07
		PM ₁₀	0.18	0.04
		SO ₂	0.17	0.04
		VOC	0.21	0.05

- (1) Emission point identification - either specific equipment designation or emission point number (EPN) from plot plan.
- (2) Specific point source name. For fugitive sources use area name or fugitive source name.
- (3) CO - carbon monoxide
NO_x - total oxides of nitrogen
PM - particulate matter, suspended in the atmosphere, including PM₁₀
PM₁₀ - particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns in emitted.
SO₂ - sulfur dioxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code ' 101.1
- (4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
- (5) The Chemical Hot Box, EPN P3023, and Storage Tanks F-403, F-409, F-505, F-580, F-611A, F-616B, and F-643, EPNs P1011, T1005, T1006, T5008, P3010, P3013, and T4011 respectively, shall be vented to Flare X-501, EPN PX501, for control after design and construction of the vent system; and the normal operation emissions to atmosphere noted shall be eliminated.
- (6) Tank Truck Loading Racks A, C, and E and Railcar Loading at Track 2, Spot 7, EPNs LT001, LT003, LT005, and LR004 respectively, shall be vented to Flare X-501, EPN PX501, for control

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

after design and construction of the vent system; and the normal operation emissions to atmosphere noted will be reduced to loading loss fugitives.

- * Emission rates are based on and the facilities are limited by the following maximum operating schedule:

Hrs/day ____ Days/week ____ Weeks/year ____ or Hrs/year 8,760

- ** Compliance with annual emission limits is based on a rolling 12-month period.

Dated January 20, 2011