Emission Sources - Maximum Allowable Emission Rates

Permit Number 93546

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)
T-69	TK-069 (6) (7)	VOC	0.74	1.93
		Benzene	<0.01	0.01
T-76	TK-076 (6) (7)	VOC	0.89	2.05
		Benzene	0.01	0.01
T-90	TK-090 (6) (7)	VOC	1.22	1.63
		Benzene	0.01	0.01
T-95	TK-095 (6) (7)	VOC	1.64	2.52
		Benzene	0.01	0.01
T-96	TK-096 (6) (7)	VOC	1.61	2.85
		Benzene	0.01	0.01
T-97	TK-097 (6) (7)	VOC	1.61	2.81
		Benzene	0.01	0.01
T-98	TK-098 (6)	VOC	0.93	0.08
T-99	TK-099 (6)	VOC	0.28	0.08
T-100	TK-100 (6)	VOC	3.85	0.89
T-101	TK-101 (6)	VOC	0.78	0.02
T-107	TK-107 (6) (7)	VOC	3.41	8.58
		Benzene	0.02	0.03
T-113	TK-113 (6) (7)	VOC	0.08	0.05
		Benzene	<0.01	<0.01
T-114	TK-114 (6) (7)	VOC	1.06	2.41
		Benzene	0.01	0.01

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T-115	TK-115 (6) (7)	VOC	1.65	2.47
		Benzene	0.01	0.01
T-116	TK-116 (6) (7)	VOC	2.21	3.27
		Benzene	0.01	0.01
T-117	TK-117 (6) (7)	VOC	2.08	2.91
		Benzene	0.01	0.01
		Toluene	<0.01	<0.01
		Xylene	<0.01	<0.01
T-118	TK-118 (6) (7)	VOC	1.25	3.67
		Benzene	<0.01	0.01
T-119	TK-119 (6) (7)	VOC	2.05	2.95
		Benzene	<0.01	0.01
T-123	TK-123 (6) (7)	VOC	2.16	3.17
		Benzene	0.01	0.01
T-124	TK-124 (6) (7)	VOC	2.07	3.05
		Benzene	0.01	0.01
T-125	TK-125 (6) (7)	VOC	1.98	2.89
		Benzene	<0.01	0.04
T-126	TK-126 (6) (7)	VOC	1.02	2.99
		Benzene	<0.01	0.01
T-127	TK-127 (6) (7)	VOC	2.50	3.55
		Benzene	0.01	0.05
T-129	TK-129 (6 (7))	VOC	0.96	2.82
		Benzene	<0.01	0.01
T-130	TK-130 (6) (7)	VOC	2.36	3.32
		Benzene	0.01	0.04
T-131	TK-131 (6) (7)	VOC	1.23	3.81
		Benzene	<0.01	0.01
T-132	TK-132 (6)	VOC	1.66	3.00

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T-133	TK-133 (6) (7)	VOC	10.76	13.85
		Benzene	0.04	0.05
T-136	TK-136 (7)	VOC	1.39	3.28
		Benzene	<0.01	0.01
T-137	TK-137 (6) (7)	VOC	3.75	8.64
		Benzene	0.01	0.02
T-139	TK-139 (6)	VOC	1.17	0.85
T-140	TK-140 (6) (7)	VOC	4.21	9.60
		Benzene	0.02	0.04
T-141	TK-141 (6) (7)	VOC	2.17	5.06
		Benzene	0.01	0.02
T-142	TK-142 (6) (7)	VOC	1.23	3.48
		Benzene	0.01	0.05
T-143	TK-143 (6) (7)	VOC	1.48	4.25
		Benzene	0.01	0.02
T-144	TK-144 (6) (7)	VOC	1.42	3.62
		Benzene	0.01	0.01
T-145	TK-145 (6) (7)	VOC	1.54	3.99
		Benzene	0.01	0.02
T-146	TK-146 (6) (7)	VOC	1.48	4.33
		Benzene	0.01	0.02
T-164	TK-164 (6) (7)	VOC	1.03	2.77
		Benzene	<0.01	0.01
T-165	TK-165 (6) (7)	VOC	2.07	3.99
		Benzene	0.01	0.02
T-166	TK-166 (6) (7)	VOC	1.01	2.70
		Benzene	<0.01	0.01

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T-167	TK-167 (6) (7)	VOC	1.61	3.93
		Benzene	0.01	0.01
T-181	TK-181 (6) (7)	VOC	2.06	5.77
		Benzene	0.01	0.02
T-182	TK-182 (6) (7)	VOC	5.96	15.02
		Benzene	0.03	0.05
T-183	TK-183 (6) (7)	VOC	2.27	6.54
		Benzene	0.01	0.02
T-190	TK-190 (6) (7)	VOC	2.89	8.11
		Benzene	0.01	0.03
T-191	TK-191 (6) (7)	VOC	2.85	7.97
		Benzene	0.01	0.03
T-192	TK-192 (6) (7)	VOC	2.63	7.73
		Benzene	0.01	0.03
T-202	TK-202 (6) (7)	VOC	1.90	2.60
		Benzene	0.01	0.01
T-210	TK-210 (6) (7)	VOC	1.47	2.75
		Benzene	<0.01	<0.01
T-211	TK-211 (6) (7)	VOC	2.33	6.94
		Benzene	<0.01	0.03
71	TK-4008 (6)	VOC	1.05	0.24
66	TK-4012 (6)	VOC	0.50	0.17
52	TK-4013 (6)	VOC	1.28	0.32
79	TK-4035 (6) (7)	VOC	1.00	2.42
		Benzene	0.01	0.01
53	TK-4046 (6)	VOC	10.72	0.46
28	TK-4050 (6) (7)	VOC	7.50	19.99
		Benzene	0.03	0.07

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67	TK-4051 (6)	VOC	0.73	0.19
29	TK-4057 (6)	VOC	0.14	0.13
T4064	TK-4064 (6) (7)	VOC	1.41	0.06
		Benzene	0.01	<0.01
45	TK-4065 (6) (7)	VOC	1.05	1.15
		Benzene	0.01	<0.01
46	TK-4113 (6)	VOC	1.86	0.36
48	TK-4115 (6)	VOC	0.06	0.03
49	TK-4116 (6)	VOC	2.69	0.82
38	TK-4118 (6) (7)	VOC	1.61	3.73
		Benzene	0.01	0.01
39	TK-4119 (6) (7)	VOC	1.30	3.83
		Benzene	0.01	0.05
40	TK-4120 (6) (7)	VOC	1.41	3.91
		Benzene	0.01	0.05
42	TK-4121 (6) (7)	VOC	0.67	1.77
		Benzene	<0.01	0.01
43	TK-4122 (6) (7)	VOC	0.70	1.75
		Benzene	<0.01	0.01
47	TK-4123 (6) (7)	VOC	1.33	3.88
		Benzene	<0.01	0.01
44	TK-4124 (6) (7)	VOC	1.57	4.49
		Benzene	0.01	0.02
116	TK-4285 (6) (7)	VOC	2.47	6.88
		Benzene	0.01	0.02
118	TK-4601 (6) (7)	VOC	1.10	1.21
		Benzene	0.01	0.01
119	TK-4602 (6)	VOC	4.13	1.39
120	TK-4603 (6)	VOC	4.49	1.40

Emission Sources - Maximum Allowable Emission Rates

124	TK-4605 (6) (7)	VOC	2.55	6.63
		Benzene	0.01	0.03
TANK504	TK-504 (6) (7)	VOC	0.88	0.03
		Benzene	0.01	<0.01
TANK506	TK-506 (6)	VOC	0.46	<0.01
VENT507	TK-507 (6)	VOC	0.46	<0.01
TANK508	TK-508 (6) (7)	VOC	0.98	1.23
		Benzene	0.01	0.01
TANK509	TK-509 (6)	VOC	56.27	9.28
PRV512	TK-512 (6) (7)	VOC	1.21	2.05
		Benzene	0.01	0.01
TANK513	TK-513 (6) (7)	VOC	1.15	1.33
		Benzene	0.01	0.01
		Toluene	0.01	0.01
		Xylene	0.01	0.01
TANK514	TK-514 (6) (7)	VOC	1.07	1.03
		Benzene	0.01	0.01
		Toluene	0.01	0.01
		Xylene	0.01	0.01
TANK515	TK-515 (6) (7)	VOC	0.88	0.95
		Benzene	0.01	<0.01
TANK516	TK-516 (6) (7)	VOC	0.84	0.98
		Benzene	0.01	<0.01
TK-517	TK-517 (6)	VOC	2.97	0.15
VENT518	TK-518 (6)	VOC	2.97	0.11
VENT519	TK-519 (6)	VOC	2.97	0.07
TANK520	TK-520 (6) (7)	VOC	1.36	1.71
		Benzene	0.01	0.01
TANK521	TK-521 (6)	VOC	1.14	0.20

Emission Sources - Maximum Allowable Emission Rates

TANK522	TK-522 (6)	VOC	0.94	0.23
T-524	TK-524 (6)	VOC	0.17	0.03
F-10N-T	North Plant Utilities Fugitives (5) (6)	VOC	0.28	1.23
		H_2S	<0.01	<0.01
WWCTS-T	North API Separator Fugitives (5) (6) (7)	VOC	<0.01	<0.01
		Benzene	<0.01	<0.01
		H_2S	<0.01	<0.01
		NH_3	<0.01	<0.01
TNK-FUG-T	Tank Field Piping Fugitives (5) (6) (7)	VOC	17.94	77.96
		Benzene	0.20	0.86
		H_2S	<0.01	<0.01
F-16S-T	Receiving, Pumping, and Shipping Fugitives (5) (6) (7)	VOC	11.54	50.52
		Benzene	0.10	0.44
		H_2S	<0.01	<0.01
FUG-T	Terminal Fugitives (5) (6) (7)	VOC	5.16	22.59
		Benzene	0.05	0.18
		H_2S	<0.01	<0.01
SLR1	South Railcar Loading Rack (6)	VOC	3.89	0.31
		H_2S	<0.01	<0.01
SLR2	South LPG Tank truck Loading Rack (6)	VOC	0.10	0.01
SLR4	South Acid/Caustic Tank truck Loading Rack (6)	VOC	10.53	1.05
		H_2S	<0.01	<0.01
NLR2-5 (FIN: NLR2)	North Railcar and Tank truck Loading Rack (6)	VOC	2.16	4.76
NLR 2-5 (FIN: NLR3)	North Loading Rack NLR3 (6) (7)	VOC	8.27	0.81
		Toluene	1.18	0.11
		Xylene	0.61	0.06
NLR2-5 (FIN: NLR4)	North Caustic Loading Rack (6)	VOC	5.28	0.09

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		H_2S	<0.01	<0.01
NLR-6	Solid Waste Gondola Loading Rack (6)	PM	3.24	0.19
		PM_{10}	1.62	0.10
		$PM_{2.5}$	1.62	0.10
NLR-7	North Asphalt Feed Loading Rack (6)	VOC	0.04	<0.01
LLPG-TC	North LPG Railcar and Tank truck Loading Rack (6)	VOC	0.40	0.09
CA-SK (FIN: LRACK)	Terminal Tank Truck Loading Rack VRU (6)	VOC	1.58	2.76
LRACK-FUG	Terminal Loading Rack Hose Fugitives (6)	VOC	0.72	0.71
VACLR	Vacuum Residue Loading (6)	VOC	0.01	0.01
CA-SK (FIN: S-1)	Marketing Terminal Sump-1 (6)	VOC	0.14	0.60
CA-SK (FIN:S-2)	Marketing Terminal Sump-2 (6)	VOC	0.14	0.60
Compliance Caps - Final	Compliance Caps - Final (5)(6) (7)	PM	3.24	0.19
		PM10	1.62	0.10
		PM2.5	1.62	0.10
		VOC	243.00	281.02
		Benzene	0.55	1.20
MSS CAP	Sitewide MSS Sources Excluding Flares	VOC	348.76	66.92
		NO_x	1.49	9.94
		CO	0.44	2.19
		SO_2	0.19	0.75
		PM	8.86	1.72
		PM_{10}	8.86	1.72
		$PM_{2.5}$	8.86	1.72
		H_2S	0.01	0.01
XF 3601	Asphalt Plant – Furnace F-3601	VOC	0.72	3.15

Emission Sources - Maximum Allowable Emission Rates

		NO_x	1.99	8.72
		CO	14.16	62.01
		SO_2	1.98	8.67
		PM	0.63	2.76
		PM_{10}	0.63	2.76
		$PM_{2.5}$	0.63	2.76
		H_2S	0.06	0.26
TTLR/TCLR	Asphalt Plant – Loading Rack	VOC	0.12	0.11
		H_2S	<0.01	<0.01
D-3601	Asphalt Tank D-3601	VOC	0.28	0.81
		H_2S	<0.01	<0.01
D-3602	Asphalt Tank D-3602	VOC	0.28	0.81
		H_2S	<0.01	<0.01
D-3605	Asphalt Tank D-3605	VOC	0.22	0.63
		H_2S	<0.01	<0.01
D-3606	Asphalt Tank D-3606	VOC	0.22	0.63
		H_2S	<0.01	<0.01
D-3607	Asphalt Tank D-3607	VOC	0.01	0.04
		H_2S	<0.01	<0.01
D-3608	Asphalt Tank D-3608	VOC	0.01	0.04
		H_2S	<0.01	<0.01
D-3609	Asphalt Tank D-3609	VOC	0.01	0.04
		H_2S	<0.01	<0.01
D-3610	Asphalt Tank D-3610	VOC	0.01	0.04
		H_2S	<0.01	<0.01
D-3611	Asphalt Tank D-3611	VOC	0.01	0.04
		H_2S	<0.01	<0.01
D-3612	Asphalt Tank D-3612	VOC	0.01	0.04
		H_2S	<0.01	<0.01

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D-3623	Asphalt Tank D-3623	VOC	0.01	0.04
		H_2S	<0.01	<0.01
D-3624	Asphalt Tank D-3624	VOC	0.01	0.04
		H_2S	<0.01	<0.01
D-3625	Asphalt Tank D-3625	VOC	0.01	0.06
		H_2S	<0.01	<0.01
D-3627	Asphalt Tank D-3627	VOC	0.01	0.06
		H_2S	<0.01	<0.01
D-3628	Asphalt Tank D-3628	VOC	<0.01	0.02
		H_2S	<0.01	<0.01
D-3629	Asphalt Tank D-3629	VOC	<0.01	0.02
		H_2S	<0.01	<0.01
D-3630	Asphalt Tank D-3630	VOC	0.01	0.04
		H_2S	<0.01	<0.01
D-3670	Asphalt Tank D-3670	VOC	<0.01	0.01
		H_2S	<0.01	<0.01
D-3671	Asphalt Tank D-3671	VOC	<0.01	0.01
		H_2S	<0.01	<0.01
D-3672	Asphalt Tank D-3672	VOC	<0.01	0.01
		H_2S	<0.01	<0.01
FUELFUG	Asphalt Plant Fugitives (5)	VOC	1.80	7.90
		H_2S	0.01	0.03

(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
H_2S - hydrogen sulfide
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

Emission Sources - Maximum Allowable Emission Rates

(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) Total emission rates from these emission points shall comply with compliance caps contained in this MAERT.
(7) Speciated emission rates of toluene, xylene, and benzene are quantified in the total VOC emission rate.

Date: May 25, 2023