

Sources - Maximum Allowable Emission Rates

Permit Number 2193 and N232

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)
Group No. 1 Storage Tanks (5)				
3-9	Tank No. 3-9	VOC	7.63	-
3-10	Tank No. 3-10	VOC	7.63	-
5-21	Tank No. 5-21	VOC	6.48	-
7	Tank No. 7	VOC	52.87	-
10-9	Tank No. 10-9	VOC	52.87	-
10-10	Tank No. 10-10	VOC	52.87	-
10-11	Tank No. 10-11	VOC	52.87	-
10-12	Tank No. 10-12	VOC	52.87	-
10-13	Tank No. 10-13	VOC	52.87	-
10-14	Tank No. 10-14	VOC	52.87	-
10-15	Tank No. 10-15	VOC	52.87	-
10-16	Tank No. 10-16	VOC	52.87	-
10-17	Tank No. 10-17	VOC	52.87	-
10-18	Tank No. 10-18	VOC	5.28	-
10-19	Tank No. 10-19	VOC	52.87	-
10-20	Tank No. 10-20	VOC	52.87	-
10-21	Tank No. 10-21	VOC	52.87	-
12-1	Tank No. 12-1	VOC	4.94	-
12-3	Tank No. 12-3	VOC	5.08	-

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12-4	Tank No. 12-4	VOC	4.65	-
12-5	Tank No. 12-5	VOC	5.19	-
12-6	Tank No. 12-6	VOC	52.87	-
12-7	Tank No. 12-7	VOC	52.87	-
12-8	Tank No. 12-8	VOC	52.87	-
12-9	Tank No. 12-9	VOC	5.10	-
12-10	Tank No. 12-10	VOC	5.08	-
12-11	Tank No. 12-11	VOC	5.08	-
12-12	Tank No. 12-12	VOC	5.08	-
12-13	Tank No. 12-13	VOC	5.08	-
12-14	Tank No. 12-14	VOC	4.16	-
12-15	Tank No. 12-15	VOC	4.13	-
12-16	Tank No. 12-16	VOC	5.08	-
12-17	Tank No. 12-17	VOC	4.67	-
12-18	Tank No. 12-18	VOC	5.08	-
12-19	Tank No. 12-19	VOC	5.08	-
12-20	Tank No. 12-20	VOC	5.05	-
12-21	Tank No. 12-21	VOC	52.87	-
12-22	Tank No. 12-22	VOC	52.87	-
12-23	Tank No. 12-23	VOC	52.87	-
12-24	Tank No. 12-24	VOC	5.08	-
12-25	Tank No. 12-25	VOC	52.87	-
12-26	Tank No. 12-26	VOC	4.07	-
12-27	Tank No. 12-27	VOC	4.09	-
12-28	Tank No. 12-28	VOC	5.10	-

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12-29	Tank No. 12-29	VOC	5.08	-
12-30	Tank No. 12-30	VOC	5.08	-
15-1	Tank No. 15-1	VOC	5.19	-
15-2	Tank No 15-2	VOC	4.76	-
15-3	Tank No. 15-3	VOC	3.61	-
20-1	Tank No. 20-1	VOC	52.87	-
20-2	Tank No. 20-2	VOC	52.87	-
22	Tank No. 22	VOC	52.87	-
25-1	Tank No. 25-1	VOC	52.87	-
25-2	Tank No. 25-2	VOC	2.65	-
25-3	Tank No. 25-3	VOC	4.15	-
25-4	Tank No. 25-4	VOC	4.15	-
25-5	Tank No. 25-5	VOC	5.55	-
25-6	Tank No. 25-6	VOC	4.54	-
25-7	Tank No. 25-7	VOC	4.11	-
25-8	Tank No. 25-8	VOC	4.15	-
25-9	Tank No. 25-9	VOC	52.87	-
25-10	Tank No. 25-10	VOC	4.15	-
25-11	Tank No. 25-11	VOC	4.20	-
25-12	Tank No. 25-12	VOC	3.26	-
25-13	Tank No. 25-13	VOC	4.21	-
25-14	Tank No. 25-14	VOC	3.17	-
25-15	Tank No. 25-15	VOC	4.17	-
25-16	Tank No. 25-16	VOC	4.15	-
25-17	Tank No. 25-17	VOC	3.29	-

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25-18	Tank No. 25-18	VOC	3.29	-
25-19	Tank No. 25-19	VOC	3.29	-
25-20	Tank No. 25-20	VOC	52.87	-
25-21	Tank No. 25-21	VOC	4.14	-
25-22	Tank No. 25-22	VOC	4.10	-
25-23	Tank No. 25-23	VOC	2.96	-
25-24	Tank No. 25-24	VOC	4.15	-
25-25	Tank No. 25-25	VOC	4.15	-
25-26	Tank No. 25-26	VOC	3.29	-
25-27	Tank No. 25-27	VOC	2.71	-
25-28	Tank No. 25-28	VOC	4.15	-
25-29	Tank No. 25-29	VOC	4.20	-
25-30	Tank No. 25-30	VOC	4.15	-
31	Tank No. 31	VOC	3.35	-
32	Tank No. 32	VOC	4.24	-
37	Tank No. 37	VOC	52.87	-
40-1	Tank No. 40-1	VOC	52.87	-
50-1	Tank No. 50-1	VOC	52.87	-
50-2	Tank No. 50-2	VOC	52.87	-
50-3	Tank No. 50-3	VOC	52.87	-
80-9	Tank No. 80-9	VOC	4.15	-
80-10	Tank No. 80-10	VOC	3.98	-
80-11	Tank No. 80-11	VOC	4.15	-
80-12	Tank No. 80-12	VOC	4.24	-
80-13	Tank No. 80-13	VOC	4.24	-

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80-14	Tank No. 80-14	VOC	4.15	-
80-15	Tank No. 80-15	VOC	4.18	-
80-16	Tank No. 80-16	VOC	1.75	-
80-17	Tank No. 80-17	VOC	1.75	-
80-18	Tank No. 80-18	VOC	4.24	-
80-19	Tank No. 80-19	VOC	4.24	-
80-20	Tank No. 80-20	VOC	2.69	-
80-21	Tank No. 80-21	VOC	4.24	-
80-22	Tank No. 80-22	VOC	4.24	-
90-1	Tank No. 90-1	VOC	4.20	-
90-2	Tank No. 90-2	VOC	4.20	-
100-1	Tank No. 100-1	VOC	4.55	-
100-2	Tank No. 100-2	VOC	1.61	-
100-3	Tank No. 100-3	VOC	4.54	-
100-4	Tank No. 100-4	VOC	4.04	-
100-5	Tank No. 100-5	VOC	4.54	-
100-6	Tank No. 100-6	VOC	4.58	-
100-7	Tank No. 100-7	VOC	3.92	-
100-8	Tank No. 100-8	VOC	5.00	-
100-9	Tank No. 100-9	VOC	4.80	-
100-10	Tank No. 100-10	VOC	4.65	-
100-11	Tank No. 100-11	VOC	3.55	-
100-12	Tank No. 100-12	VOC	4.42	-
100-13	Tank No. 100-13	VOC	5.47	-
100-14	Tank No. 100-14	VOC	5.47	-

Emission Sources - Maximum Allowable Emission Rates

100-15	Tank No. 100-15	VOC	3.71	-
100-16	Tank No. 100-16	VOC	3.71	-
100-17	Tank No. 100-17	VOC	3.71	-
100-18	Tank No. 100-18	VOC	3.71	-
100-19	Tank No. 100-19	VOC	3.71	-
100-21	Tank No. 100-21	VOC	52.87	-
100-23	Tank No. 100-23	VOC	3.56	-
100-24	Tank No. 100-24	VOC	3.56	-
125-1	Tank No. 125-1	VOC	3.71	-
150-101	Tank No. 150-101	VOC	3.90	-
150-102	Tank No. 150-102	VOC	3.90	-
150-103	Tank No. 150-103	VOC	3.90	-
150-104	Tank No. 150-104	VOC	3.90	-
150-105	Tank No. 150-105	VOC	3.90	-
150-106	Tank No. 150-106	VOC	3.90	-
150-107	Tank No. 150-107	VOC	3.90	-
150-108	Tank No. 150-108	VOC	3.90	-
150-109	Tank No. 150-109	VOC	3.90	-
150-110	Tank No. 150-110	VOC	3.90	-
150-111	Tank No. 150-111	VOC	3.90	-
150-112	Tank No. 150-112	VOC	3.90	-
150-113	Tank No. 150-113	VOC	3.90	-
150-114	Tank No. 150-114	VOC	3.90	-
150-115	Tank No. 150-115	VOC	3.90	-
144-1	Tank No. 144-1	VOC	4.71	-

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187-1	Tank No. 187-1	VOC	3.92	-
LANDRFCAP	Uncontrolled Routine & MSS ST Cap No.1 Roof Landing	VOC	721.71	-
TKGP1CAP	Uncontrolled Tank Maintenance Sub Cap No. 1	VOC	-	42.45
	Total Annual Cap	VOC	-	418.13
TK-DEGAS	Controlled Tank Degassing	NO _x	3.45	3.95
		CO	6.89	4.43
		VOC	29.49	1.10
		PM	0.19	0.21
		PM ₁₀	0.19	0.21
		PM _{2.5}	0.19	0.21
		SO ₂	2.50	1.12
Storage Tank Group No. 1 Vapor Combustors (5)				
TK-VCU-1A	Routine Tank Roof Landing Emissions Control Tanks 100-7 to100-10 Tanks 100-13 to 100-19 Tanks 150-101 to 150-115	NO _x	9.00	-
		CO	12.00	-
		VOC	8.25	-
		PM	0.45	-
		PM ₁₀	0.45	-
		PM _{2.5}	0.45	-
		SO ₂	0.04	-
TK-VCU-1B	Routine Tank Roof Landing Emissions Control Tanks 100-7 to 100-10 Tanks 100-13 to 100-19 Tanks 150-101 to 150-115	NO _x	9.00	-
		CO	12.00	-
		VOC	8.25	-
		PM	0.45	-
		PM ₁₀	0.45	-

Emission Sources - Maximum Allowable Emission Rates

		PM _{2.5}	0.45	-
		SO ₂	0.04	-
TK1A-BCAP	Annual Routine Tank Roof Landing Emissions Control CAP	NO _x	-	13.23
	Tanks 100-7 to 100-10 Tanks 100-13 to 100-19 Tanks 150-101 to 150-115	CO	-	17.64
		VOC	-	3.71
		PM	-	0.66
		PM ₁₀	-	0.66
		PM _{2.5}	-	0.66
		SO ₂	-	0.05
TK-VCU-2A	Routine Tank Roof Landing Emission Control	NO _x	7.50	1.72
	Tank 125-1 Tank 187-1	CO	10.00	2.30
		VOC	8.26	0.06
		PM	0.37	0.09
		PM ₁₀	0.37	0.09
		PM _{2.5}	0.37	0.09
		SO ₂	0.03	0.01
PORT-TO	Routine Tank Roof Landing Emissions Control	NO _x	5.52	0.03
	Tanks 12-4, 12-26, 12-27 Tanks 25-7, 25-23	CO	11.02	0.06
		VOC	12.93	0.10
		PM	1.54	0.01
		PM ₁₀	1.54	0.01
		PM _{2.5}	1.54	0.01
		SO ₂	0.01	<0.01
Tank Group No. 2 (6)				
100-25	Tank No. 100-25	VOC	1.84	-

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100-26	Tank No. 100-26	VOC	1.84	-
100-27	Tank No. 100-27	VOC	1.84	-
100-28	Tank No. 100-28	VOC	1.84	-
150-116	Tank No. 150-116	VOC	1.59	-
150-117	Tank No. 150-117	VOC	1.59	-
150-118	Tank No. 150-118	VOC	1.59	-
150-119	Tank No. 150-119	VOC	1.59	-
150-120	Tank No. 150-120	VOC	1.59	-
150-121	Tank No. 150-121	VOC	1.59	-
TKGR2CAP	Tank Emission Cap	VOC	-	11.45
Tank Group No. 2 Vapor Combustors (6)				
TK-VCU-1C	Routine Tank Roof Landing Emission Control Device Tanks 100-25 to 100-28 Tanks 150-116 to 150-121	NO _x	13.05	-
		CO	17.40	-
		VOC	8.25	-
		PM	0.65	-
		PM ₁₀	0.65	-
		PM _{2.5}	0.65	-
		SO ₂	0.05	-
TK-VCU-1D	Routine Tank Roof Landing Emission Control Device Tanks 100-25 to 100-28 Tanks 150-116 to 150-121	NO _x	13.05	-
		CO	17.40	-
		VOC	8.25	-
		PM	0.65	-
		PM ₁₀	0.65	-
		PM _{2.5}	0.65	-
		SO ₂	0.05	-

Emission Sources - Maximum Allowable Emission Rates

TK1C-DCAP	Annual Routine Tank Roof Landing Emission Control CAP Tanks 100-25 to 100-28 Tanks 150-116 to 150-121	NO _x	-	4.97
		CO	-	6.62
		VOC	-	1.11
		PM	-	0.25
		PM ₁₀	-	0.25
		PM _{2.5}	-	0.25
		SO ₂	-	0.02
Truck and Railcar Emissions (5)				
TR-1	Truck Rack No. 1 Loading Losses 9 Truck Spots	VOC	9.24	-
TR-7	Truck Rack No. 7 Loading Losses 1 Truck Spot	VOC	1.03	-
TR-10	Truck Rack No. 10 Loading Losses 43 Truck Spots	VOC	44.16	-
TR-11	Truck Rack No. 11 Loading Losses 15 Truck Spots	VOC	15.40	-
TR-12	Truck Rack No. 12 Loading Losses 9 Truck Spots	VOC	9.24	-
TR-13	Truck Rack No. 13 Loading Losses 7 Truck Spots	VOC	7.19	-
TR-14	Truck Rack No. 14 Loading Losses 7 Truck Spots	VOC	7.19	-
C-RCR	Central Railcar Rack Loading Losses 35 Rail Spots	VOC	129.39	-
E-RCR	East Railcar Rack Loading Losses 24 Rail Spots	VOC	129.39	-
W-RCR	West Railcar Rack Loading Losses 34 Rail Spots	VOC	125.70	-
LANDLOAD	Annual Truck and Railcar Uncontrolled/Fugitive Loading Losses	VOC	-	1.39
Truck/Railcar Vapor Combustor Units (5)				
VCU-1A	Truck/Rail Car VCU	NO _x	6.75	2.87
	Truck Racks - 1, 7, 10 to 13 West Railcar Rack	CO	9.00	3.83

Emission Sources - Maximum Allowable Emission Rates

		VOC	5.74	0.76
		PM	0.34	0.14
		PM ₁₀	0.34	0.14
		PM _{2.5}	0.34	0.14
		SO ₂	0.03	0.01
Ship and Barge Emissions (5 & 6)				
SHPDK-1	Ship Dock No. 1 – Uncollected & Fugitive Ship/Barge Loading Losses	VOC	34.23	-
SHPDK-2	Ship Dock No. 2 – Uncollected & Fugitive Ship/Barge Loading Losses	VOC	34.23	-
SHPDK-3	Ship Dock No. 3 – Uncollected & Fugitive Ship/Barge Loading Losses	VOC	34.23	-
SHPDK-4	Ship Dock No. 4 – Uncollected & Fugitive Ship/Barge Loading Losses	VOC	34.23	-
BGDK-2	Barge Dock No. 2 - Uncollected & Fugitive Barge Loading Losses	VOC	34.23	-
BGDK-3	Barge Dock No. 3 - Uncollected & Fugitive Barge Loading Losses	VOC	34.23	-
MARINELOAD	Annual Ship/Barge Uncontrolled & Fugitive Loading Losses	VOC	-	23.18
Ship/Barge Vapor Combustor Units (5 & 6)				
VCU-1B	Ship/Barge Controlled Loading VCU Ship Dock No. 2 Barge Dock No.2	NO _x	14.08	-
		CO	18.77	-
		VOC	9.56	-
		PM	0.99	-
		PM ₁₀	0.99	-
		PM _{2.5}	0.99	-
		SO ₂	0.08	-

Emission Sources - Maximum Allowable Emission Rates

VCU-1C	Ship/Barge Controlled Loading VCU Ship Dock No. 2 Barge Dock No.2	NO _x	11.25	-
		CO	15.00	-
		VOC	6.37	-
		PM	0.56	-
		PM ₁₀	0.56	-
		PM _{2.5}	0.56	-
		SO ₂	0.04	-
VCU-2A	Ship Controlled Loading VCU Ship Dock No. 3	NO _x	11.10	-
		CO	14.80	-
		VOC	3.19	-
		PM	0.55	-
		PM ₁₀	0.55	-
		PM _{2.5}	0.55	-
		SO ₂	0.04	-
VCU-2B	Ship Controlled Loading VCU Ship Dock No. 3	NO _x	11.10	-
		CO	14.80	-
		VOC	3.19	-
		PM	0.55	-
		PM ₁₀	0.55	-
		PM _{2.5}	0.55	-
		SO ₂	0.04	-
VCU-2C	Ship Controlled Loading VCU Ship Dock No. 3	NO _x	11.10	-
		CO	14.80	-
		VOC	3.19	-
		PM	0.55	-

Emission Sources - Maximum Allowable Emission Rates

		PM ₁₀	0.55	-
		PM _{2.5}	0.55	-
		SO ₂	0.04	-
BD-3-VCU	Ship/Barge Loading VCU Barge Dock No. 3 Ship Dock No. 4	NO _x	11.25	-
		CO	15.00	-
		VOC	4.78	-
		PM	0.56	-
		PM ₁₀	0.56	-
		PM _{2.5}	0.56	-
		SO ₂	0.04	-
SD-4-VCU	Barge Dock No. 3 & Ship Dock No. 4 Loading VCU	NO _x	14.75	-
		CO	19.66	-
		VOC	9.56	-
		PM	1.15	-
		PM ₁₀	1.15	-
		PM _{2.5}	1.15	-
		SO ₂	0.09	-
SBVCUCAP	Annual Ship and Barge Collected & Controlled Loading Losses EPNs: VCU-1B to VCU-1C EPNs: VCU-2A to VCU-2C EPN: BD-3-VCU EPN: SD-4-VCU	NO _x	-	33.66
		CO	-	44.88
		VOC	-	12.79
		PM	-	1.67
		PM ₁₀	-	1.67
		PM _{2.5}	-	1.67
		SO ₂	-	0.13
MARVCUCAP	Marine Loading VCU Emission Cap Nonattainment N232 (7)	NO _x	-	2.55

Emission Sources - Maximum Allowable Emission Rates

		CO	-	3.40
		VOC	-	3.39
		PM	-	0.32
		PM ₁₀	-	0.32
		PM _{2.5}	-	0.32
		SO ₂	-	0.03
MARFUGCAP	Marine Loading Fug Emissions Cap Nonattainment No. N232 (7)	VOC	141.96	6.70
Other Emission Points				
SUMP-1	Wastewater Sumps (5)	VOC	5.67	2.85
CAMU	Corrective Action Management Unit	VOC	0.05	0.11
FUG	Entire Terminal Fugitives (8)	VOC	6.90	30.21
MSS	MSS Emissions (5 & 6)	NO _x	29.55	0.89
		CO	39.40	1.18
		VOC	114.72	3.62
		PM	1.47	0.04
		PM ₁₀	1.47	0.04
		PM _{2.5}	1.47	0.04
		SO ₂	0.12	<0.01
N158-BEN	N158 Benzene Emissions Cap (6)	VOC	-	0.12

- (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) NO_x - total oxides of nitrogen
- CO - carbon monoxide
- VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}
- PM₁₀ - total 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
- SO₂ - sulfur dioxide

Emission Sources - Maximum Allowable Emission Rates

MSS - maintenance, startup, and shutdown

- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) The emission points listed are subject to the requirements of Special Condition No. 1A.
- (6) The emission points listed are subject to the requirements of Special Condition No. 1B.
- (7) The emission points listed are subject to the requirements of Special Condition No. 1C.
- (8) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: July 10, 2019