Emission Sources - Maximum Allowable Emission Rates

Permit Number 46307

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)
FUG-BD-V	VERP Fugitives	VOC	0.27	1.18
TK-TBD	IFR MTBE/ETBE/DIB/IC8 Tank	VOC	0.53	1.16
MSS-BD	BD MSS	VOC	0.87	<0.01
MSS-FLR	BD MSS Flare	VOC	3.76	0.04
		CO	1.69	0.02
		NO_x	0.20	<0.01
		SO_2	<0.01	<0.01
EP-5	Plant Flare (6)	VOC	190.74	20.90
		NO_x	29.09	3.44
		SO_2	<0.01	0.01
		CO	148.21	17.51
		BD	--	4.42
		HRVOC	--	15.00
12DG-15	Boilerhouse Emergency Generator	VOC	1.04	0.44
		NO_x	12.87	5.47
		SO_2	0.85	0.36
		PM	0.91	0.39
		PM_{10}	0.91	0.39
		$PM_{2.5}$	0.91	0.39
		CO	2.77	1.18
		HAP	0.01	0.01
3DG-14	OXO Emergency Generator	VOC	0.37	0.16
		NO_x	4.62	1.96

Emission Sources - Maximum Allowable Emission Rates

		SO_2	0.31	0.13
		PM	0.33	0.14
		PM_{10}	0.33	0.14
		$PM_{2.5}$	0.33	0.14
		CO	1.00	0.42
		HAP	0.01	0.01
31G-2350	Diesel Water Blaster Engine	VOC	0.75	0.78
		NO_x	3.04	3.16
		SO_2	0.01	0.01
		PM	0.10	0.10
		PM_{10}	0.10	0.10
		$PM_{2.5}$	0.10	0.10
		CO	1.72	1.79
		HAP	0.01	0.01
13G-2629	No. 10 Firewater Pump Engine	VOC	0.15	0.01
		NO_x	4.22	0.11
		SO_2	0.12	0.01
		PM	0.07	0.01
		PM_{10}	0.07	0.01
		$PM_{2.5}$	0.07	0.01
		CO	0.41	0.01
		HAP	0.01	0.01
20DG-16	Dock Emergency Generator	VOC	0.10	0.01
		NO_x	1.24	0.03
		SO_2	0.08	0.01
		PM	0.09	0.01
		PM_{10}	0.09	0.01
		$PM_{2.5}$	0.09	0.01
		CO	0.27	0.01

Emission Sources - Maximum Allowable Emission Rates

		HAP	0.01	0.01
21G-2216	Diesel Fire Pump Engine	VOC	0.40	0.01
		NO_x	6.10	0.16
		SO_2	0.60	0.02
		PM	0.24	0.01
		PM_{10}	0.24	0.01
		$PM_{2.5}$	0.24	0.01
		CO	0.50	0.01
		HAP	0.01	0.01
19G-3789	Diesel Driven Fire Water Engine	VOC	0.08	0.01
		NO_x	2.46	0.06
		SO_2	0.31	0.01
		PM	0.10	0.01
		PM_{10}	0.10	0.01
		$PM_{2.5}$	0.10	0.01
		CO	0.63	0.02
		HAP	0.01	0.01
N14-C475	Cummins Diesel Air Compressor	VOC	1.17	0.03
		NO_x	14.73	0.38
		SO_2	0.97	0.03
		PM	1.05	0.03
		PM_{10}	1.05	0.03
		$PM_{2.5}$	1.05	0.03
		CO	3.17	0.08
		Total HAPs	0.01	0.01
F-CT-7	Cooling Tower CT-7	PM	0.11	0.46
		PM_{10}	0.08	0.34
		$PM_{2.5}$	0.01	0.01
		VOC (5)	0.60	1.38

Emission Sources - Maximum Allowable Emission Rates

F-CT-10	Cooling Tower CT-10	PM	0.04	0.15
		PM_{10}	0.03	0.11
		$PM_{2.5}$	0.01	0.01
		VOC (5)	0.21	0.92
F-CT-11	Cooling Tower CT-11	PM	0.01	0.05
		PM_{10}	0.01	0.04
		$PM_{2.5}$	0.01	0.01
		VOC (5)	0.04	0.08
F-CT-14	Cooling Tower CT-14	PM	0.08	0.34
		PM_{10}	0.06	0.25
		$PM_{2.5}$	<0.01	<0.01
		VOC (5)	0.88	2.03
F-CT-17	Cooling Tower CT-17	PM	0.36	1.56
		PM_{10}	0.26	1.16
		$PM_{2.5}$	<0.01	<0.01
		VOC (5)	2.04	4.69
F-CT-18	Cooling Tower CT-18	PM	0.27	1.2
		PM_{10}	0.2	0.89
		$PM_{2.5}$	<0.01	<0.01
		VOC (5)	1.56	3.59
F-TTR	Truck Rack Loading Facility	VOC	6.47	0.26
E-PIBTT	PIB-1 Product Loading B Tank Trucks	VOC	(8)	(8)
E-PIB1RC1	PIB-1 Product Loading Rail Cars – Station 1	VOC	(8)	(8)
E-PIB1RC2	PIB-1 Product Loading Rail Cars – Station 2	VOC	(8)	(8)
E-PIB2RC1	PIB-2 Product Loading Rail Cars - Station 1	VOC	(8)	(8)
E-PIB2RC2	PIB-2 Product Loading Rail Cars - Station 2	VOC	(8)	(8)
E-PIB2TT1	PIB-2 Product Loading Tank Truck - Station 1	VOC	(8)	(8)
E-PIB2TT2	PIB-2 Product Loading	VOC	(8)	(8)

Emission Sources - Maximum Allowable Emission Rates

	Tank Truck - Station 2			
LOAD-GRP	Loading Emissions Cap	VOC	0.60	1.94
T-P1WW1	PIB-1 Wastewater Tank 1	VOC	<0.01	<0.01
		NH_3	0.07	0.01
T-P1WW2	PIB-1 Wastewater Tank 2	VOC	<0.01	<0.01
		NH_3	0.07	0.01
T-P2WW1	PIB-2 Wastewater Tank 1	VOC	<0.01	<0.01
		NH_3	0.07	0.01
T-31	No. 31 Tank	VOC	0.33	0.62
T-32	No. 32 Tank	VOC	0.21	0.32
T-33	No. 33 Tank	VOC	0.41	<0.01
T-34	No. 34 Tank	VOC	0.61	0.28
T-36	DIB Storage Tank 36	VOC	0.18	0.23
T-37	DIB Storage Tank 37	VOC	0.18	0.23
T-69-1	No. 69-1 Tank	VOC	0.40	0.01
T-71	Methanol/Ethanol Tank	VOC	0.24	0.91
T-72	Methanol/Ethanol Tank	VOC	0.21	0.84
T-73	MTBE/ETBE Storage Tank 73	VOC	1.06	1.41
T-74	MTBE/ETBE Storage Tank 74	VOC	1.06	1.41
T-77	Tank	VOC	0.15	0.28
T-78	Tank	VOC	0.15	0.28
T-79	Tank	VOC	0.17	0.29
T-80	MeOH/EtOH Storage Tank 80	VOC	1.70	1.98
T-81	No. 81 Tank	VOC	0.41	0.01
T-82	No. 82 Tank	VOC	5.54	0.88
T-84	No. 84 Tank	VOC	0.34	0.59
T-85	No. 85 Tank	VOC	0.10	0.01
T-86	No. 86 Tank	VOC	0.24	0.01

Emission Sources - Maximum Allowable Emission Rates

T-103	MTBE/ETBE Tank	VOC	0.57	1.35
T-111	Tank	VOC	1.45	0.01
T-112	Tank	VOC	1.45	0.01
T-114	MTBE/ETBE Tank	VOC	0.49	1.17
T-115	MTBE/ETBE/IC8 Tank	VOC	0.49	1.17
T-117	PIB-1 Process Tank 117	VOC	0.50	(7)
T-118	PIB-1 Process Tank 118	VOC	0.50	(7)
T-119	PIB-1 Process Tank 119	VOC	0.50	(7)
T-204	PIB-2 Process Tank 1	VOC	0.55	(7)
T-205	PIB-2 Process Tank 2	VOC	0.55	(7)
T-206	PIB-2 Process Tank 3	VOC	0.55	(7)
TNK-GRP	Tank Emissions Cap	VOC	--	1.34
T-Diesel2	Tank	VOC	0.24	0.01
T-155	TEA Storage Tank	VOC	0.01	0.01
1F-511	Tank	VOC	1.91	0.01
Gas-2	Tank	VOC	53.51	0.31
T01	Diesel Tank	VOC	0.03	0.01
2F26	Furfural Sump Tank	VOC	0.01	0.01
4F14	Furfural Sump Tank	VOC	0.01	0.01
5F3	Furfural Sump Tank	VOC	0.01	0.01
PLANT-FUG	Plant Fugitives (5)	VOC	17.75	77.73
		BD	2.41	10.51
		Other HAPs	1.24	5.42
F-10A	Oil Separation	VOC	4.99	0.80
WW-IDS	Wastewater Drain System	VOC	0.88	3.84
WW-PN	Wastewater Aeration Ponds	VOC	11.69	5.12
DEGREAS1	Cold Solvent Degreaser	VOC	3.34	0.07

Emission Sources - Maximum Allowable Emission Rates

DEGREAS2	Cold Solvent Degreaser	VOC	3.34	0.07
LABST-1	Lab Sump Tank	VOC	0.04	0.01

(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
HRVOC - highly reactive volatile organic compounds as defined in 30 TAC § 115.10 (ethylene, propylene, butenes and 1,3-butadiene are present at this facility)
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
CO - carbon dioxide
BD - 1,3-butadiene
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - 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
NH_3 - ammonia
HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
(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.
(6) Annual emissions of BD and total HRVOCs are limited as indicated. The allowable emission rate listed for HRVOCs from this EPN are included in the total VOC emission rate. The HRVOC CAP of 15 tons per year includes the BD emission rate.
(7) The total annual emission rates for PIB process and storage tanks are limited to the annual cap indicated under EPN TNK-GRP.
(8) The total PIB product loading emission rates are limited to the hourly and annual caps indicated under EPN LOADGRP which may be loaded through either tank trucks or tank cars or both.

Date: TBD

Emission Sources - Maximum Allowable Emission Rates

Permit Number GHGPSDTX202

This table lists the maximum allowable emission rates of greenhouse gas (GHG) emissions, as defined in Title 30 Texas Administrative Code § 101.1, for all sources of GHG air contaminants on the applicant's property that are authorized 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 authorized by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates
			TPY (4)
MSS-FLR	BD MSS Flare	CO_2 (5)	11.57
		CH_4 (5)	<0.01
		N_2O (5)	<0.01
		CO_2e	11.58
EP-5	Plant Flare	CO_2 (5)	6869.86
		CH_4 (5)	4.44
		N_2O (5)	0.01
		CO_2e	6984.26

(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) CO_2 - carbon dioxide
N_2O - nitrous oxide
CH_4 - methane
HFCs - hydrofluorocarbons
PFCs - perfluorocarbons
SF_6 - sulfur hexafluoride
CO_2e - carbon dioxide equivalents based on the following Global Warming Potentials (1/2015): CO_2 (1), N_2O (298), CH_4(25), SF_6 (22,800), HFC (various), PFC (various)
(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. These rates include emissions from maintenance, startup, and shutdown.
(5) Emission rate is given for informational purposes only and does not constitute enforceable limit.

Date: TBD