

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 105710 and PSDTX1306M1

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 (4)	
			lbs/hour	TPY (5)
TRB1	Propane Refrigeration Turbines Emission rates are per turbine	NO _x	39.60	See Annual CAP limits below.
TRB2		CO	24.10	
TRB7		VOC	0.90	
TRB8		SO ₂	0.44	
TRB13		H ₂ S	<0.01	
TRB14		PM	0.98	
		PM ₁₀	0.98	
		PM _{2.5}	0.98	
TRB3	Ethylene Refrigeration Turbines Emission rates are per turbine	NO _x	39.60	
TRB4		CO	24.10	
TRB9		VOC	0.90	
TRB10		SO ₂	0.44	
TRB15		H ₂ S	<0.01	
TRB16		PM	0.98	
		PM ₁₀	0.98	
		PM _{2.5}	0.98	
TRB5	Methane Refrigeration Turbines Emission rates are per turbine	NO _x	39.60	
TRB6		CO	24.10	
TRB11		VOC	0.90	
TRB12		SO ₂	0.44	
TRB17		H ₂ S	<0.01	
TRB18		PM	0.98	
		PM ₁₀	0.98	
		PM _{2.5}	0.98	

Emission Sources - Maximum Allowable Emission Rates

TRB1-TRB18	Annual CAP Six Propane, Six Ethylene, and Six Methane Refrigeration Turbines	NO _x	See hourly limits per turbine above.	3121.92
		CO		1900.26
		VOC		71.28
		SO ₂		34.74
		H ₂ S		0.18
		PM		77.58
		PM ₁₀		77.58
		PM _{2.5}		77.58
TO-1	Thermal Oxidizer	NO _x	4.69	17.31
		CO	13.84	46.86
		VOC	0.24	0.56
		SO ₂	1.44	3.36
		H ₂ S	<0.01	0.02
		PM	0.58	2.15
		PM ₁₀	0.58	2.15
		PM _{2.5}	0.58	2.15
TO-2	Thermal Oxidizer	NO _x	4.69	17.31
		CO	13.84	46.86
		VOC	0.24	0.56
		SO ₂	1.44	3.36
		H ₂ S	<0.01	0.02
		PM	0.58	2.15
		PM ₁₀	0.58	2.15
		PM _{2.5}	0.58	2.15

Emission Sources - Maximum Allowable Emission Rates

TO-3	Thermal Oxidizer	NO _x	4.69	17.31
		CO	13.84	46.86
		VOC	0.24	0.56
		SO ₂	1.44	3.36
		H ₂ S	<0.01	0.02
		PM	0.58	2.15
		PM ₁₀	0.58	2.15
		PM _{2.5}	0.58	2.15
WTDYFLR1	Wet/Dry Gas Flare 1 (Normal Operations)	NO _x	71.29	See Flare Cap limits below.
		CO	283.93	
		VOC	61.26	
		SO ₂	4.42	
		H ₂ S	0.05	
WTDYFLR2	Wet/Dry Gas Flare 2 (Normal Operations)	NO _x	71.29	
		CO	283.93	
		VOC	61.26	
		SO ₂	4.42	
		H ₂ S	0.05	
STG1_2GF	Ground Flare (Normal Operations)	NO _x	71.29	
		CO	283.93	
		VOC	61.26	
		SO ₂	4.42	
		H ₂ S	0.05	
WTDYFLR1, WTDYFLR2, and STG1_2GF	Flare Cap (Normal Operations)	NO _x	71.29	63.94
		CO	283.93	254.65
		VOC	61.26	74.87
		SO ₂	4.42	3.39
		H ₂ S	0.05	0.04
WTDYFLR1	Wet/Dry Gas Flare 1 (MSS)	NO _x	816.68	See Annual Flare Cap

Emission Sources - Maximum Allowable Emission Rates

		CO	3,252.52	
		VOC	2,895.54	
		SO ₂	2.20	
		H ₂ S	0.02	
WTDYFLR2	Wet/Dry Gas Flare 2 (MSS)	NO _x	816.68	
		CO	3,252.52	
		VOC	2,895.54	
		SO ₂	2.20	
		H ₂ S	0.02	
STG1_2GF	Ground Flare (MSS)	NO _x	816.68	
		CO	3,252.52	
		VOC	2,895.54	
		SO ₂	2.20	
		H ₂ S	0.02	
WTDYFLR1, WTDYFLR2, STG1_2GF	Annual Flare Cap (MSS)	NO _x	See hourly MSS limits per flare above.	228.09
		CO		908.39
		VOC		116.62
		SO ₂		1.02
		H ₂ S		0.01
MRNFLR	Marine Flare	NO _x	106.23	47.66
		CO	909.72	403.88
		VOC	7.85	3.60
		SO ₂	<0.01	<0.01
		H ₂ S	<0.01	<0.01
GEN1	Standby Generator 1	NO _x	28.70	1.30
		CO	5.28	0.24
		VOC	0.32	0.01
		SO ₂	0.03	<0.01
		PM	0.16	<0.01

Emission Sources - Maximum Allowable Emission Rates

		PM ₁₀	0.16	<0.01
		PM _{2.5}	0.16	<0.01
GEN2	Standby Generator 2	NO _x	28.70	1.30
		CO	5.28	0.24
		VOC	0.32	0.01
		SO ₂	0.03	<0.01
		PM	0.16	<0.01
		PM ₁₀	0.16	<0.01
		PM _{2.5}	0.16	<0.01
GEN3	Standby Generator 3	NO _x	28.70	1.30
		CO	5.28	0.24
		VOC	0.32	0.01
		SO ₂	0.03	<0.01
		PM	0.16	<0.01
		PM ₁₀	0.16	<0.01
		PM _{2.5}	0.16	<0.01
GEN4	Standby Generator 4	NO _x	28.70	1.30
		CO	5.28	0.24
		VOC	0.32	0.01
		SO ₂	0.03	<0.01
		PM	0.16	<0.01
		PM ₁₀	0.16	<0.01
		PM _{2.5}	0.16	<0.01
FWPUMP1	Diesel Firewater Pump 1	NO _x	2.90	0.13
		CO	0.69	0.03
		VOC	0.08	<0.01
		SO ₂	<0.01	<0.01
		PM	0.10	<0.01
		PM ₁₀	0.10	<0.01

Emission Sources - Maximum Allowable Emission Rates

		PM _{2.5}	0.10	<0.01
FWPUMP2	Diesel Firewater Pump 2	NO _x	2.90	0.13
		CO	0.69	0.03
		VOC	0.08	<0.01
		SO ₂	<0.01	<0.01
		PM	0.10	<0.01
		PM ₁₀	0.10	<0.01
		PM _{2.5}	0.10	<0.01
IFRTK1	Condensate Tank	VOC	0.60	1.27
TRKLD	Truck Loading	VOC	1.33	1.91
TRKVCU	Condensate Truck Loading VCU	NO _x	5.11	22.40
		CO	2.96	12.99
		VOC	1.02	1.47
		SO ₂	0.02	0.09
		PM	0.28	1.21
		PM ₁₀	0.28	1.21
		PM _{2.5}	0.28	1.21
WWLD	Wastewater Truck Loading	VOC	3.95	0.03
WWTK1	Wastewater Tank	VOC	0.18	<0.01
TK1902	Spent Scavenger Tank	VOC	0.01	<0.01
SCAVLD	Spent Scavenger Loading	VOC	<0.01	<0.01
DSLTK1	Diesel Tank	VOC	0.08	<0.01
DSLTK2	Diesel Tank	VOC	0.08	<0.01
DSLTK3	Diesel Tank	VOC	0.08	<0.01
DSLTK4	Diesel Tank	VOC	0.08	<0.01
FWPTK1	Diesel Tank	VOC	0.05	<0.01
FWPTK2	Diesel Tank	VOC	0.05	<0.01
GDFTK1	Diesel Tank	VOC	0.08	<0.01

Emission Sources - Maximum Allowable Emission Rates

GDFTK2	Gasoline Tank	VOC	14.52	0.31
AMNTK1	Amine Storage Tank	VOC	<0.01	<0.01
AMNSRG1	Amine Surge Tank - MSS	VOC	<0.01	<0.01
AMNSRG2	Amine Surge Tank - MSS	VOC	<0.01	<0.01
AMNSRG3	Amine Surge Tank - MSS	VOC	<0.01	<0.01
FUG	Fugitive Emissions (6)	VOC	18.12	79.40
		H ₂ S	<0.01	<0.01
TRKMSS	Truck Loading (MSS)	VOC	43.05	0.49

- (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
PM₁₀ - 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
H₂S - hydrogen sulfide
- (4) Planned startup and shutdown (SS) lbs/hour emissions for all pollutants are authorized even if not specifically identified as SS.
- (5) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: November 4, 2020