

Emission Sources - Maximum Allowable Emission Rates

Permit Number 7278

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)
A-D-1	HA-3 Flare (Normal Operations)	VOC	24.46	23.95
		NO _x	3.39	2.99
		CO	8.53	9.96
		SO ₂	0.01	0.01
	HA-3 Flare Maintenance, Start-up, and Shutdown Activities (MSS)	VOC	39.99	1.88
		NO _x	3.12	0.12
		CO	16.05	0.64
		SO ₂	0.01	0.01
BLR-1	Boiler 1 (10)	VOC	0.73	---
		NO _x	2.73	---
		CO	13.45	---
		SO ₂	0.11	---
		PM	0.91	---
		PM ₁₀	0.91	---
		PM _{2.5}	0.91	---
		NH ₃	0.82	---
BLR-2	Boiler 2 (10)	VOC	0.73	---
		NO _x	2.73	---
		CO	13.45	---
		SO ₂	0.11	---
		PM	0.91	---
		PM ₁₀	0.91	---
		PM _{2.5}	0.91	---
		NH ₃	0.82	---

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BLR-CAP	Boiler Cap	VOC	---	6.38
		NO _x	---	23.91
		CO	---	29.46
		SO ₂	---	0.94
		PM	---	7.97
		PM ₁₀	---	7.97
		PM _{2.5}	---	7.97
		NH ₃	---	7.15
CT-1	Water Cooling Tower	VOC	0.96	4.20
		PM	0.35	1.54
		PM ₁₀	0.21	0.93
		PM _{2.5}	<0.01	<0.01
1T-121	1T-121 Storage Tank	VOC	3.54	2.12
1T-122	1T-122 Storage Tank	VOC	1.35	1.82
1T-201	1T-201 Petroleum Distillate Storage	VOC	0.48	0.07
1T-202	1T-202 Petroleum Distillate Storage	VOC	0.48	0.07
1T-241	1T-241 Storage Tank	VOC	1.22	1.50
1T-242	1T-242 Storage Tank	VOC	1.22	0.22
1T-243	1T-243 Storage Tank	VOC	1.22	1.50
1T-251	1T-251 Storage Tank	VOC	1.77	2.24
1T-321	1T-321 Olefin Blend Tank	VOC	0.82	0.05
1T-341	1T-341 Storage Tank	VOC	1.95	3.19
1T-361	1T-361 Storage Tank	VOC	1.95	3.19
1T-401	1T-401 Storage Tank	VOC	0.17	0.01
1T-402	1T-402 Storage Tank	VOC	0.09	0.01
1T-403	1T-403 Storage Tank	VOC	0.69	0.01
1T-404	1T-404 Storage Tank	VOC	0.09	0.01
1T-407	1T-407 Storage Tank	VOC	0.07	0.01
1T-408	1T-408 Storage Tank	VOC	0.80	0.02
1T-409	1T-409 Storage Tank	VOC	0.80	0.02
1T-421	1T-421 Storage Tank	VOC	0.09	0.01
1T-422	1T-422 Storage Tank	VOC	0.69	0.01
1T-423	1T-423 Storage Tank	VOC	2.31	0.07
1T-424	1T-424 Storage Tank	VOC	0.17	0.01
1T-425	1T-425 Storage Tank	VOC	0.60	0.01
1T-431	1T-431 Storage Tank	VOC	0.55	0.01
1T-432	1T-432 Storage Tank	VOC	0.55	0.01
1T-433	1T-433 Storage Tank	VOC	0.01	0.01

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1T-451	1T-451 Storage Tank	VOC	0.60	0.01
1T-452	1T-452 Storage Tank	VOC	0.07	0.01
1T-501	1T-501 Tank Vent	VOC	0.89	0.22
1T-502	1T-502 Tank Vent	VOC	0.89	0.22
1T-503	1T-503 Tank Vent	VOC	7.23	0.30
1T-504	1T-504 Tank Vent	VOC	7.23	0.08
1T-511	1T-511 Tank Vent	VOC	0.62	0.14
1T-512	1T-512 Tank Vent	VOC	0.10	0.10
1T-513	1T-513 Tank Vent C14	VOC	0.10	0.10
1T-521	1T-521 Tank Vent	VOC	0.72	0.02
1T-522	1T-522 Tank Vent	VOC	0.72	0.02
1T-523	1T-523 Tank Vent	VOC	0.22	0.15
1T-524	1T-524 Tank Vent	VOC	0.01	0.02
1T-525	1T-525 Tank Vent C10	VOC	5.24	0.05
1T-526	1T-526 Tank Vent C10	VOC	5.24	0.07
1T-528	1T-528 Tank Vent	VOC	0.01	0.03
1T-529	1T-529 Tank Vent	VOC	4.87	0.03
L-D-0T	Portable Flare for 1T-251 Degas	VOC	0.01	0.01
		NO _x	0.03	0.01
		CO	0.06	0.01
L-D-1T	Portable Flare for 1T-121 Degas	VOC	0.15	0.01
		NO _x	0.03	0.01
		CO	0.06	0.01
VCSTK	Marine Vapor Combustor System (MVCS) Loading	VOC	5.34	0.65
		NO _x	2.95	1.67
		CO	5.88	3.33
		SO ₂	0.06	0.04
		PM	0.05	0.01
		PM ₁₀	0.05	0.01
		PM _{2.5}	0.05	0.01
K-A-1C	East Dock - Fuel Oil/Olefins	VOC	0.01	0.01
HPIB FUG	HPIB Fugitive Emissions (5)	VOC	1.68	7.38
TT/RC FUG	Tank Truck/Rail Rack Uncontrolled and fugitive	VOC	2.79	1.05
BARGUNC	Barge Loading Uncontrolled	VOC	71.57	0.91
MARINE FUG	Marine Fugitive Emissions (5)	VOC	0.11	0.37
E TNK FUG	E Tank Farm Fugitive Emissions (5)	VOC	0.23	0.93
S TNK FUG	S Tank Farm Fugitive Emissions (5)	VOC	0.20	0.65

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N TNK FUG	N Tank Farm Fugitive Emissions (5)	VOC	0.08	0.11
NW TNK FUG	NW Tank Farm Fugitive Emissions (5)	VOC	0.08	0.11
TNK GAS FUG	Gasoline Blendstock Piping Fugitive Emissions (5)	VOC	0.06	0.04
1T-521 MSS	1T-521 Tank MSS Emissions (6)	VOC	2.26	0.01
1T-522 MSS	1T-522 Tank MSS Emissions (6)	VOC	2.26	0.01
1T-523 MSS	1T-523 Tank MSS Emissions	VOC (7)	3.54	0.01
		VOC (8)	1.15	0.01
TNK MSS UNC	Uncontrolled Tank MSS Emissions (11)	VOC	113.13	3.68
MVCS MSS TNK	Controlled Tank Degassing (11)	VOC	1.60	---
		NO _x	0.88	---
		CO	1.76	---
		SO ₂	0.01	---
		PM	0.04	---
		PM ₁₀	0.04	---
		PM _{2.5}	0.04	---
PORTO-1	Portable Thermal Oxidizer (11)	VOC	0.32	---
		NO _x	0.40	---
		CO	0.49	---
		SO ₂	<0.01	---
		PM	0.05	---
		PM ₁₀	0.05	---
		PM _{2.5}	0.05	---
PORTFL-1	Portable Flare (11)	VOC	6.40	---
		NO _x	0.91	---
		CO	1.82	---
		SO ₂	<0.01	---
TNKDEGAS	Controlled Tank Degassing (11)	VOC	---	0.47
		NO _x	---	0.07
		CO	---	0.12
		SO ₂	---	0.01
		PM	---	0.01
		PM ₁₀	---	0.01

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		PM _{2.5}	---	0.01
VACTRK MSS	Vacuum Truck w/control	VOC	1.03	0.03
PUMP MSS	Uncontrolled Pump Degassing Emissions	VOC (7)	0.01	0.01
MISC-MSS	Uncontrolled MSS Emissions from miscellaneous degassing	VOC (9)	14.22	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
 - 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
 - NH₃ ammonia
- (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) Storing materials have true vapor pressures less than 0.5 psia. All degassing and refilling emissions are uncontrolled.
- (7) Uncontrolled degassing emissions after VOC concentration has been detected as equal or below 10,000 ppmv.
- (8) Tank roof landing refill emissions.
- (9) Total of all uncontrolled degassing emissions from miscellaneous MSS activities for filters, process reactors, and process columns.
- (10) Annual VOC emission rate is included in the Boiler Cap (EPN BLR-CAP).
- (11) Emissions from tank roof landings for EPNs (EPNs 1T-121, 1T-122, 1T-241, 1T-242, 1T-243, 1T-251, 1T-341, and 1T-361).
- (12) Annual emissions for EPNs MVCS MSS TNK, PORTTO-1, and PORTFL-1 are included in EPN TNKDEGAS. Only 1 control device may operate at any given time during degassing activities.

Date: January 31, 2020