

Emission Sources - Maximum Allowable Emission Rates

Permit Number 49823

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)
NORMCAP	Source Cap for Normal Operation (6)	VOC		591.89
		Ethylene		223.86
		Propylene		1.25
		NO _x		121.66
		CO		271.58
		PM ₁₀		16.05
		SO ₂		4.95
PE-CT1	Cooling Tower CT1(6)	VOC	1.26	5.52
PE-CT2A	Cooling Tower CT2A (6)	VOC	0.63	2.76
PE-CT2B	Cooling Tower CT2B (6)	VOC	0.67	2.94
PE-CT3	Cooling Tower CT3(6)	VOC	1.16	5.06
PE-FLARE	Polyethylene Flare (6)	NO _x	73.64	22.61
		CO	379.37	116.47
		VOC	351.24	125.61
		SO ₂	1.92	0.29
PE-A50	Area 50 Fugitives (5) (6)	VOC	21.38	93.65
PE-AR702	Area R702 Fugitives (5) (6)	VOC	10.68	46.77
PE-A130A	Area 130A Fugitives (5) (6)	VOC	9.16	40.14

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PE-A130B	Area 130B Fugitives (5) (6)	VOC	16.00	70.06
PE-A130C	Area 130C Fugitives (5) (6)	VOC	9.80	42.91
PE-A150	Area 150 Fugitives (5) (6)	VOC	10.75	47.09
PE-A160	Area 160 Fugitives (5) (6)	VOC	2.76	12.09
PE-AMTRYD	Metering Yard Components Fugitives (5) (6)	VOC	1.85	8.09
PE-ERU	Ethylene Recovery Unit Fugitives (5) (6)	VOC	17.65	77.31
PE-A410	PP Tank Farm Fugitives (5) (6)	VOC	2.09	9.13
PE-CM7DRY, PE-CM7STG	CM7 Dryer Vent and Storage Vent (6) (7)	VOC	4.17	6.94
PE-CM7STG	CM7 Storage Vent(6)	PM	0.02	0.07
PE-CM8DRY, PE-CM8STG, PE-CM8VNT	CM8 Dryer Vent, Storage Vent, and Extruder Premixer Vent (6) (7)	VOC	4.21	7.01
PE-CM8STG	CM8 Storage Vent (6)	PM	0.01	0.01
PE-CM8VNT	CM8 Extruder Premix Vent (6)	PM	0.01	0.01
PE-CM10DRY, PE-CM10STG, PE-CM10FV	CM10 Dryer Vent, Storage Vent, and Extruder Feed Vent (6) (7)	VOC	5.61	10.76
PE-CM10STG	CM10 Storage Vent(6)	PM	0.01	0.01
PE-CM10FV	CM10 Extruder Feed Vent (6)	PM	0.01	0.01
PE-FCM1DRY, PE-FM1STG	FCM1 Dryer Vent and Storage Vent (6) (7)	VOC	1.39	2.55
PE-FCM1STG	FCM1 Storage Vent (6)	PM	0.11	0.19
PE-FCM2DRY, PE-FCM2STG	FCM2 Dryer Vent and Storage Vent (6) (7)	VOC	1.76	3.36
PE-FCM2STG	FCM2 Storage Vent(6)	PM	0.11	0.24

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PE-FCM3DRY, PE-FCM3STG	FCM3 Dryer Vent and Storage Vent (6) (7)	VOC	1.76	3.36
PE-FCM3STG	FCM3 Storage Vent (6)	PM	0.11	0.24
PE-FCM6DRY, PE-FCM6STG, PE-FCM6FV	FCM6 Dryer Vent, Storage Vent, and Extruder feed Vent (6) (7)	VOC	5.73	9.79
PE-FCM6STG	FCM6 Storage Vent (6)	PM	0.20	0.45
PE-LOAD	Loading (6)	VOC	2.88	4.24
		PM	0.60	0.83
PE-HRSG21, PE-HRSG22, PE-HRSG23, PE-HRSG24	Cogen Units 1, 2, 3, and 4 (6) (8)	NO _x	46.04	100.12
		CO	63.04	162.92
PE-HRSG21	Cogen Unit 1 (6)	PM	1.59	3.37
		VOC	3.53	5.58
		SO ₂	0.50	1.16
PE-HRSG22	Cogen Unit 2 (6)	PM	1.59	3.37
		VOC	3.53	5.58
		SO ₂	0.50	1.16
PE-HRSG23	Cogen Unit 3 (6)	PM	1.59	3.37
		VOC	3.53	5.58
		SO ₂	0.50	1.16
PE-HRSG24	Cogen Unit 4 (6)	PM	1.59	3.37
		VOC	3.53	5.58
		SO ₂	0.50	1.16

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PE-H11	Catalyst Activator Heater H11 (6)	NO _x	0.54	2.38
		CO	0.46	2.00
		PM	0.05	0.23
		VOC	0.03	0.13
		SO ₂	0.02	0.07
PE-H16	Catalyst Activator Heater H16 (6)	NO _x	0.54	2.38
		CO	0.46	2.00
		PM	0.05	0.23
		VOC	0.03	0.13
		SO ₂	0.02	0.07
PE-H19	Catalyst Activator Heater H19 (6)	NO _x	0.54	2.38
		CO	0.46	2.00
		PM	0.05	0.23
		VOC	0.03	0.13
		SO ₂	0.02	0.07
PE-RTO	Thermal Oxidizer	NO _x	0.70	3.07
		CO	0.52	2.27
		PM	0.09	0.41
		VOC	0.54	2.34
		SO ₂	0.09	0.08
PE-TLOAD	Transloading Operations (6)	PM	0.40	1.75

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VCONT	Temporary Flares and Vapor Combustors	NO _x	1.61	0.06
		CO	8.27	0.33
		SO ₂	0.03	0.01
MSSCAP2	Sitewide MSS Activities (9)	VOC	56.01	1.30
PE-FLAREMSS	Flare MSS Emissions (10)	NO _x	29.17	0.32
		CO	150.25	0.65
		VOC	498.80	15.99
		SO ₂	7.13	0.08

- (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
 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
- (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) The emission caps apply in addition to the individual emission limitations for these EPNs during normal operations.
- (7) VOC emissions occur at multiple EPNs including *-DRY, *-STG, *-VNT, *-FV.
- (8) NO_x and CO emission limits represent the total of all four Cogen Units.
- (9) The MSS VOC emissions from temporary flares and vapor combustors are included in EPN MSSCAP2. MSS NO_x, CO, and SO₂ emissions from temporary flares and vapor combustors are represented in EPN VCONT and are not included in EPN MSSCAP2.
- (10) Emissions rates for PE-FLAREMSS represent emissions from planned MSS activities that are routed to the plant flare (EPN PE-FLARE) and are included under the caps for VOC, NO_x, CO, and SO₂ under EPN NORMCAP.

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