

Emission Sources - Maximum Allowable Emission Rates

Permit Number 30513

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)
7-0-0	Unit 7 Fugitives (5)	VOC	0.97	4.27
		Benzene	0.23	1.02
11-0-0	Unit 11 Fugitives (5)	VOC	2.38	10.43
		Benzene	0.03	0.12
		Hydrogen Sulfide	<0.01	0.02
14-0-0	Unit 14 Fugitives (5)	VOC	3.31	14.49
		Benzene	0.06	0.25
		Hydrogen Sulfide	0.06	0.27
17-0-0	Unit 17 Fugitives (5)	VOC	0.18	0.79
		Benzene	0.08	0.37
35-0-0	Unit 35 Fugitives (5)	VOC	3.61	15.82
		Benzene	0.04	0.17
11-36-1	Unit 11 Prefac Furnace	NO _x	3.60	15.77
		CO	4.94	21.64
		VOC	0.32	1.42
		SO ₂	1.36	1.87
		PM	0.45	1.96
		PM ₁₀	0.45	1.96
		PM _{2.5}	0.45	1.96

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11-36-5	Unit 11 HDS Furnace	NO _x	4.20	18.40
		CO	5.76	25.25
		VOC	0.38	1.65
		SO ₂	1.59	2.18
		PM	0.52	2.28
		PM ₁₀	0.52	2.28
		PM _{2.5}	0.52	2.28
14-36-3	Unit 14 Prefac Furnace	NO _x	4.80	21.02
		CO	6.59	28.86
		VOC	0.43	1.89
		SO ₂	1.82	2.49
		PM	0.60	2.61
		PM ₁₀	0.60	2.61
		PM _{2.5}	0.60	2.61
14-36-4	Unit 14 HDS Furnace	NO _x	3.30	14.45
		CO	4.53	19.84
		VOC	0.30	1.30
		SO ₂	1.25	1.71
		PM	0.41	1.79
		PM ₁₀	0.41	1.79
		PM _{2.5}	0.41	1.79
35-36-1	CCR Furnace	VOC	2.70	9.55
		NO _x	30.00	106.30
		CO	30.00	106.30
		PM	3.73	13.20
		PM ₁₀	3.73	13.20
		PM _{2.5}	3.73	13.20
		SO ₂	11.36	12.58

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35-95-102	Caustic Scrubber	HCl	0.08	0.34
		Cl ₂	0.04	0.19
54-22-2	Unit 11 Cooling Tower	VOC	0.39	1.72
		Ethylene	0.01	0.05
		Propylene	0.01	0.05
54-22-8	Unit 14 Cooling Tower	VOC	0.52	2.30
		Ethylene	0.02	0.07
		Propylene	0.02	0.07
54-22-11	Unit 7 Cooling Tower	VOC	0.08	0.37
		Ethylene	0.01	0.01
		Propylene	0.01	0.01
54-22-18	Unit 35 Cooling Tower	VOC	0.57	2.48
		Ethylene	0.02	0.07
		Propylene	0.02	0.07
56-61-1	Flare 1	NO _x	0.52	2.27
		CO	4.44	19.44
		VOC	6.34	12.35
		SO ₂	0.01	0.04

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56-61-11	Flare 11	NO _x	0.07	0.29
		VOC (6)	1.35	5.91
		SO ₂	0.12	0.53
		Ethylene	0.01	0.01
		Propylene	0.01	0.06
	Flare 11 (Unit 7 SSM Emissions from Flare 11) (7)	NO _x	0.01	0.01
		CO	0.06	0.01
		VOC	0.19	0.01
	Flare 11 (Unit 17 SSM Emissions from Flare 11) (7)	NO _x	0.01	0.01
		CO	0.05	0.01
		VOC	0.15	0.01
	Flare 11 (Unit 35 SSM Emissions from Flare 11) (7)	NO _x	0.03	0.01
		CO	0.21	0.02
		VOC	0.65	0.07

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56-61-16	Flare 16	NO _x	0.83	3.64
		CO	1.89	8.30
		VOC (6)	4.57	20.02
		SO ₂	4.29	18.78
		Ethylene	0.01	0.02
		Propylene	0.53	2.32
	Flare 16 (Unit 7 SSM Emissions from Flare 16) (7)	NO _x	0.02	0.01
		CO	0.05	0.01
		VOC	0.19	0.01
	Flare 16 (Unit 17 SSM Emissions from Flare 16) (7)	NO _x	0.02	0.01
		CO	0.04	0.01
		VOC	0.15	0.01
	Flare 16 (Unit 35 SSM Emissions from Flare 16) (7)	NO _x	0.08	0.01
		CO	0.17	0.02
		VOC	0.65	0.07
68-95-31	Storage Tank 31	VOC	0.34	0.80
68-95-66	Sour Naphtha Storage Tank	VOC	1.14	3.81
68-95-74	Sour Naphtha Storage Tank	VOC	1.20	4.05
68-95-75	Sour Naphtha Storage Tank	VOC	1.09	3.63
68-95-76	Sour Naphtha Storage Tank	VOC	1.06	3.50
68-95-85	Benzene/Toluene Storage Tank	VOC	0.17	0.64
68-95-86	Benzene Storage Tank	VOC	0.29	0.48
68-95-87	Benzene Storage Tank	VOC	0.29	0.44
68-95-92	Benzene Storage Tank	VOC	0.18	0.49
68-95-93	Benzene Storage Tank	VOC	0.20	0.55
68-95-205	Heavy Aromatics Storage Tank	VOC	0.78	1.92
68-95-206	Hydrotreated Naphtha Tank	VOC	1.90	6.79
68-95-210	Raffinate Storage Tank	VOC	3.66	13.13
68-95-216	Toluene Storage Tank	VOC	0.66	0.80

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68-95-409	Xylene Storage Tank	VOC	0.14	0.28
68-95-410	Unit 7 Extractor Charge Tank	VOC	0.75	2.35
68-95-411	Unit 7 Extract Storage Tank	VOC	0.31	0.59
68-95-413	Xylene Storage Tank	VOC	0.14	0.27
7-SSM-0	Unit 7 SSM Emissions (7)	VOC	1.83	0.05
17-SSM-0	Unit 17 SSM Emissions (7)	VOC	1.30	0.04
35-SSM-0	Unit 35 SSM Emissions (7)	VOC	24.06	1.35

Emission Sources - Maximum Allowable Emission Rates

- (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 - particulate matter
 - PM₁₀ - particulate matter equal to or less than 10 microns in diameter
 - PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 - CO - carbon monoxide
 - HCl - hydrogen chloride (Hydrochloric acid)
 - Cl₂ - chlorine
 - SSM - start-up, shutdown & maintenance
- (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) Ethylene and propylene emissions are included in the total VOC.
- (7) These SSM emissions shall not occur simultaneously at Units 7, 17, and 35.

Date: July 10, 2015