

Emission Sources - Maximum Allowable Emission Rates

Permit Number 3150

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)
AG_D103302	Acid Gas Flare	CO	4.63	20.27
		H ₂ S	0.55	2.39
		NO _x	0.54	2.37
		SO ₂	54.17	237.43
		VOC	0.27	1.18
AMINE	West Amine Reboiler 9 MMBtu/hr	CO	0.82	3.6
		NO _x	0.98	4.29
		PM	0.07	0.33
		PM ₁₀	0.07	0.33
		PM _{2.5}	0.07	0.33
		SO ₂	0.01	0.03
		VOC	0.05	0.24
AMINE-1	East Amine Reboiler 9 MMBtu/hr	CO	0.82	3.6
		NO _x	0.98	4.29
		PM	0.07	0.33
		PM ₁₀	0.07	0.33
		PM _{2.5}	0.07	0.33
		SO ₂	0.01	0.03
		VOC	0.05	0.24

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CAT1	Caterpillar 3608 LE No. 1 2,370-hp	CO	1.31	5.72
		NO _x	4.54	19.9
		PM	0.17	0.73
		PM ₁₀	0.17	0.73
		PM _{2.5}	0.17	0.73
		SO ₂	0.01	0.05
		VOC	2.3	10.1
CAT2	Caterpillar 3608 LE No. 2 2,370-hp	CO	1.31	5.72
		NO _x	4.54	19.9
		PM	0.17	0.73
		PM ₁₀	0.17	0.73
		PM _{2.5}	0.17	0.73
		SO ₂	0.01	0.05
		VOC	2.30	10.1
CAT3	Caterpillar 3608 LE No. 3 2,370-hp	CO	1.31	5.72
		NO _x	4.54	19.9
		PM	0.17	0.73
		PM ₁₀	0.17	0.73
		PM _{2.5}	0.17	0.73
		SO ₂	0.01	0.05
		VOC	2.3	10.1

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CAT4	Caterpillar 3516 LE No. 4	CO	0.56	2.44
		NO _x	4.43	19.4
		PM	0.10	0.44
		PM ₁₀	0.10	0.44
		PM _{2.5}	0.10	0.44
		SO ₂	0.01	0.03
		VOC	0.65	2.85
CAT5	Caterpillar 3516 LE No. 5	CO	0.56	2.44
		NO _x	4.43	19.4
		PM	0.10	0.44
		PM ₁₀	0.10	0.44
		PM _{2.5}	0.10	0.44
		SO ₂	0.01	0.03
		VOC	0.65	2.85
COOL-21	Cooling Tower	VOC (5)	0.17	0.74
		PM	1.34	5.87
		PM ₁₀	1.34	5.87
		PM _{2.5}	1.34	5.87

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D40103	Solar Centaur Turbine 4,100-hp	CO	10.66	46.67
		NO _x	16.08	70.41
		PM	0.24	1.07
		PM ₁₀	0.24	1.07
		PM _{2.5}	0.24	1.07
		SO ₂	0.03	0.12
		VOC	0.09	0.4
D40105	Solar Centaur Turbine 4,100-hp	CO	10.66	46.67
		NO _x	16.08	70.41
		PM	0.24	1.07
		PM ₁₀	0.24	1.07
		PM _{2.5}	0.24	1.07
		SO ₂	0.03	0.12
		VOC	0.09	0.4
EM_D103301	Emergency Gas Flare Pilot Fuel Only	CO	0.02	0.07
		NO _x	<0.01	0.02
		SO ₂	<0.01	<0.01
		VOC	<0.01	<0.01

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RGH-S	South Regen Gas Heater	CO	1.7	7.43
		NO _x	2.02	8.85
		PM	0.15	0.67
		PM ₁₀	0.15	0.67
		PM _{2.5}	0.15	0.67
		SO ₂	0.02	0.06
		VOC	0.11	0.49
RGH-N	North Regeneration Gas Heater 24 MMBTU/hr	CO	2.2	9.62
		NO _x	2.62	11.45
		PM	0.20	0.87
		PM ₁₀	0.20	0.87
		PM _{2.5}	0.20	0.87
		SO ₂	0.02	0.08
		VOC	0.14	0.63
FUG-KKK	Process Fugitives (5)	H ₂ S	<0.01	<0.01
		VOC	1.29	5.65
FUG-OOOO	Process Fugitives (5)	H ₂ S	<0.01	<0.01
		VOC	0.04	0.18
FUG-STATE	Process Fugitives (5)	H ₂ S	<0.01	<0.01
		VOC	1.57	6.88

- (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

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PM _{2.5}	- particulate matter equal to or less than 2.5 microns in diameter
CO	- carbon monoxide
H ₂ S	- hydrogen sulfide

(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.

Date: June 17,
2014