

Emission Sources - Maximum Allowable Emission Rates

Permit Number 140763 and PSDTX1500

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)
3U-7A	UT3 No. 1 Gas Turbine	NO _x	9.69	50.74
		NO _x (MSS)	177.18	
		CO	11.79	78.16
		CO (MSS)	434.17	
		VOC	3.37	15.82
		VOC (MSS)	37.22	
		SO ₂	0.93	3.67
		PM	4.03	17.38
		PM ₁₀	4.03	17.38
		PM _{2.5}	4.03	17.38
		NH ₃	17.93	73.08
		NH ₃ (MSS)	50.00	
		H ₂ SO ₄	0.43	1.68
		(NH ₄) ₂ SO ₄	0.58	2.27
3U-7ALOVT	UT3 No. 1 Gas Turbine Lube Oil Vent (5)	VOC	0.01	0.04
		PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04
3U-7ANGVT	UT3 No. 1 Gas Turbine Natural Gas Vent (5)	VOC	0.66	0.01
3U-CL2FUG	UT3 Chlorine Fugitives (5)	Cl ₂	0.01	0.02
3U-7B	UT3 No. 2 Gas Turbine	NO _x	9.69	50.74
		NO _x (MSS)	177.18	
		CO	11.79	78.16
		CO (MSS)	434.17	

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		VOC (MSS)	37.22	
		SO ₂	0.93	3.67
		PM	4.03	17.38
		PM ₁₀	4.03	17.38
		PM _{2.5}	4.03	17.38
		NH ₃	17.93	73.08
		NH ₃ (MSS)	50.00	
		H ₂ SO ₄	0.43	1.68
		(NH ₄) ₂ SO ₄	0.58	2.27
3U-7BLOVT	UT3 No. 2 Gas Turbine Lube Oil Vent (5)	VOC	0.01	0.04
		PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04
3U-7BNGVT	UT3 No. 2 Gas Turbine Natural Gas Vent (5)	VOC	0.66	0.01
3U-STLOVT	UT3 Steam Turbine Lube Oil Vent (5)	VOC	0.01	0.04
		PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04
OL3-FLRA, OL3-FLRB	UT3 Contribution to the Olefins 3 Elevated Flare	NO _x	2.00	0.01
		CO	7.98	0.01
		VOC	15.02	0.01
3U-NGFUG	UT3 Natural Gas Fugitives (5)	VOC	0.03	0.14
3U-NH3FUG	UT3 Aqueous Ammonia Fugitives (5)	NH ₃	0.01	0.04
3U-MSS	UT3 ILE Maintenance Fugitives (5)	NO _x	0.01	0.01
		CO	0.01	0.01
		VOC	1.00	0.01
		PM	27.83	0.14

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		PM ₁₀	27.83	0.14
		PM _{2.5}	27.83	0.14
		NH ₃	47.96	0.05
3U-W10	UT3 Cooling Tower	PM	0.17	0.73
		PM ₁₀	0.13	0.56
		PM _{2.5}	0.01	0.01
		HOCl	0.01	0.01
3U-W11	UT3 Sulfuric Acid Tank (5)	H ₂ SO ₄	0.01	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

HOCl - hypochlorous Acid

H₂SO₄ - sulfuric Acid

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

(NH₄)₂SO₄ - ammonium Sulfate

Cl₂ - chlorine gas

(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: April 17, 2017