

Emission Sources - Maximum Allowable Emission Rates

Permit Number 42734 and PSDTX958

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 (8)	
			lbs/hour	TPY (4)
STACK1	CTG-HRSG Stack 1 Normal Operations	CO	117.60	
		NO _x	97.20	
		PM ₁₀	31.40	
		PM	31.40	
		PM _{2.5}	31.40	
		SO ₂	4.24	
		VOC	12.00	
		NH ₃	45.70	
		(NH ₄) ₂ SO ₄	2.10	
STACK1	CTG-HRSG Stack 1 MSS (9)(10)	CO	1108.80	
		NO _x	344.00	
		PM ₁₀	31.40	
		PM	31.40	
		PM _{2.5}	31.40	
		SO ₂	4.20	
		VOC	183.50	
		NH ₃	45.70	
		(NH ₄) ₂ SO ₄	2.10	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (8)	
			lbs/hour	TPY (4)
STACK1	CTG-HRSG Stack 1 Normal and MSS Operations	CO(7)		212.60
		NO _x (7)		200.43
		PM ₁₀ (7)		107.80
		PM		107.80
		PM _{2.5}		107.80
		SO ₂		6.32
		VOC		25.35
		NH ₃		109.06
		(NH ₄) ₂ SO ₄		2.95
STACK2	CTG-HRSG Stack 2 Normal Operations	CO	117.60	
		NO _x	97.20	
		PM ₁₀	31.40	
		PM	31.40	
		PM _{2.5}	31.40	
		SO ₂	4.24	
		VOC	12.00	
		NH ₃	45.70	
		(NH ₄) ₂ SO ₄	2.10	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (8)	
			lbs/hour	TPY (4)
STACK2	CTG-HRSG Stack 2 MSS (9)(10)	CO	1108.80	
		NO _x	344.00	
		PM ₁₀	31.40	
		PM	31.40	
		PM _{2.5}	31.40	
		SO ₂	4.20	
		VOC	183.5	
		NH ₃	45.70	
		(NH ₄) ₂ SO ₄	2.10	
STACK2	CTG-HRSG Stack 2 Normal and MSS Operations	CO		212.60
		NO _x		200.43
		PM ₁₀		107.80
		PM		107.80
		PM _{2.5}		107.80
		SO ₂		6.32
		VOC		25.35
		NH ₃		109.06
		(NH ₄) ₂ SO ₄		2.95
TOMV1	Turbine Oil Mist Vent (5)	VOC	0.01	0.04
TOMV2	Turbine Oil Mist Vent (5)	VOC	0.01	0.04
TOMV3	Turbine Oil Mist Vent (5)	VOC	0.01	0.02
CT-1	Cooling Tower	PM ₁₀	4.50	11.84
		PM	4.50	11.84
		PM _{2.5}	4.50	11.84

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (8)	
			lbs/hour	TPY (4)
TANK1	Aqueous Ammonia Tank	NH ₃	<0.01	<0.01
TANK2	Aqueous Ammonia Tank	NH ₃	<0.01	<0.01
TANK3	Sodium Hypochlorite Tank	NaOCl	<0.01	0.01
TANK4	Sulfuric Acid Tank	H ₂ SO ₄	<0.01	<0.01
TANKS5 through 8	Water Tanks	--	--	--
WTB1	Common Vent for Water Treatment Chemical Tanks 9, 10, 11, 12, and 13	IOC and OC	0.54	<0.10
FUG1	Ammonia System Fugitives (6)	NH ₃	0.01	0.04
FUG2	Natural Gas Pipeline and Metering Station Fugitives	VOC	0.04	0.19
FUG3	Planned MSS Activities (ILE and non-ILE)	CO	<0.01	<0.01
		NO _x	<0.01	<0.01
		PM ₁₀	11.28	0.55
		PM	11.28	0.55
		PM _{2.5}	11.28	0.55
		SO ₂	<0.01	<0.01
		VOC	506.42	2.62
		NH ₃	21.07	0.03

(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

HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C

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NH ₃	- ammonia
H ₂ SO ₄	- sulfuric acid
NaOCl	- sodium hypochlorite
(NH ₄) ₂ SO ₄	- ammonium sulfate
IOC and OC	- inorganic and organic compounds for water treatment including (but not limited to) trisodiumphosphate, carbonylhydrazide, sodium bisulfate, sodium chloride, and polyquaternary amine chloride.

- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Turbine oil mist vent emissions are estimates only based on mist vent eliminator vendor data.
- (6) Fugitive emissions are an estimate only based on component count and application of appropriate fugitive emission factors.
- (7) Emissions regulated under PSDTX958 permit authorization.
- (8) Emission rates are based on a maximum combustion turbine generator (CTG) operating schedule of 8,760 hours per year per CTG, and heat recovery duct burners operating a maximum of 2,500 hours per EPNs STACK1 and STACK2.
- (9) For each pollutant whose emissions during planned MSS activities are measured using a CEMS, the MSS lb/hr limits apply only during each clock hour that includes one or more minutes of MSS activities. During all other clock hours, the normal lb/hr limits apply.
- (10) These limits include hourly emissions from a non-ILE activity (See Attachment B).

Dated April 22, 2020