

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 43965, PSDTX966, and N026

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)
HRSG-001	Heat Recovery Steam Generator GE Frame 7F Turbine (5)	NO _x	32.4	104.6
		CO	92.4	215.6
		VOC	9.5	26.0
		SO ₂	7.2	6.2
		PM/PM ₁₀	38.6	104.4
		NH ₃	18.2	79.7
		H ₂ SO ₄	1.3	0.95
HRSG-002	Heat Recovery Steam Generator GE Frame 7F Turbine (5)	NO _x	32.4	104.6
		CO	92.4	215.6
		VOC	9.5	26.0
		SO ₂	7.2	6.2
		PM/PM ₁₀	38.6	104.4
		NH ₃	18.2	79.7
		H ₂ SO ₄	1.3	0.95
FW PUMP-1	300-hp Fire Water Pump (6)	NO _x	9.3	0.47
		CO	2.0	0.10
		VOC	0.75	0.38
		SO ₂	0.62	0.03
		PM/PM ₁₀	0.66	0.03

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LVCGT-001	Gas Turbine 1 Lube Oil Vent (6)	VOC	0.04	0.19
LVCGT-002	Gas Turbine 2 Lube Oil Vent (6)	VOC	0.04	0.19
LVSTG-001	Steam Turbine 1 Lube Oil Vent (6)	VOC	0.03	0.11
CT-001	Cooling Tower (6)	PM/PM ₁₀	1.58	3.5
TK-DSL1	Diesel Tank 1 (6)	VOC	0.003	0.01
TK-001	Caustic Tank 1 (6)	Caustic	<0.01	<0.01
TK-003	H ₂ SO ₄ Tank (6)	H ₂ SO ₄	<0.01	<0.01
FUG-P	Natural Gas Piping Fugitives (6) (7)	VOC	0.346	1.52
FUG-NH3A	Ammonia Fugitives (6) (7)	NH ₃	0.0002	0.001
FUG-NH3B	Ammonia Fugitives (6) (7)	NH ₃	0.0002	0.001
Maintenance, Startup and Shutdown Emissions (8)				
HRSG-001	Heat Recovery Steam Generator GE Frame 7F Turbine	NO _x	350.00	
		CO	2400.00	
		VOC	47.11	
		SO ₂	7.20	
		PM/PM ₁₀	38.60	
		NH ₃	50.00	
		H ₂ SO ₄	1.30	
HRSG-002	Heat Recovery Steam Generator GE Frame 7F Turbine	NO _x	350.00	
		CO	2400.00	

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		VOC	47.11	
		SO ₂	7.20	
		PM/PM ₁₀	38.60	
		NH ₃	50.00	
		H ₂ SO ₄	1.30	
MSSFUG	MSS-Related Fugitives (9)	NO _x	<0.01	<0.01
		CO	<0.01	<0.01
		VOC	3.52	0.02
		PM/PM ₁₀ /PM _{2.5}	0.11	0.02
		NH ₃	0.87	0.001

- (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} - total particulate matter equal to or less than 2.5 microns in diameter
 CO - carbon monoxide
 NH₃ - ammonia
 H₂SO₄ - sulfuric acid
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) The tpy emission limit specified in the table entitled "Emission Sources - Maximum Allowable Emission Rates" for this facility includes emissions from the facility during both normal operations and planned maintenance, startup, and shutdown (MSS) activities.

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- (6) The pound per hour and ton per year emission limits specified in the maximum allowable emission rates table for this facility includes emissions from the facility during both normal operations and planned MSS activities.
- (7) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (8) 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.
- (9) These limits include hourly emissions from inherently low emitting activities (See Attachment A).

Date: December 9, 2011