

Emission Sources - Maximum Allowable Emission Rates
Permit Numbers 107523, PSDTX1336, and N174

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)
HR15.101	Reactor Charge Heater (8)	NO _x	9.74	21.34
		CO	38.32	83.92
		VOC	0.97	4.27
		PM	3.63	15.90
		PM10	3.63	15.90
		PM2.5	3.63	15.90
		SO ₂	25.45	111.48
		NH ₃	2.20	9.65
		H ₂ SO ₄	7.80	34.14
	MSS (6)	VOC	1.95	---
		NO _x	31.17	---

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DW37.101	Waste Heat Boiler, Waste Heat Boiler Burner, Regeneration Air Heater,	NO _x	37.53	75.74
		CO	87.84	80.13
	Regen Air Comp. Gas Turbine A, and	VOC	43.70	38.44
		PM	16.56	69.01
	Regen Air Comp. Gas Turbine B (8)	PM10	16.56	69.01
		PM2.5	16.56	69.01
		SO ₂	36.71	131.90
		NH ₃	29.05	117.09
		H ₂ SO ₄	11.24	40.40
	MSS(6)	VOC	13.50	---
		CO	90.00	---
		NO _x	67.50	---
GT26.101A	Turbine A Bypass Stack (7)	NO _x	43.51	---
		CO	152.98	---
		VOC	3.97	---
		PM	3.00	---
		PM10	3.00	---
		PM2.5	3.00	---
		SO ₂	0.88	---

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GT26.101B	Turbine B Bypass Stack (7)	NO _x	43.51	---
		CO	152.98	---
		VOC	3.97	---
		PM	3.00	---
		PM10	3.00	---
		PM2.5	3.00	---
		SO ₂	0.88	---
BO10.103A	Auxiliary Boiler A	NO _x	8.40	---
		CO	31.08	---
		VOC	3.36	---
		PM	2.10	---
		PM10	2.10	---
		PM2.5	2.10	---
		SO ₂	24.84	---
		NH ₃	1.901	---
		H ₂ SO ₄	7.606	---

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BO10.103B	Auxiliary Boiler B	NO _x	8.40	---
		CO	31.08	---
		VOC	3.36	---
		PM	2.10	---
		PM10	2.10	---
		PM2.5	2.10	---
		SO2	24.84	---
		NH3	1.901	---
		H2SO4	7.606	---
BO10.103A BO10.103B	Auxiliary Boiler A Auxiliary Boiler B Annual Caps (8)	NO _x	---	13.13
		CO	---	22.56
		VOC	---	1.99
		PM	---	1.24
		PM10	---	1.24
		PM2.5	---	1.24
		SO2	---	14.70
		NH3	---	0.53
		H2SO4	---	4.50
HR15.101 DW37.101 BO10.103A BO10.103B	SO2/H2SO4 Annual Caps (8)	SO2	---	135.21
		H2SO4	---	41.41
CT13.801	Cooling Tower	PM	0.61	2.65
		PM10	0.50	2.19
		PM2.5	0.23	0.99
		VOC	2.5	5.5
SK25.801	Process Flare, Routine	NO _x	0.74	1.86

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	MSS	SO2	0.004	0.02
		CO	3.67	4.42
		VOC	20.03	6.25
		NO _x	317.44	3.46
		SO2	0.00	0.00
		CO	633.74	8.81
		VOC	727.50	8.57
PM18.803	Fire Water Pump Engine	NO _x	1.96	0.05
		CO	3.11	0.08
		VOC	1.63	0.04
		PM	0.18	<0.01
		PM10	0.18	<0.01
		PM2.5	0.18	<0.01
		SO2	0.01	<0.01
PM18.850C	Raw Water Pump Engine	NO _x	1.02	0.03
		CO	1.62	0.04
		VOC	0.85	0.02
		PM	0.09	<0.01
		PM10	0.09	<0.01
		PM2.5	0.09	<0.01
		SO2	<0.01	<0.01
FUG-PDH	Process Fugitives	VOC	1.14	4.99
FUG-NGAS	Nat. Gas Pipeline Fugitives	VOC	0.05	0.21
FUG-SCR	SCR Ammonia Fugitives	NH3	0.01	0.06
MSS-PDH	Maintenance, Startup, Shutdown Cap	VOC	21.11	0.51

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SV19.807	Neutralizing Amine Tank	VOC	0.01	0.04
SV19.901	Wastewater Equalization	VOC	0.01	0.04
SV19.904	Sludge Holding Tank	VOC	0.01	0.04
SV19.842	FWP Diesel Tank	VOC	0.01	0.04
SV19.843	RWP Diesel Tank	VOC	0.01	0.04
SV19.841	Methanol Tote	VOC	0.01	0.04

- (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) Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.
 - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - HRVOC - highly reactive volatile organic compounds as defined in 30 TAC § 115.10
 - IOC-U - inorganic compounds (unspeciated)
 - NO_x - total oxides of nitrogen
 - SO₂ - sulfur dioxide
 - H₂SO₄ - sulfuric acid
 - 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
- (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) Annual MSS emissions are included in the annual routine allowable rate for this EPN.
- (7) Annual MSS emissions are included in the annual allowable rate for EPN DW37.101.
- (8) The annual combined SO₂ and H₂SO₄ emissions from Emission Point Nos.HR15.101, DW37.101, BO10.103A, BO10.103B are limited per the SO₂ and H₂SO₄ emissions caps.

Date: March 13, 2014