Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 56653 and PSDTX1376

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

Combustion Units Firing Natural Gas

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
BOILER1 with Low-NO_x Burners	Central Plant Boiler No. 1 124 MMBtu/hr	NO_x	4.46	---
		CO	4.59	---
		VOC	0.25	---
		SO_2	0.07	---
		PM	0.99	---
		PM_{10}	0.99	---
		$PM_{2.5}$	0.99	---
BOILER2 with Low-NO_x Burners	Central Plant Boiler No. 2 124 MMBtu/hr	NO_x	2.48	---
		CO	2.23	---
		VOC	0.15	---
		SO_2	0.07	---
		PM	0.99	---
		PM_{10}	0.99	---
		$PM_{2.5}$	0.99	---
BOILER9 with Low-NO_x Burners	West Chill Plant Boiler 140 MMBtu/hr	NO_x	1.40	6.13
		CO	4.90	21.45
		VOC	0.75	3.31
		SO_2	0.08	0.36
		PM	1.04	4.57
		PM_{10}	1.04	4.57
		$PM_{2.5}$	1.04	4.57

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WP-CTG/HRSG	West Plant Combustion Turbine Normal Operating Emissions	NO_x	0.96	3.54
		CO	12.10	79.40
		VOC	0.76	2.84
		SO_2	0.34	0.52
		PM	1.80	5.06
		PM_{10}	1.80	5.06
		$PM_{2.5}$	1.80	5.06
		H_2SO_4	0.08	0.12
		$(NH_4)_2SO_4$	0.10	0.16
		NH_3	1.66	5.07
EP-CTG/HRSG	East Plant Combustion Turbine Normal Operating Emissions	NO_x	0.96	3.54
		CO	12.10	79.40
		VOC	0.76	2.84
		SO_2	0.34	0.52
		PM	1.80	5.06
		PM_{10}	1.80	5.06
		$PM_{2.5}$	1.80	5.06
		H_2SO_4	0.08	0.12
		$(NH_4)_2SO_4$	0.10	0.16
		NH_3	1.66	5.07

Annual Limits for Boilers 1 and 2

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)

Emission Sources - Maximum Allowable Emission Rates

BOILER1 and BOILER2	Central Plant Boiler No. 1 and Central Plant Boiler No. 2 Combined Annual Limits Firing Natural Gas and up to 200,000 gallons Fuel Oil	NO_x	---	17.13
		CO	---	16.95
		VOC	---	0.97
		SO_2	---	5.06
		PM	---	4.78
		PM_{10}	---	4.78
		$PM_{2.5}$	---	4.78

Short Term Limits for Boilers 1 and 2 when firing Fuel Oil

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
BOILER1 with Low-NO_x Burners	Central Plant Boiler No. 1, 124 MMBtu/hr firing Fuel Oil	NO_x	16.12	---
		CO	15.0	---
		VOC	0.93	---
		SO_2	41.73	---
		PM	2.92	---
		PM_{10}	2.92	---
		$PM_{2.5}$	2.92	---
BOILER2 with Low-NO_x Burners	Central Plant Boiler No. 2, 124 MMBtu/hr firing Fuel Oil	NO_x	12.4	---
		CO	15.0	---
		VOC	0.62	---
		SO_2	41.73	---
		PM	2.92	---
		PM_{10}	2.92	---
		$PM_{2.5}$	2.92	---

Fugitives and Planned Maintenance Emissions

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)

Emission Sources - Maximum Allowable Emission Rates

			lbs/hour	TPY (4)
BOILER9 MSS	West Chill Plant Boiler 140 MMBtu/hr Short Term MSS (6)	NO_x	4.20	---
		CO	14.70	---
WP-CTG/HRSG MSS	West Plant Combustion Turbine Short Term MSS	NO_x	2.36	---
		CO	180.77	---
		VOC	2.49	---
EP-CTG/HRSG MSS	East Plant Combustion Turbine Short Term MSS	NO_x	2.36	---
		CO	180.77	---
		VOC	2.49	---
TURB-MSS	ILE Turbine Maintenance Fugitives	NO_x	< 0.01	< 0.01
		CO	< 0.01	< 0.01
		VOC	0.53	< 0.01
		PM	0.09	0.02
		PM_{10}	0.09	0.02
		$PM_{2.5}$	0.09	0.02
		NH_3	< 0.01	< 0.01
WP-CTLOV	West Plant Combustion Turbine Lube Oil Vent	VOC	< 0.01	< 0.01
		PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
		$PM_{2.5}$	< 0.01	< 0.01
EP-CTLOV	East Plant Combustion Turbine Lube Oil Vent	VOC	< 0.01	< 0.01
		PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
		$PM_{2.5}$	< 0.01	< 0.01
WP-STLOV	West Plant Steam Turbine Lube Oil Vent	VOC	< 0.01	< 0.01
		PM	< 0.01	< 0.01

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	< 0.01	< 0.01
		$PM_{2.5}$	< 0.01	< 0.01
EP-STLOV	East Plant Steam Turbine Lube Oil Vent	VOC	< 0.01	< 0.01
		PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
		$PM_{2.5}$	< 0.01	< 0.01
WP-COOLTWR	West Plant Cooling Tower	PM	0.52	2.26
		PM_{10}	0.22	0.98
		$PM_{2.5}$	< 0.01	< 0.01
EP-COOLTWR	East Plant Cooling Tower	PM	0.27	1.17
		PM_{10}	0.12	0.51
		$PM_{2.5}$	< 0.01	< 0.01
VOC-FUG	Fuel fugitives	VOC	0.20	0.88
WP-NH3FUG	Ammonia fugitives	NH_3	0.05	0.21
EP-NH3FUG	Ammonia fugitives	NH_3	0.05	0.21

(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
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - 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
H_2SO_4 - sulfuric acid
$(NH_4)_2SO_4$ - ammonium sulfate
NH_3 - ammonia
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period. Annual emission limits include planned startup and shutdown activities.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations. Emission rates include planned MSS activities.
(6) During periods of start-up, shutdown, and maintenance (30 percent or less of firing capacity).

Emission Sources - Maximum Allowable Emission Rates

Date: October 13, 2014