

Emission Sources - Maximum Allowable Emission Rates

Permit Number 19166, HAP10 and PSDTX760M9

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.

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
7A	88 MW (ISO) Gas Turbine GE Model PG7111 (EA) with 141.8 MMBtu/hr Duct Burner Firing Hydrogen, Natural Gas, Process Gas, Tail Gas	NO _x	119.02	460.00
		NO _x (6)	175.00	--
		CO	60.13	232.71
		CO (6)	250.00	--
		VOC	1.75	7.66
		VOC (6)	1.83	--
		PM	5.71	25.01
		PM ₁₀	5.71	25.01
		PM _{2.5}	5.71	25.01
		SO ₂	0.83	3.64
7B	88 MW (ISO) Gas Turbine GE Model PG7111 (EA) with 141.8 MMBtu/hr Duct Burner Firing Hydrogen, Natural Gas, Process Gas, Tail Gas	NO _x	119.02	460.00
		NO _x (6)	175.00	--
		CO	60.13	232.71
		CO (6)	250.00	--
		VOC	1.75	7.66
		VOC (6)	1.83	--
		PM	5.71	25.01
		PM ₁₀	5.71	25.01
		PM _{2.5}	5.71	25.01
		SO ₂	0.83	3.64

Emission Sources - Maximum Allowable Emission Rates

7C	88 MW (ISO) Gas Turbine GE Model PG7111 (EA) with 141.8 MMBtu/hr Duct Burner Firing Hydrogen, Natural Gas, Process Gas, Tail Gas	NO _x	119.02	460.00
		NO _x (6)	175.00	--
		CO	60.13	232.71
		CO (6)	250.00	--
		VOC	1.75	7.66
		VOC (6)	1.83	--
		PM	5.71	25.01
		PM ₁₀	5.71	25.01
		PM _{2.5}	5.71	25.01
		SO ₂	0.83	3.64
7D	88 MW (ISO) Gas Turbine GE Model PG7111 (EA) with 141.8 MMBtu/hr Duct Burner Firing Hydrogen, Natural Gas, Process Gas, Tail Gas	NO _x	132.02	530.07
		NO _x (6)	175.00	--
		CO	59.13	237.09
		CO (6)	250.00	--
		VOC	1.75	7.66
		VOC (6)	1.83	--
		PM	5.71	25.01
		PM ₁₀	5.71	25.01
		PM _{2.5}	5.71	25.01
		SO ₂	0.83	3.64

Emission Sources - Maximum Allowable Emission Rates

7E	88 MW (ISO) Gas Turbine GE Model PG7111 (EA) with 141.8 MMBtu/hr Duct Burner Firing Hydrogen, Natural Gas, Process Gas, Tail Gas	NO _x	132.02	530.07
		NO _x (6)	175.00	--
		CO	59.13	237.09
		CO (6)	250.00	--
		VOC	1.75	7.66
		VOC (6)	1.83	--
		PM	5.71	25.01
		PM ₁₀	5.71	25.01
		PM _{2.5}	5.71	25.01
		SO ₂	0.83	3.64
7F	Package Boiler 250 MMBTU/hr	NO _x	12.50	54.75
		NO _x (6)	22.50	--
		CO	25.00	109.50
		CO (6)	83.00	--
		VOC	0.34	1.51
		VOC (6)	1.40	---
		PM	1.25	5.48
		PM ₁₀	1.25	5.48
		PM _{2.5}	1.25	5.48
		SO ₂	0.10	0.43

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7G	83 MW (ISO) Gas Turbine GE Model PG7121 (EA)	NO _x	38.00	166.44
		NO _x (6)	175.00	--
		CO	62.00	271.56
		CO (6)	250.00	--
		VOC	0.55	2.41
		VOC (6)	0.63	--
		PM	5.00	21.90
		PM ₁₀	5.00	21.90
		PM _{2.5}	5.00	21.90
		SO ₂	0.62	2.69
7H	No.1 Package Boiler 417 MMBTU/hr	NO _x	6.25	27.00
		NO _x (6)	42.00	--
		CO	15.40	67.00
		CO (6)	153.00	--
		VOC	2.50	10.00
		PM	3.10	13.70
		PM ₁₀	3.10	13.70
		PM _{2.5}	3.10	13.70
		SO ₂	0.70	3.00
		NH ₃	3.40	9.90

Emission Sources - Maximum Allowable Emission Rates

7J	No. 2 Package Boiler 417 MMBTU/hr	NO _x	6.25	27.00
		NO _x (6)	42.00	--
		CO	15.40	67.00
		CO (6)	153.00	--
		VOC	2.50	10.00
		PM	3.10	13.70
		PM ₁₀	3.10	13.70
		PM _{2.5}	3.10	13.70
		SO ₂	0.70	3.00
		NH ₃	3.40	9.90
CWTP1	Combined Wastewater	VOC	12.50	27.30
TTW-15A	Diesel Storage Tank	VOC	0.06	0.01
TTW-15B	Diesel Storage Tank	VOC	0.06	0.01
TTW-15C	Diesel Storage Tank	VOC	0.06	0.01
TTW-15D	Diesel Storage Tank	VOC	0.06	0.01
TTW-15E	Diesel Storage Tank	VOC	0.06	0.01
UT-F02A	Diesel Storage Tank	VOC	0.06	0.01
UT-F02B	Diesel Storage Tank	VOC	0.06	0.01
UT-F02C	Diesel Storage Tank	VOC	0.06	0.01
FPM-02A	Diesel Firewater Pump	NO _x	8.36	0.33
		CO	3.19	0.12
		VOC	0.18	0.01
		PM	0.66	0.03
		PM ₁₀	0.66	0.03
		PM _{2.5}	0.66	0.03
		SO ₂	2.06	0.08
FPM-02B	Diesel Firewater Pump	NO _x	8.36	0.33

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		CO	3.19	0.12
		VOC	0.18	0.01
		PM	0.66	0.03
		PM ₁₀	0.66	0.03
		PM _{2.5}	0.66	0.03
		SO ₂	2.06	0.08
FPM-02C	Diesel Firewater Pump	NO _x	8.36	0.33
		CO	3.19	0.12
		VOC	0.18	0.01
		PM	0.66	0.03
		PM ₁₀	0.66	0.03
		PM _{2.5}	0.66	0.03
		SO ₂	2.06	0.08
FPM-02D	Diesel Firewater Pump	NO _x	8.36	0.33
		CO	3.19	0.12
		VOC	0.18	0.01
		PM	0.66	0.03
		PM ₁₀	0.66	0.03
		PM _{2.5}	0.66	0.03
		SO ₂	2.06	0.08
FPM-02E	Diesel Firewater Pump	NO _x	8.36	0.33
		CO	3.19	0.12
		VOC	0.18	0.01
		PM	0.66	0.03
		PM ₁₀	0.66	0.03
		PM _{2.5}	0.66	0.03
		SO ₂	2.06	0.08

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UP-F02A	Diesel Firewater Pump	NO _x	8.68	0.34
		CO	1.87	0.07
		VOC	0.69	0.03
		PM	0.62	0.02
		PM ₁₀	0.62	0.02
		PM _{2.5}	0.62	0.02
		SO ₂	1.42	0.06
UP-F02B	Diesel Firewater Pump	NO _x	8.68	0.34
		CO	1.87	0.07
		VOC	0.69	0.03
		PM	0.62	0.02
		PM ₁₀	0.62	0.02
		PM _{2.5}	0.62	0.02
		SO ₂	1.42	0.06
UP-F02C	Diesel Firewater Pump	NO _x	8.68	0.34
		CO	1.87	0.07
		VOC	0.69	0.03
		PM	0.62	0.02
		PM ₁₀	0.62	0.02
		PM _{2.5}	0.62	0.02
		SO ₂	1.42	0.06
XZ-OS01	Waste Oil Storage Tank	VOC	0.01	0.01
XZ-WS01	Oil-Water Separation System	VOC	0.11	0.25
PCDIESELFUG	PC Plant Fire Water System Fugitives	VOC	0.04	0.16
EXPDIESELFUG	Expansion Plant Fire Water System Fugitives	VOC	0.06	0.27
NG-FUG	Natural Gas and OL	VOC	0.07	0.31

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	Tail Gas Fugitives (5)			
NH ₃ -FUG	Ammonia Fugitives	NH ₃	0.23	1.01
TURB-MSS	ILE Turbine Maintenance Fugitives (5)	NO _x	<0.01	<0.01
		CO	<0.01	<0.01
		VOC	0.47	<0.01
		PM	0.58	0.03
		PM ₁₀	0.58	0.03
		PM _{2.5}	0.58	0.03
		NH ₃	75.7	0.76

- (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
 NH₃ - ammonia
- (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) MSS-Maintenance, startup-shutdown emissions

Date: November 8, 2017