

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 70017

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)
VX-1A and VX-1B VX-1B and VX-2B VX-3A and VX-3B VX-4A and VX-4B  GX-1, GX-2, GX-3, GX-4, GX-5, GX-6, GX-7, GX-8, GX-9, GX-10, GX-11, GX-12, GX-13, GX-14, GX-15, GX-16, GX-17  AX-1, AX-2, AX-3, AX-4, AX-5, AX-6, AX-7, AX-8, AX-9, AX-10, AX-11, AX-12, AX-13  CX-1, CX-2, CX-3, CX-4, CX-5, CX-6, CX-7  MISC1	<b>FAB1 Building and Miscellaneous Sources</b>	VOC	6.80	25.62
	RCTO1 Vents			
	RCTO2 Vents			
	RCTO3 Vents			
	RCTO4 Vents			
	General Exhaust			
	Acid Scrubbers	Exempt Solvent	15.51	67.94
		PM <sub>10</sub> /PM <sub>2.5</sub>	1.4	6.13
	Caustic Scrubbers	GIC	12.24	53.61
	Wastewater Treatment Systems, Labs, Chemical Docks, and Cooling Towers	CO	1.00	4.70
		NO <sub>x</sub>	0.11	0.50
		VOC (5)	0.20	0.57
VX-5A and VX-5B VX-6A and VX-6B VX-7A and VX-7B VX-8A and VX-8B VX-9A and VX-9B	<b>FAB2 Building and Miscellaneous Sources</b>	PM <sub>10</sub> /PM <sub>2.5</sub> (5)	0.23	0.80
		NO <sub>x</sub> (5)	4.04	17.74
	RCTO5 Vent	CO (5)	6.71	29.38
	RCTO6 Vent	SO <sub>2</sub> (5)	0.01	0.03
	RCTO7 Vent			
	RCTO8 Vent	VOC (6)	36.00 (6)	6.10 (6)
GX-21, GX-22, GX-23, GX-24, GX-25, GX-26, GX-27, GX-28, GX-29, GX-30, GX-31, GX-32, GX-34, GX-35, GX-36, GX-37, GX-38, GX-39, GX-40, GX-41, GX-42, GX-43, GX-44, GX-45,  AX-21, AX-22, AX-23, AX-24, AX-25, AX-26, AX-27, AX-28,	General Exhaust			
	Acid Scrubbers			

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		Exempt Solvent (6)	11.50 (6)	1.94 (6)
<b>FAB1</b> B1, B2, B3 VGX-1,VGX-2, VGX-3, VGX-4  <b>FAB2</b> B11, B12, B13, B14, B15, B16, B17, B18  VGX-21,VGX-22, VGX-23, VGX-24, VGX-25	MECH Buildings (Boilers and Industrial Chillers)	VOC	0.01	0.01
		Exempt Solvent	4.95	15.52
		GIC	0.01	<0.01
		VOC (5)	1.75 (7)	4.92 (7)
		PM <sub>10</sub> /PM <sub>2.5</sub> (5)	1.37 (7)	3.10 (7)
		NO <sub>x</sub> (5)	9.20 (7)	11.61 (7)
		CO (5)	7.81 (8)	33.36 (7)
		SO <sub>2</sub> (5)	22.92 (7)	2.13 (7)
ST1, ST2, ST3, T1VOC, T2VOC, T3VOC, T4VOC, T5VOC, T-1ING and TINGMISC	FAB 1 TANKS (Process Material, Fuel, and Waste Solvent)	VOC	0.10	1.20
		Exempt Solvent	0.01	0.02
		GIC	0.10	0.03
ST21, ST22, ST23, T6VOC, T7VOC, T8VOC, T9VOC and T10VOC, T-2ING and TINGMISC2	FAB2 TANKS (Process Material, Fuel, and Waste Solvent)	VOC	0.50	1.20
		Exempt Solvent	0.01	0.02
		GIC	0.10	0.03
All Emission Points	All Sources at Site	Single HAP	---	<10.00
		Multiple HAPS	---	<25.00

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

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- (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.
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|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| VOC               | - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1                                                   |
| GIC               | - Gaseous inorganic compounds including acids and bases                                                                                 |
| NO <sub>x</sub>   | - total oxides of nitrogen                                                                                                              |
| SO <sub>2</sub>   | - sulfur dioxide                                                                                                                        |
| PM                | - total particulate matter, suspended in the atmosphere, including PM <sub>10</sub> and PM <sub>2.5</sub> , as represented              |
| PM <sub>10</sub>  | - total particulate matter equal to or less than 10 microns in diameter, including PM <sub>2.5</sub> , as represented                   |
| PM <sub>2.5</sub> | - 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) Combustion product
- (6) Unabated emissions during planned maintenance, gas curtailments, and switching to backup oxidizers based on a maximum of 338 hr/yr for all RCTOs combined
- (7) Rate from burning No. 2 fuel oil up to 168 hours per year per boiler
- (8) Rate from burning natural gas

Date: September 4, 2018