

Emission Sources - Maximum Allowable Emission Rates

Permit Number 17684

This table lists the maximum allowable emission rates and all sources of air contaminants 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	Air Contaminant Name (2)	Emission Rates (3)	
			lbs/hour	TPY (4)
1, 2, 3, 4, 5, 7, 8, and 9	Building 1 Wafer Fabrication vented through Acid Scrubbers 1900, 1960, 1970, 1930, 1940, 1950, 1920, and 1910	VOC	0.39	1.73
		Exempt Solvent	0.02	0.10
		Reactant	1.26	5.49
		Inert Gas	1.34	5.85
10 and 11	Building 1 Wafer Fabrication vented through Ammonia Scrubbers 1980 and 1990	VOC	0.09	0.38
		Reactant	0.14	0.60
20	Building 1 Wafer Fabrication vented through a RTO (11.0 MMBtu/hr)	VOC	2.59	11.17
		Exempt Solvent	0.04	0.19
		Reactant	0.46	2.05
		VOC (5)	0.06	0.26
		PM/PM ₁₀ /PM _{2.5} (6)	0.08	0.35
		NO _x (6)	1.15	4.97
		CO (6)	0.92	3.99
		SO ₂ (5)	0.02	0.08
20	Building 1 Uncontrolled Wafer Fabrication	VOC	28.25	1.55
		Exempt Solvent	0.44	0.03

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name	Air Contaminant Name (2)	Emission Rates (3)	
			lbs/hour	TPY (4)
14, 15, 16, and 17	One 200-HP (8 MMBtu/hr), Two 350-HP (11 MMBtu/hr), and One 250 HP (12.5 MMBtu/hr) Boilers	VOC	0.17	0.25
		PM/PM ₁₀ /PM _{2.5}	0.23	0.34
		NO _x	3.09	4.50
		CO	2.60	3.78
		SO ₂	0.02	0.03
23	700 kW Generator	VOC	0.76	0.03
		PM/PM ₁₀ /PM _{2.5}	0.25	0.01
		NO _x	33.27	1.20
		CO	1.21	0.04
		SO ₂	0.60	0.02
24	1,000 kW Generator	VOC	0.70	0.03
		PM/PM ₁₀ /PM _{2.5}	0.29	0.01
		NO _x	40.87	1.47
		CO	2.97	0.11
		SO ₂	0.87	0.03
25	1,000 kW Generator	VOC	0.70	0.03
		PM/PM ₁₀ /PM _{2.5}	0.29	0.01
		NO _x	40.87	1.47
		CO	2.97	0.11
		SO ₂	0.87	0.03
26	Industrial Wastewater Tanks	VOC	<0.01	<0.01
27	Waste Solvent Storage Tank	VOC	0.02	0.36

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28 and 29	Epitaxial Deposition vented through Two Wet Scrubbers 4100 and 4200	Reactant	0.01	0.04
		VOC	<0.01	<0.01
30, 31, 32, 33, 34, 35, 36, and 37	Epitaxial Deposition vented through Eight Airguard Point-of-Use Wet Scrubbers ECD01, ECD02, ECD03, ECD04, ECD05, ECD06, ECD09, and ECD10	Reactant	0.03	0.13
All Emission Points	All Sources	Individual HAP		<10.00
		All HAP		<25.00

- (1) Emission point identification number from plot plan.
- (2) Exempt Solvent - carbon compounds which have been excluded from the definition of VOC and as defined Title 30 Texas Administrative Code (30 TAC) § 101
 - VOC - volatile organic compounds as defined in 30 TAC § 101
 - Reactant - inorganic compounds
 - Inert Gas - argon, helium, hydrogen, krypton, nitrogen, neon, and oxygen
 - CO - carbon monoxide
 - NO_x - total oxides of nitrogen
 - SO₂ - sulfur dioxide
 - PM - total particulate matter suspended in the atmosphere, including PM₁₀ and PM_{2.5}
 - PM₁₀ - particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}
 - PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 - 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
- (3) Rates include planned maintenance, startup, and shutdown emissions.
- (4) Rate is for a rolling 12 consecutive months.
- (5) Emissions from combustion of natural gas
- (6) Emissions from combustion of natural gas and VOC and exempt solvent in the RTO inlet stream

Date: November 30, 2015