

## 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	
			lbs/hour	TPY (3)
1, 2, 3, 4, 5, 7, 8, and 9	Wafer Fabrication vented through Acid Scrubbers 1900, 1910, 1920, 1930, 1940, 1950, 1960, and 1970	VOC	0.39	1.73
		Exempt Solvent	0.02	0.10
		Reactant	1.13	4.93
		Inert Gas	1.34	5.85
		Other	0.13	0.56
10 and 11	Wafer Fabrication vented through Ammonia Scrubbers 1980 and 1990	VOC	0.09	0.38
		Reactant	0.14	0.60
20	Wafer Fabrication vented through a Regenerative Thermal Oxidizer (RTO)	VOC	0.54 (4)	2.36 (4)
		VOC	10.79 (5)	0.91 (5)
		Exempt Solvent	0.12 (4)	0.50 (4)
		Exempt Solvent	2.34 (5)	0.20 (5)
		Reactant	0.14	0.63
		Other	0.32	1.42
		VOC (6)	<0.01	0.02
		PM <sub>10</sub> /PM <sub>2.5</sub>	<0.01	0.01
		NO <sub>x</sub>	0.04	0.17
		CO	0.01	0.05
		SO <sub>2</sub>	0.01	0.06

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name	Air Contaminant Name (2)	Emission Rates	
			lbs/hour	TPY (3)
14	200-HP Boiler (8 MMBtu/hr)	VOC	0.04	0.19
		PM <sub>10</sub> /PM <sub>2.5</sub>	0.06	0.26
		NO <sub>x</sub>	0.78	3.44
		CO	0.66	2.89
		SO <sub>2</sub>	<0.01	0.02
15	350-HP-Boiler (11 MMBtu/hr)	VOC	0.06	0.26
		PM <sub>10</sub> /PM <sub>2.5</sub>	0.08	0.36
		NO <sub>x</sub>	1.08	4.72
		CO	0.91	3.97
		SO <sub>2</sub>	0.01	0.03
16	350 HP-Boiler (11 MMBtu/hr)	VOC	0.06	0.26
		PM <sub>10</sub> /PM <sub>2.5</sub>	0.08	0.36
		NO <sub>x</sub>	1.08	4.72
		CO	0.91	3.97
		SO <sub>2</sub>	0.01	0.03
23	700 kW Generator	VOC	0.76	0.03
		PM <sub>10</sub> /PM <sub>2.5</sub>	0.25	0.01
		NO <sub>x</sub>	33.27	1.20
		CO	1.21	0.04
		SO <sub>2</sub>	0.60	0.02

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name	Air Contaminant Name (2)	Emission Rates	
			lbs/hour	TPY (3)
24	1,000 kW Generator	VOC	0.70	0.03
		PM <sub>10</sub> /PM <sub>2.5</sub>	0.29	0.01
		NO <sub>x</sub>	40.87	1.47
		CO	2.97	0.11
		SO <sub>2</sub>	0.87	0.03
25	1,000 kW Generator	VOC	0.70	0.03
		PM <sub>10</sub> /PM <sub>2.5</sub>	0.29	0.01
		NO <sub>x</sub>	40.87	1.47
		CO	2.97	0.11
		SO <sub>2</sub>	0.87	0.03
26	Industrial Wastewater Tanks	VOC	<0.01	<0.01
27	Waste Solvent Storage Tank	VOC	0.02	0.36
28 and 29	Wet Sinks Epitaxial Deposition vented through Two Wet Scrubbers	Reactant	0.01	0.04
		VOC	<0.01	<0.01
30, 31, 32, 33, 34, 35, 36, and 37	Epitaxial Deposition vented through Eight Point-of-Use Wet Scrubbers	Reactant	0.03	0.13
All Emission Points	All Sources	Individual HAP		<10.00
		All HAP		<25.00

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (1) Emission point identification number from plot plan.
- (2) Exempt Solvent - 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
  - Reactant - inorganic compounds
  - Inert Gas - argon, helium, hydrogen, krypton, nitrogen, neon, and oxygen
  - Other - inorganic compounds
  - CO - carbon monoxide
  - NO<sub>x</sub> - total oxides of nitrogen
  - SO<sub>2</sub> - sulfur dioxide
  - PM - total particulate matter, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
  - PM<sub>10</sub> - total particulate matter suspended in the atmosphere equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>
  - PM<sub>2.5</sub> - total particulate matter suspended in the atmosphere 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) Rate is for a rolling 12 consecutive months.
- (4) Rate during normal operations
- (5) Rate during planned maintenance on the RTO
- (6) Combustion and solvent firing emissions.

Date: May 8, 2012