

## 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 **until** the catalytic oxidizer (EPN 6) is shutdown and emissions routed to the regenerative thermal oxidizer (EPN 20). 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
6	Wafer Fabrication vented through a Catalytic Oxidizer	Isopropyl Alcohol (VOC)	2.24 (4)	3.23(4)
		Isopropyl Alcohol (VOC)	0.04 (5)	0.13 (5)
		VOC (6)	<0.01	<0.01
		PM <sub>10</sub> /PM <sub>2.5</sub>	<0.01	<0.01
		NO <sub>x</sub>	0.03	0.09
		CO	0.02	0.07
		SO <sub>2</sub>	<0.01	<0.01
10 and 11	Wafer Fabrication vented through Ammonia Scrubbers 1980 and 1990	VOC	0.09	0.38
		Reactant	0.14	0.60

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			lbs/hour	TPY (3)
20	Wafer Fabrication vented through a Regenerative Thermal Oxidizer (RTO)	VOC	0.43 (7)	1.87 (7)
		VOC	8.55 (8)	0.72 (8)
		Exempt Solvent	0.12 (7)	0.50 (7)
		Exempt Solvent	2.34 (8)	0.20 (8)
		Reactant	0.14	0.63
		Other	0.32	1.42
		VOC (6)	<0.01	0.01
		PM <sub>10</sub> /PM <sub>2.5</sub>	<0.01	0.01
		NO <sub>x</sub>	0.03	0.14
		CO	0.01	0.04
		SO <sub>2</sub>	0.01	0.05
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

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			lbs/hour	TPY (3)
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>10/2.5</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
24	1,000 kW Generator	VOC	0.70	0.03
		PM <sub>10/2.5</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>10/2.5</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

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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 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 non-ozone season November 1 through February 28/29

(5) Rate during ozone season March 1 through October 31

(6) Combustion and solvent firing emissions

(7) Rate during normal operations

(8) Rate during planned maintenance on the RTO

Date: June 28, 2011