

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 8559

This table lists the maximum allowable emission rates of the sources of air contaminants covered by this permit. Annual rates are for any 12-consecutive month period.

AIR CONTAMINANTS DATA

Emission *	Source	Air Contaminant	Emission Rates	
Point No.	Name	Name (1)	lb/hr	TPY
Initial Period (2)				
A1 through A8	8 Wet Scrubbers (for Fab Lines I, II, and IIA)	Acids/Bases	3.39	14.9
		Fluoride Compounds	4.49	1.04
		Specialty Gases	0.15	0.73
		Halocarbons	6.19	27.11
		Elemental Gases	0.46	2.03
		VOC	6.3	27.47
		Non-VOC Organics	5.81	25.43
A9	Ammonia Scrubber	Ammonium Compounds	0.68	1.0
T01	Thermal Oxidizer (for Fab Line IIA)	VOC	1.65	7.21
		Non-VOC Organics	0.22	0.93
		PM	0.03	0.12
		NO _x	0.35	1.23
		SO ₂	<0.01	0.01
		CO	0.09	0.31
		TOC	0.01	0.05
B1 through B8	8 Steam Boilers (6 active units, 2 reserve)	PM	1.21	4.25
		NO _x	29.71	8.48
		SO ₂	0.05	0.19
		CO	3.1	10.85
		TOC	0.51	1.8
T-008	Waste Solvent Tank	VOC	0.16	0.07
		Non-VOC Organics	0.05	0.03

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Emission *	Source	Air Contaminant	Emission Rates	
Point No.	Name	Name (1)	lb/hr	TPY

Interim Period (3)

A1 through A8	8 Wet Scrubbers (for Fab Lines I, II, and IIA) 4.49	Acids/Bases	3.39	14.9
		Fluoride Compounds		1.04
		Specialty Gases	0.15	0.73
		Halocarbons	6.19	27.11
		Elemental Gases	0.46	2.03
		VOC	4.4	18.8
		Non-VOC Organics	5.40	23.64
A9	Ammonia Scrubber	Ammonium Compounds	0.68	1.0
T01	Thermal Oxidizer (for Fab Lines II and IIA) 1.45	VOC	2.57	11.2
		Non-VOC Organics		0.34
		PM	0.03	0.12
		NO _x	0.35	1.23
		SO ₂	<0.01	0.01
		CO	0.09	0.31
		TOC	0.01	0.05
B1 through B8	8 Steam Boilers (6 active units, 2 reserve) 29.71	PM	1.21	4.25
		NO _x		8.48
		SO ₂	0.05	0.19
		CO	3.1	10.85
		TOC	0.51	1.8

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AIR CONTAMINANTS DATA

Emission *	Source	Air Contaminant	Emission Rates	
Point No.	Name	Name (1)	lb/hr	TPY
T-008	Waste Solvent Tank	VOC	0.16	0.07
		Non-VOC Organics	0.05	0.03

Post-Construction Period (4)

A1 through A8	8 Wet Scrubbers (for Fab Lines I, II, and IIA) 6.11	Acids/Bases	1.81	7.91
		Fluoride Compounds		1.4
		Specialty Gases	0.13	0.58
		Halocarbons	6.19	27.11
		Elemental Gases	0.23	1.02
		VOC	0.3	1.0
		Non-VOC Organics	0.3	1.0
A9	Ammonia Scrubber	Ammonium Compounds	0.68	1.0
T01	Thermal Oxidizer (for Fab Lines I, II, and IIA) 8.31	VOC	3.65	16.0
		Non-VOC Organics		1.9
		PM	0.03	0.12
		NO _x	0.35	1.23
		SO ₂	<0.01	0.01
		CO	0.09	0.31
		TOC	0.01	0.05
B1 through B8	8 Steam Boilers (6 active units, 2 reserve) 29.71	PM	1.21	4.25
		NO _x		8.48

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AIR CONTAMINANTS DATA

Emission * Point No.	Source Name	Air Contaminant Name (1)	Emission Rates	
			lb/hr	TPY
		SO ₂	0.05	0.19
		CO	3.1	10.85
		TOC	0.51	1.8
T-008	Waste Solvent Tank	VOC	0.16	0.07
		Non-VOC Organics	0.05	0.03

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION SOURCES

- (1) PM - particulate matter
- NO_x - total oxides of nitrogen
- SO₂ - sulfur dioxide
- CO - carbon monoxide
- TOC - total organic compound emissions from the incomplete combustion of natural gas
- VOC - volatile organic compounds as defined in General Rule 101.1
- Non-VOC Organics - organic compounds excluded from the definition of VOC in General Rule 101.1, such as acetone. For the purposes of this permit non-VOC organics do not include halocarbons.
- Halocarbons - compounds containing carbon, and one or more halogens, and sometimes hydrogen.

Fluoride Compounds

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inorganic compounds that contain a fluorine.

Notwithstanding compound changes authorized in Special Condition No. 7, specific air contaminants for each category are as listed in Table 1 of the confidential portion of the permit amendment application dated January 11, 1996.

(2) Initial Period - begins on the date of this permit and ends after VOC emissions from Fab II have been routed to and are controlled by a thermal oxidizer, but no later than May 30, 1997.

(3) Interim Period - begins after the initial period and ends after all VOC emissions from all semiconductor fabrication lines have been routed to and are controlled by a thermal oxidizer, but no later than May 30, 1998.

(4) Post-Construction Period - begins after the Interim Period and shall begin no later than May 31, 1998.

* Facilities may operate:

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

Dated_____