

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 16786 and N038

The total emissions of air contaminants from any of the sources listed on this table shall not exceed the stated rates.

## AIR CONTAMINANTS DATA

Emission Point	Source Name	Air Contaminant Name (1)	Emission Rates	
			lb/hr	TPY (2)
2B, 19A, 19B, 26C, 32A, 32C, 32D, 36, 53A, 53B, 60, 62, S28, 217, 225, 204, 205, 206, 207, SBGEN, 226, 227B, 234, and KCGEN	South and Kilby Wafer Fab 74.22 (4)	VOC	12.99 (4)	33.23 (4)
		VOC	41.07 (5)	
		VOC	14.28 (8)	
		Exempt VOC		17.81 (4)
		Exempt VOC	9.90 (5)	
		Exempt VOC	13.69 (8)	
		PM	2.93	7.63
		GIC	10.99	35.63
		CO	0.40	1.76
		NO <sub>x</sub>	0.06	0.26
		VOC (3)	0.01	0.01
		PM (3)	0.13	0.44
		NO <sub>x</sub> (3)	6.96	30.45
		CO (3)	6.06	26.54
		SO <sub>2</sub> (3)	0.06	0.22
101 and 103	Dallas Support Building	VOC	0.36	0.93
		Exempt VOC	0.25	1.10
		GIC	0.01	0.01
11 and 52	Facilities Building	VOC	0.30	1.24
		Exempt VOC	0.03	0.13
		GIC	0.11	0.23
74	Time Building	VOC	1.06	2.30
		GIC	0.15	0.34

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			lb/hr	TPY (2)
238, 239, D5NAM, D5NAM2, 40E1, 40E2, 40E3, 40E4, DM5NGEN1, DM5NGEN2, 208, 209, 210, 218, 219, 220, DM5SGEN1, DM5SGEN2, DM5SGEN3, and DM5SGEN4	DMOS5 Wafer Fab	VOC	9.81 (4)	37.92 (4)
		VOC	71.45 (5)	
		Exempt VOC	22.89 (4)	99.56 (4)
		Exempt VOC	28.99 (5)	
		PM	1.41	5.10
		GIC	8.85	34.62
		CO	0.76	3.36
		NO <sub>x</sub>	0.10	0.44
		VOC (3)	0.01	0.01
		PM (3)	0.13	0.49
		NO <sub>x</sub> (3)	9.87	43.20
		CO (3)	8.99	39.35
		SO <sub>2</sub> (3)	0.02	0.04
CUP1, CUP2, CUP3, and CUP4	Central Utility Plant	VOC	1.00	4.38
		Exempt VOC	4.95	13.02
		GIC	0.01	<0.01
		VOC (3)	1.71 (6)	7.25 (7)
		PM (3)	7.26 (6)	11.21 (7)
		NO <sub>x</sub> (3)	36.98 (6)	86.42 (7)
		CO (3)	11.71 (6)	51.24 (7)
		SO <sub>2</sub> (3)	177.48 (6)	31.94 (7)
213	Solvent Building	VOC	1.75	6.86
		Exempt VOC	1.00	2.00
		GIC	<0.01	<0.01

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			lb/hr	TPY (2)
221A, 221B, 221C, 221D, 222, 223, 224, and DM6GEN1	DMOS6 Wafer Fab	VOC	4.87 (4)	20.38 (4)
		VOC	35.20 (8)	
		Exempt VOC	10.45 (4)	45.76 (4)
		Exempt VOC	12.95 (8)	
		PM	0.47	2.07
		GIC	6.58	23.11
		CO	0.38	1.68
		NO <sub>x</sub>	0.05	0.22
		VOC (3)	<0.01	<0.01
		PM (3)	0.05	0.17
		NO <sub>x</sub> (3)	1.85	8.12
		CO (3)	2.33	10.21
		SO <sub>2</sub> (3)	0.01	0.01
228A, 228B, 228C, 229, 229A, 230, SCGEN1, SCGEN2, and SCGEN3	SC Wafer Fab	VOC	3.10 (4)	11.67 (4)
		VOC	15.06 (5)	
		Exempt VOC	0.46 (4)	2.00 (4)
		Exempt VOC	4.79 (5)	
		GIC	0.83	3.52
		VOC (3)	0.01	0.04
		PM (3)	0.02	0.06
		NO <sub>x</sub> (3)	0.68	3.00
		CO (3)	0.58	2.52
		SO <sub>2</sub> (3)	<0.01	<0.01
S28, 40E1, 40E2, 40E3, 40E4, 210, 218, 221A, 221B, 221C, 221D, 227A, 227B, 228A, 228B, and 228C	South and Kilby, DMOS5, DMOS6, and SC Wafer Fabs	VOC		22.00 (8)
		Exempt VOC		1.60 (8)

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			lb/hr	TPY (2)
41200, 156653, 182206, 182207, 190311, 190312, 190313, 190314, 190315, 190316, 190317, and 202991	12 Boilers (Other than in Central Utility Plant)	VOC (3)	0.76 (6)	3.25 (9)
		PM (3)	3.24 (6)	4.66 (9)
		NO <sub>x</sub> (3)	19.70 (6)	32.26 (9)
		CO (3)	11.49 (6)	49.51 (9)
		SO <sub>2</sub> (3)	44.76 (6)	3.95 (9)
Attachment 1	53 Fuel and Process Material Storage Tanks	VOC	3.06	5.65
		Exempt VOC	0.35	0.44
No Designations	Degreasers, Inorganic Storage Tanks, Cooling Towers, Wastewater Neutralization Systems, Labs, and Cafeterias	VOC	0.51	0.74
		Exempt VOC	0.10	0.01
		GIC	0.01	0.01
		PM	0.03	0.15
All applicable to Sources	South and Kilby DMOS5, DMOS6, SC Wafer Fabs, Dallas Support, Facilities and Time Buildings; and all other TI sources on the site	Single HAP		<10.00
		Multiple HAP		<25.00

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (1) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1 (30 TAC ' 101.1).  
 Exempt VOC - exempt solvents as defined in 30 TAC § 101.1.  
 PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>  
 PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.  
 GIC - gaseous inorganic compounds including acids and caustics  
 CO - carbon monoxide  
 NO<sub>x</sub> - nitrogen oxides  
 SO<sub>2</sub> - sulfur dioxide  
 HAP - hazardous air pollutants as identified in Title 40 Code of Federal Regulations Part 63, Subpart C.
- (2) Rate is for a rolling 12 consecutive months.
- (3) Combustion product.
- (4) Rate during normal operation with thermal oxidizer(s).
- (5) Rate during scheduled maintenance on thermal oxidizer(s) or gas curtailments.
- (6) Rate from burning No. 2 fuel oil.
- (7) Rate from burning natural gas and No. 2 fuel oil with the burning of No. 2 fuel oil limited to 360 hours per year (hrs/yr) per four boilers.
- (8) Rate during scheduled maintenance on thermal oxidizers, gas curtailments, and switching to backup thermal oxidizers.
- (9) Rate from burning natural gas and No. 2 fuel oil. Burning No. 2 fuel oil is limited as follows:

<u>Boiler Location</u>	<u>EPN</u>	<u>Hrs/Yr Limit</u>
DMOS6	190315	168
DMOS6	190316	168
DMOS6	190317	168
DMOS6	190311, 190312, 190313, and 190314 combined	504

Date: January 3, 2011