EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 9459

This table lists the maximum allowable emission rates for all sources covered by this permit.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
07	EPI Bottle Room	Acids	0.01	0.01
08	EPI 105 and 106	Arsenic (as As_2O_3)	0.01	0.01
		Silicon Dioxide	0.01	0.02
		Hydrogen Chloride	0.01	0.04
		Diborane	0.01	0.01
		Hydrochloric Acid	0.03	0.14
09	EPI 103 and 104	Arsenic (as As_2O_3)	0.01	0.01
		Silicon Dioxide	0.01	0.02
		Hydrogen Chloride	0.03	0.11
14	Photo	Tetramethyl Ammoniumde Hydroxide	0.12	0.54
		Hexamethyldisilazane	0.01	0.04
		VOC	0.02	0.06
18	WJ999	Diborane	0.01	0.01
		Hydrofluoric Acid	0.05	0.22
		Phosphine (as P_2O_5)	0.01	0.01
		Silicon Dioxide	0.01	0.05
19	WJ 998	Diborane	0.01	0.01
		Hydrofluoric Acid	0.05	0.22
		Phosphine (as P_2O_5)	0.01	0.01
		Silicon Dioxide	0.01	0.05
21	Silane Burn Tubes	Silicon Dioxide	0.01	0.01
24	Phase II North General Exhausts - 182B37	Hydrofluoric Acid	0.01	0.03
		Boron Trifluoride (as B_2O_3)	0.01	0.01
		Hexafluoroethane	0.04	0.16
		VOC	0.02	0.08

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
27	Implant	Arsenic (as As_2O_3)	0.01	0.01
		Phophorous (as P_2O_5)	0.01	0.02
		Antimony Trioxide	0.01	0.02
55	South-Side General Exhaust - 106C106	Tetrafluoromethane	0.02	0.06
		Acetone	0.06	0.27
		Xylene	0.12	0.53
		Butyl Acetate	0.01	0.04
		Hydrofluoric Acid	0.01	0.02
		VOC	0.01	0.03
		Isoproponal	0.04	0.16
		Tetramethyl Ammonium Hydroxide	0.02	0.09
62	South Side General Exhaust - 124B101	Phosphoric Acid	0.01	0.01
		Ammonia	0.01	0.01
		Hydrochloric Acid	0.01	0.01
		Methanol	0.01	0.01
		VOC	0.02	0.07
		Sulfuric Acid	0.01	0.01
		Nitric Acid	0.01	0.01
67	Surface Analysis Lab	Acid	0.01	0.01
		VOC	0.02	0.09
		Nitrous Oxide	0.01	0.01
75	B1 Boiler (Boil 1)	PM	0.07	0.28
		VOC	0.05	0.20
		SO_2	0.01	0.03
		NO_X	1.21	5.30
		CO	0.12	0.53

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
85	B1 Boiler (Boil 2)	PM	0.13	0.55
		VOC	0.10	0.40
		SO_2	0.01	0.05
		NO_X	0.86	3.77
		CO	3.37	14.77
95	B1 Boiler (Boil 3)	PM	0.10	0.41
		VOC	0.07	0.30
		SO_2	0.01	0.04
		NO_X	0.81	3.55
		CO	0.17	0.75
116	Solvent MCV Room	Propylene Glycol Monomethyl Ether Acetate	0.01	0.03
		Ethanolamine	0.01	0.03
		Isoproponal	0.01	0.05
		Hexamethyldisilazane	0.23	0.01
		Tetramethyl Ammonium Hydroxide	0.07	0.01
		n-Methylpyrrolidinone	1.13	0.12
		2-(2-Butoxyethoxy) Ethanol	3.84	0.41
129	Cafeteria Boiler	PM	0.04	0.14
		VOC	0.03	0.10
		SO_2	0.01	0.02
		NO_X	0.42	1.80
		CO	0.35	1.51
133	Source Rebuild Exhaust	Arsenic (as As_2O_3)	0.01	0.01
		Phosphorus (as P_2O_5)	0.01	0.01
		Antimony Trioxide	0.01	0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		Boron Trifluoride (as B_2O_3)	0.01	0.01
140	Rotary Concentrator	VOC	0.23	0.97
202	Houston Device Analysis Organization	Nitric Acid	0.01	0.03
		Acetic Acid	0.01	0.01
		Hydrochloric Acid	0.01	0.01
		Hydrofluoric Acid	0.01	0.01
		Sulfuric Acid	0.01	0.01
203	Houston Device Analysis Organization	Acetone	0.01	0.02
		Tetrafluoromethane	0.01	0.03
		Hydrofluoric Acid	0.01	0.01
		Methanol	0.01	0.02
		Nitrous Oxide	0.01	0.01
		VOC	0.01	0.02
209	B2 Emergency Generator	SO_2	0.01	0.01
		PM	0.04	0.01
		VOC	0.03	0.01
		NO_X	0.40	0.07
		CO	0.10	0.02
211	B2 Boiler (Boil 5)	PM	0.01	0.02
		VOC	0.01	0.01
		SO_2	0.01	0.01
		NO_X	0.04	0.16
		CO	0.03	0.13
219	B2 Boiler (Boil 6)	PM	0.04	0.14
		VOC	0.03	0.10
		CO	0.35	1.51
		NO_X	0.41	1.80
		SO_2	0.01	0.02

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
303	Welding Shop	Chromium	0.01	0.01
		Cobalt	0.01	0.01
		Manganese	0.01	0.01
		Nickel	0.01	0.01
		PM	0.01	0.01
316	Mod A Boiler (Boil 7)	PM	0.02	0.03
		VOC	0.02	0.02
		SO_2	0.01	0.01
		NO_X	0.13	0.57
		CO	0.32	1.41
419	HF Treatment	Ammonia	2.00	7.00
		PM	0.28	0.50
		VOC	0.01	0.01
		CO	1.12	2.00
		NO_X	2.79	5.00
		SO_2	0.12	0.20
428	Thermal Oxidizer	PM	0.10	0.41
		VOC	12.12	15.56
		CO	2.88	12.60
		NO_X	5.44	23.79
		SO_2	0.01	0.04
		Non-VOC	0.01	0.01
431	Fuel Oil Tank	VOC	0.03	0.04
432	Spent Solvent Tank	VOC	0.06	0.12
439	Chlorine Room	Chlorine	0.02	0.01
441	Site Utilities Fuel Oil Tank	Fuel Oil	0.83	0.04
442	Site Utilities Emergency Generator	VOC	0.42	0.08
		CO	11.67	2.03
		NO_X	0.02	0.01

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		SO_2	0.01	0.01
448	Diesel Fire Pump	VOC	0.96	0.03
		CO	2.54	0.08
		NO_X	11.73	0.37
		SO_2	0.78	0.03
		PM	0.84	0.03
451	B1 Emergency Generator	PM	2.66	0.30
		VOC	3.04	0.34
		SO_2	2.49	0.28
		NO_X	37.41	4.12
		CO	8.06	0.89
452	Scrubber Yard	Acetic Acid	0.01	0.01
		Nitric Acid	0.01	0.01
		Ammonia	0.48	2.08
		Boron Trichloride (as B_2O_3)	0.01	0.04
		Chlorine	0.09	0.40
		Ammonium Fluoride	0.01	0.01
		Cupric Sulfate	0.01	0.01
		Hexafluoroethane	0.12	0.54
		Tetrafluoromethane	0.03	0.13
		Trifluoromethane	0.02	0.09
		Hydrochloric Acid	0.20	0.85
		Hydrofluoric Acid	0.32	1.39
		Hydrogen Bromide	0.01	0.03
		Tetramethyl Ammonium Hydroxide	0.99	4.34
		Nitrogen Trifluoride	0.01	0.01
		Nitrous Oxide	0.03	0.11
		Peroxydisulfuric Acid	0.01	0.01
		Phosphoric Acid	0.01	0.01
		Phosphine (as P_2O_5)	0.01	0.01
		Silicon Dioxide	0.04	0.16
		Sulfur Hexafluoride	0.06	0.23
		Sulfur Dioxide	0.01	0.03

Sulfuric Acid	0.01	0.02
Teraethyl Ortho-Silicate	0.01	0.03
Arsenic (as As_2O_3)	0.01	0.01
Diborane	0.01	0.01

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

(3) VOC -volatile organic compounds as defined in 30 Texas Administrative Code (TAC) Section 101.1

Non-VOC - exempted VOC as defined in 30 TAC §101.1
PM - particulate matter, suspended in the atmosphere, including PM_{10}.
PM_{10} - particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
NO_X - total oxides of nitrogen
SO_2 - sulfur dioxide
CO - carbon monoxide

Dated_____