Permit Number 9459

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

Emission	Source	Air Contaminant	Emission	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
<u>(4)</u>			-	
07	EPI Bottle Room	IC	0.37	0.47
08A and 08B	EPI 103, 104, 105, and 106	IC	0.22	0.93
14	Photo	VOC	0.15	0.64
18	WJ002	IC	0.08	0.29
19	WJ001	IC	0.08	0.29
21	Silane Burn Tubes	IC	0.01	0.01
24	Phase II North General Exhausts - 182B37	ES IC VOC	0.04 0.02 0.02	0.16 0.04 0.08
27	Implant	IC	0.10	0.15
55	South-Side General Exhaust - 106C106	ES IC VOC	0.08 0.01 0.20	0.33 0.02 0.85
62	South Side General Exhaust - 124B101	IC VOC	0.05 0.03	0.05 0.08
67	Surface Analysis Lab	IC VOC	0.02 0.02	0.02 0.09
75	B1 Boiler (Boil 1)	PM VOC SO ₂ NO _x	0.13 0.07 4.28 1.21	0.37 0.27 0.14 4.69

Emission	Source	Air	Contaminant	Emission	Rates *
Point No. (1)	Name (2)		Name (3)	lb/hr	TPY
<u>(4)</u>					
			CO	0.90	3.93
85	B1 Boiler (Boil 2)		PM VOC SO ₂ NO _x CO	0.14 0.10 0.01 1.68 1.41	0.58 0.42 0.05 7.32 6.15
95	B1 Boiler (Boil 3)		PM VOC SO ₂ NO _x CO	0.19 0.08 6.42 1.81 1.06	0.44 0.32 0.20 5.56 4.65
116	Solvent MCV Room		VOC	5.30	0.66
129	Cafeteria Boiler		PM VOC SO ₂ NO _x CO	0.04 0.03 0.01 0.42 0.35	0.14 0.10 0.02 1.80 1.51
133	Source Rebuild Exh	aust	IC	0.04	0.04
140	Rotary Concentrator	VOC	ES 0.27 9.55 (5)	0.01 2.71	0.03
143	Implant West		IC	0.09	0.14
144	WJ003		IC	0.08	0.29
145	Silane Burn Tube		IC	0.01	0.01

Emission	Source A	ir Contaminant	Emission R	ates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
<u>(4)</u>		-		
202	Houston Device Analysis Organization	IC IC	0.26 0.76 (5)	0.35
203	Houston Device Analysis Organization	ES IC VOC	0.02 0.02 1.24	0.05 0.02 0.08
209	B2 Emergency Generator VOC SO ₂	0.03	0.01 0.01 0.01 1.65 2.55	0.01 0.09 0.13
211	B2 Boiler (Boil 5)	PM VOC SO ₂ NO _x CO	0.01 0.01 0.01 0.04 0.03	0.02 0.01 0.01 0.16 0.13
219	B2 Boiler (Boil 6) NO _x	PM VOC SO ₂ 0.61 CO	0.06 0.03 2.14 1.82 0.35	0.15 0.11 0.08 1.52
303	Welding Shop	IC	0.05	0.05
316	Mod A Boiler (Boil 7)	PM VOC SO ₂ NO _x CO	0.02 0.02 0.01 0.27 0.23	0.09 0.07 0.01 1.16 0.97
419	HF Treatment through Thermal Oxidizer	IC PM	2.00 0.28	7.00 0.50

Point No. (1)	Emission	Source	Air	Contaminant	Emission	n Rates *
VOC 0.01 0.01 0.01 0.02	* *	Name (2)		Name (3)	lb/hr	TPY
NO _x 2.79 5.00 0.20	<u>(4)</u>					
NOx 2.79 5.00 2.00				VOC	0.01	0.01
CO 1.12 2.00				SO ₂	0.12	0.20
A25						
VOC 0.01 0.01 0.01 SO2 0.01 0.01 0.01 NOx 0.60 0.03 0.05			CO	1.12	2.00	
VOC 0.01 0.01 0.01 SO2 0.01 0.01 0.01 NOx 0.60 0.03 0.05	425	IW Generators		PM	0.01	0.01
NO _x 0.60 0.03 0.05			VOC			
A28			SO_2	0.01	0.01	
428 Thermal Oxidizer ES 0.05 (5) PM 0.10 0.41 VOC 12.79 23.16 VOC 36.50 (5) SO2 0.01 0.04 A31 Fuel Oil Tank VOC 0.03 0.04 A32 Spent Solvent Tank VOC 0.03 0.04 A39 Chlorine Room IC 0.02 0.01 A41 Site Utilities Fuel Oil Tank Fuel Oil 0.83 0.04 A42 Site Utilities Emergency PM 0.01 0.01 A44 0.01 0.01 CO 3.25 0.07 CO 3.25 0.17 A48 Diesel Fire Pump PM 0.84 0.03			NO_x	0.60	0.03	
ES 0.05 (5) PM 0.10 0.41 12.79 23.16 VOC 36.50 (5) SO ₂ 0.01 0.04 NO _x 5.44 23.79 12.60 431			CO	0.93	0.05	
ES 0.05 (5) PM 0.10 0.41 12.79 23.16 VOC 36.50 (5) SO ₂ 0.01 0.04 NO _x 5.44 23.79 12.60 431						
PM	428	Thermal Oxidizer			0.01	0.02
VOC 36.50 (5) SO ₂ 0.01 0.04 NO _x 5.44 23.79 CO 2.88 12.60 431 Fuel Oil Tank VOC 0.03 0.04 432 Spent Solvent Tank VOC 0.06 0.12 439 Chlorine Room IC 0.02 0.01 441 Site Utilities Fuel Oil Tank Fuel Oil 0.83 0.04 442 Site Utilities Emergency PM 0.01 0.01 Generator VOC 0.12 0.01 0.01 SO ₂ 0.01 0.01 0.01 SO ₂ 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.0						
VOC 36.50 (5) 0.01 0.04 NOx 5.44 23.79 23.79 CO 2.88 12.60 431 Fuel Oil Tank VOC 0.03 0.04 432 Spent Solvent Tank VOC 0.06 0.12 439 Chlorine Room IC 0.02 0.01 441 Site Utilities Fuel Oil Tank Fuel Oil 0.83 0.04 442 Site Utilities Emergency Generator PM 0.01 0.01 SO2 0.01 0.01 0.01 NOx 0.77 0.04 CO 3.25 0.17			РМ			00.10
SO ₂ 0.01 23.79 23.79 12.60 2.88 12.60 2.88 12.60 2.88 23.79 12.60 2.88 23.79 12.60 2.88 23.79 12.60 2.88 23.79 12.60 2.88 23.79 12.60 2.88 23.79			\/OC		12.79	23.16
NOx CO 5.44 CO 23.79 12.60 431 Fuel Oil Tank VOC 0.03 0.04 432 Spent Solvent Tank VOC 0.06 0.12 439 Chlorine Room IC 0.02 0.01 441 Site Utilities Fuel Oil Tank Fuel Oil 0.83 0.04 442 Site Utilities Emergency Generator PM VOC 0.12 0.01 0.01 0.01 0.01 0.01 0.01 0.01			VUC	• /	0.01	0.04
CO 2.88 12.60 431 Fuel Oil Tank VOC 0.03 0.04 432 Spent Solvent Tank VOC 0.06 0.12 439 Chlorine Room IC 0.02 0.01 441 Site Utilities Fuel Oil Tank Fuel Oil 0.83 0.04 442 Site Utilities Emergency PM 0.01 0.01 Generator VOC 0.12 0.01 NOx 0.77 0.04 CO 3.25 0.17 448 Diesel Fire Pump PM 0.84 0.03			NO.			0.04
431 Fuel Oil Tank VOC 0.03 0.04 432 Spent Solvent Tank VOC 0.06 0.12 439 Chlorine Room IC 0.02 0.01 441 Site Utilities Fuel Oil Tank Fuel Oil 0.83 0.04 442 Site Utilities Emergency PM 0.01 0.01 Generator PM 0.01 0.01 SO2 0.01 NOx 0.77 CO 3.25 0.17 448 Diesel Fire Pump PM 0.84 0.03						
432 Spent Solvent Tank VOC 0.06 0.12 439 Chlorine Room IC 0.02 0.01 441 Site Utilities Fuel Oil Tank Fuel Oil 0.83 0.04 442 Site Utilities Emergency PM 0.01 0.01 Generator VOC 0.12 0.01 SO ₂ 0.01 0.01 NO _x 0.77 CO 3.25 0.17 448 Diesel Fire Pump PM 0.84 0.03						
439 Chlorine Room IC 0.02 0.01 441 Site Utilities Fuel Oil Tank Fuel Oil 0.83 0.04 442 Site Utilities Emergency PM 0.01 0.01 Generator VOC 0.12 0.01 SO ₂ 0.01 0.01 NO _x 0.77 CO 3.25 0.17 448 Diesel Fire Pump PM 0.84 0.03	431	Fuel Oil Tank		VOC	0.03	0.04
441 Site Utilities Fuel Oil Tank Fuel Oil 0.83 0.04 442 Site Utilities Emergency PM 0.01 0.01 Generator VOC 0.12 0.01 SO ₂ 0.01 0.01 NO _x 0.77 CO 3.25 0.17 448 Diesel Fire Pump PM 0.84 0.03	432	Spent Solvent Tank		VOC	0.06	0.12
442 Site Utilities Emergency PM	439	Chlorine Room		IC	0.02	0.01
442 Site Utilities Emergency PM		o: = 10:		= 10"		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	441	Site Utilities Fuel Oi	IIank	Fuel Oil	0.83	0.04
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	442	Site Utilities Emerge	ency	PM	0.01	0.01
NO _x 0.77 0.04 0.17 CO 3.25 0.17 448 Diesel Fire Pump PM 0.84 0.03				VOC	0.12	0.01
CO 3.25 0.17 448 Diesel Fire Pump PM 0.84 0.03				SO ₂	0.01	0.01
448 Diesel Fire Pump PM 0.84 0.03			NO_x	0.77	0.04	
·			CO	3.25	0.17	
·	448	Diesel Fire Pump		PM	0.84	0.03
		•	VOC			

Emission	Source	Air	Contaminant	Emissio	n Rates *
Point No. (1)	Name (2)		Name (3)	lb/hr	TPY
<u>(4)</u>	* *		•		
			SO ₂	0.78	0.03
		NO_x	11.73	0.37	
		CO	2.54	0.08	
451	B1 Emergency Gene	rator	PM	2.66	0.30
	o ,		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		IC	3.10	12.54
		ES	5.31	22.57	
		VOC	0.49	2.12	
		SO_2	0.11	0.40	
453	Emergency Generato	ors	PM	1.04	0.06
		VOC	1.19	0.06	
		SO_2	0.97	0.05	
		NO_x	13.89	0.70	
		CO	3.09	0.16	
All	All Sources		Single HAP		<10.00
		Comb	ined HAP		<25.00

- (1) Emission point identification either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name.
- (3) VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1 (30 TAC § 101.1)
 - ES VOC specifically excluded from the definition of VOC as defined in 30 TAC § 101.1
 - HAP hazardous air pollutant as defined in Title 40 Code of Federal Regulations Part 63, Subpart A.
 - IC non organic compounds including acids, bases, reactives, metals, and reactact gases.
 - PM particulate matter, suspended in the atmosphere, including PM_{10} .
 - PM₁₀ particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be

AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	<u>Emissior</u>	n Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
<u>(4)</u>				
			as	ssumed that
			ne	o particulate
			m	atter
			gı	reater than
			10	0 microns is
			eı	mitted.

 $NO_x\,\,$ - total oxides of nitrogen

 SO_2 - sulfur dioxide CO - carbon monoxide

(4)

Rate is for a rolling consecutive 12-month period. Rate for uncontrolled emissions during routine/preventative maintenance. (5)

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