

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 9092

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. 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 (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
T-121/2121	Tank T-121/2121 Seal Pot Vent	VOC	0.02	0.10
T-130	Tank T-130 Breathing Losses	VOC	0.07	0.37
Z-130	Tank T-130 Working Losses	VOC	0.37	0.01
T-140	Tank T-140 Seal Pot Vent	VOC	0.21	0.92
T-150	Tank T-150 Seal Pot Vent	VOC	0.03	0.15
T-2130	Tank T-2130 Seal Pot Vent	VOC	0.01	0.02
T-125	Tank T-125 Seal Pot Vent	VOC	1.12	0.02
V-335	Tank V-335	VOC	1.12	0.02
V-362	Tank V-362	VOC	1.12	0.02
V-2340	Tank V-2340	VOC	1.12	0.01
V-3336	Tank V-3336	VOC	1.23	0.02
T-3107	Tank T-3107	VOC	0.50	0.09
WG-1	Waste Gas from Boilers	VOC	1.73	0.64
		NO <sub>x</sub>	30.00	13.00
Z-2781	Boiler No. 1 (7)	VOC	1.00	4.40
		NO <sub>x</sub>	2.99	13.10
		CO	3.68	16.10
		PM <sub>10</sub>	1.00	4.40
		SO <sub>2</sub>	0.06	0.30
Z-1871	Boiler No. 3	VOC	0.38	1.66
		NO <sub>x</sub>	2.21	9.67
		CO	5.79	25.38
		PM <sub>10</sub>	0.52	2.30
		SO <sub>2</sub>	0.04	0.18

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
Z-3781	Boiler No. 4	VOC	0.55	2.39
		NO <sub>x</sub>	3.18	13.93
		CO	8.35	36.56
		PM <sub>10</sub>	0.76	3.31
		SO <sub>2</sub>	0.06	0.26
Z-780S	Boiler No. 5	VOC	0.36	1.60
		NO <sub>x</sub>	2.67	11.70
		CO	9.70	42.50
		PM <sub>10</sub>	1.21	5.30
		SO <sub>2</sub>	1.60	1.10
Bubble	Two Boilers (Boiler Nos. 3 and 4)	VOC		4.10
		NO <sub>x</sub>		23.60
		CO		62.00
		PM <sub>10</sub>		5.60
		SO <sub>2</sub>		0.50
Z-1608	Thermal Oxidizer (B-2, B-3)	NO <sub>x</sub>	135.80	11.08
		CO	3.74	5.91
		VOC	2.80	5.50
		PM <sub>10</sub>	0.34	0.53
		SO <sub>2</sub>	0.03	0.05
Z-1607S	Regenerative Thermal Oxidizer (B-4, B-5)	NO <sub>x</sub>	4.11	16.20
		CO	4.12	16.22
		VOC	3.44	2.41
		PM <sub>10</sub>	0.03	0.11
WW-1A	Z-670 Wastewater	VOC	0.53	1.09
WW-1B	Z-3672 Wastewater	VOC	0.53	1.09
WW-1C	Line No. 3 Wastewater	VOC	0.53	1.09
WW-1D	Line Nos. 1 and 2 Wastewater	VOC	0.53	1.09
UV-390	RX Vent Valves	VOC	0.01	0.01
F-1	Line Nos. 1 and 2 Fugitives (5)	VOC	0.17	0.76

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
F-2B	Line No. 3 Polymerization Area Fugitives (5)	VOC	0.35	0.64
F-3A	Area A Tank Farm Fugitives (5)	VOC	0.04	0.17
F-3B	Area B Tank Farm Fugitives (5)	VOC	0.04	0.17
F-3C	Area C Tank Farm Fugitives (5)	VOC	0.04	0.17
F-4	Boiler Area Fugitives (5)	VOC	0.04	0.17
F-5	TO & RTO Area Fugitives	VOC	0.03	0.11
L-4014-A1	Test Oven No. 3	VOC	0.01	0.01
L-4015-A1	Test Oven No. 4	VOC	0.01	0.01
Z-652	Line No. 1 After treatment Stack	VOC	1.90	(6)
		PM <sub>10</sub>	0.02	(6)
Z-655	Line No.1 Dryer	VOC	10.85	(6)
		PM <sub>10</sub>	12.32	(6)
Z-2655	Line No. 2 Dryer	VOC	8.37	(6)
		PM <sub>10</sub>	3.69	(6)
Z-2652	Line No. 2 After treatment Stack	VOC	0.01	(6)
		PM <sub>10</sub>	0.01	(6)
Z-3655	Line 3 Fluid Bed Dryer	VOC	6.60	(6)
		PM <sub>10</sub>	1.51	(6)
Z-3654	Line No. 3 Dryer	VOC	19.8	(6)
		PM <sub>10</sub>	2.7	(6)
Z-Bubble	Line 1, 2, 3 Vents	VOC		93.15
		PM		58.18
Z-656	Line No. 1 Bagging	PM <sub>10</sub>	0.19	0.83
Z-2656	Line No. 2 Bagging	PM <sub>10</sub>	0.06	0.25
Z-3656	Line No. 3 Bagging	PM <sub>10</sub>	0.29	1.28
F-3603	Dust Collectors	PM <sub>10</sub>	0.29	1.28
Z-MAINT	RTO Maintenance Emissions	VOC	165.30	0.66
V-172	Sulfuric Acid Tank (37%) (8)	H <sub>2</sub> SO <sub>4</sub>	0.001	0.003
V-173	Sulfuric Acid Tank (10%) (8)	H <sub>2</sub> SO <sub>4</sub>	0.001	0.003

Emission Sources - Maximum Allowable Emission Rates

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) Exempt Solvent - Those 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 § 101.1
  - NO<sub>x</sub> - total oxides of nitrogen
  - SO<sub>2</sub> - sulfur dioxide
  - PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
  - CO - carbon monoxide
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) Annual emission rates for these EPNs are listed under EPN Z-Bubble.
- (7) To be taken out of service no later than 30 days after verification of emissions from Boiler 5 (EPN Z-780S) in accordance with Special Condition 33.
- (8) Emissions for these two tanks are referenced from an unregistered Permit by Rule.

Date: December 27, 2011