

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 20807

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 (6)	
			lbs/hour	TPY (4)
1A	Incinerator Stack	VOC	2.63	6.64
		NO <sub>x</sub>	5.03	20.71
		SO <sub>2</sub>	24.01	85.33
		PM	2.78	9.29
		PM <sub>10</sub>	2.78	9.29
		PM <sub>2.5</sub>	2.63	8.83
		CO	21.57	79.00
		C <sub>6</sub> H <sub>6</sub>	0.14	0.50
		C <sub>6</sub> H <sub>5</sub> C <sub>2</sub> H <sub>5</sub>	0.28	0.98
		HAPs	0.06	0.28
		HCl	0.24	0.84
3	Boiler Stack	VOC	0.04	0.16
		NO <sub>x</sub>	0.68	3.00
		SO <sub>2</sub>	<0.01	<0.01
		PM	0.05	0.23
		PM <sub>10</sub>	0.05	0.23
		PM <sub>2.5</sub>	0.05	0.23
		CO	0.57	2.51
		HAPs	0.01	0.06

## Emission Sources - Maximum Allowable Emission Rates

8	Tank 5 Heater Stack*	VOC	<0.01	0.02
		NO <sub>x</sub>	0.08	0.34
		SO <sub>2</sub>	<0.01	<0.01
		PM	0.01	0.03
		PM <sub>10</sub>	0.01	0.03
		PM <sub>2.5</sub>	0.01	0.03
		CO	0.07	0.29
		HAPs	<0.01	0.01
10	Tank 100 Heater Stack*	VOC	0.01	0.04
		NO <sub>x</sub>	0.15	0.64
		SO <sub>2</sub>	<0.01	<0.01
		PM	0.01	0.05
		PM <sub>10</sub>	0.01	0.05
		PM <sub>2.5</sub>	0.01	0.05
		CO	0.12	0.54
		HAPs	<0.01	0.01
12	Tank 202 Heater Stack*	VOC	0.01	0.04
		NO <sub>x</sub>	0.15	0.64
		SO <sub>2</sub>	<0.01	<0.01
		PM	0.01	0.05
		PM <sub>10</sub>	0.01	0.05
		PM <sub>2.5</sub>	0.01	0.05
		CO	0.12	0.54
		HAPs	<0.01	0.01
29	Loading Rack Fugitives** (5)	VOC	0.58	0.75

## Emission Sources - Maximum Allowable Emission Rates

		PM	0.16	0.21
		PM <sub>10</sub>	0.16	0.21
		PM <sub>2.5</sub>	0.15	0.20
		CO	<0.01	<0.01
30	Loading Rack Fugitives** (5)	VOC	0.58	0.75
		PM	0.16	0.21
		PM <sub>10</sub>	0.16	0.21
		PM <sub>2.5</sub>	0.15	0.20
		CO	<0.01	<0.01
31	BD Oil Loading (5)	VOC	0.13	0.56
33	Asphalt Solvent Cold Cleaner (5)	VOC	0.12	0.50
63	Tank 401A Heater Stack*	VOC	0.01	0.04
		NO <sub>x</sub>	0.15	0.64
		SO <sub>2</sub>	<0.01	<0.01
		PM	0.01	0.05
		PM <sub>10</sub>	0.01	0.05
		PM <sub>2.5</sub>	0.01	0.05
		CO	0.12	0.54
		HAPs	<0.01	0.01
64	Tank 401B Heater Stack*	VOC	0.01	0.04
		NO <sub>x</sub>	0.15	0.64
		SO <sub>2</sub>	<0.01	<0.01
		PM	0.01	0.05
		PM <sub>10</sub>	0.01	0.05
		PM <sub>2.5</sub>	0.01	0.05

## Emission Sources - Maximum Allowable Emission Rates

		CO	0.12	0.54
		HAPs	<0.01	0.01
65	Tank 402A Heater Stack*	VOC	0.01	0.04
		NO <sub>x</sub>	0.15	0.64
		SO <sub>2</sub>	<0.01	<0.01
		PM	0.01	0.05
		PM <sub>10</sub>	0.01	0.05
		PM <sub>2.5</sub>	0.01	0.05
		CO	0.12	0.54
		HAPs	<0.01	0.01
66	Tank 402B Heater Stack*	VOC	0.01	0.04
		NO <sub>x</sub>	0.15	0.64
		SO <sub>2</sub>	<0.01	<0.01
		PM	0.01	0.05
		PM <sub>10</sub>	0.01	0.05
		PM <sub>2.5</sub>	0.01	0.05
		CO	0.12	0.54
		HAPs	<0.01	0.01
69	Loading Rack Fugitives** (5)	VOC	0.13	0.06
		PM	0.04	0.02
		PM <sub>10</sub>	0.04	0.02
		PM <sub>2.5</sub>	0.03	0.02
		CO	0.01	<0.01
70	Thermal Liquid Heater Stack	VOC	0.04	0.19

Emission Sources - Maximum Allowable Emission Rates

		NO <sub>x</sub>	0.39	1.72
		SO <sub>2</sub>	0.01	0.02
		PM	0.06	0.26
		PM <sub>10</sub>	0.06	0.26
		PM <sub>2.5</sub>	0.06	0.26
		CO	0.66	2.89
VCU#	Vapor Combustor Stack	VOC	0.67	0.93
		NO <sub>x</sub>	0.40	1.76
		SO <sub>2</sub>	<0.01	0.01
		PM	0.21	0.37
		PM <sub>10</sub>	0.21	0.37
		PM <sub>2.5</sub>	0.20	0.35
		CO	0.35	1.49
MTC-VCU	Vapor Combustor - MSS	VOC	0.86	<0.01
		PM	0.24	<0.01
		PM <sub>10</sub>	0.24	<0.01
		PM <sub>2.5</sub>	0.23	<0.01
		CO	0.08	<0.01

- (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) 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 - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
- PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
- PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
- CO - carbon monoxide
- C<sub>6</sub>H<sub>6</sub> - benzene
- C<sub>6</sub>H<sub>5</sub>C<sub>2</sub>H<sub>5</sub> - ethyl benzene

Emission Sources - Maximum Allowable Emission Rates

HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C

HCl - hydrochloric acid

(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) Planned startup and shutdown emissions are included, as well as planned maintenance activities identified as part of permit amendment issued on July 3, 2013.

\* HAP emissions are included in the PM and VOC allowable emission rates, and the speciated values are reflected on the Table 1(a) submitted with the 2010 permit amendment application. When a HAP compound hourly emission rate exceeded 0.04 pound per hour, the compound and its emission rate were listed on the maximum allowable emission rates table; however, the HAP compound emissions are also included in the PM and VOC emission rates.

\*\* Emission rates are the sum of the emissions for all the listed emission points.

# Used only when the incinerator is not running to control emissions from loading and tanks.

Date: July 3, 2013