

# 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	2.99	8.89
		NO <sub>x</sub>	5.03	20.71
		SO <sub>2</sub>	24.01	85.33
		PM	2.88	9.93
		PM <sub>10</sub>	2.88	9.93
		PM <sub>2.5</sub>	2.73	9.44
		CO	21.64	79.31
		C <sub>6</sub> H <sub>6</sub>	0.09	0.31
		C <sub>6</sub> H <sub>5</sub> C <sub>2</sub> H <sub>5</sub>	0.17	0.62
		HAPs (Total)	0.48	1.74
		HCl	0.15	0.53
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 (Total)	0.01	0.06
8	Asphalt 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

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		PM <sub>2.5</sub>	0.01	0.03
		CO	0.07	0.29
		HAPs	<0.01	0.01
10	Asphalt 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	Asphalt 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	0.99	1.29
		PM	0.28	0.36
		PM <sub>10</sub>	0.28	0.36
		PM <sub>2.5</sub>	0.26	0.34
		CO	0.01	0.01
30	Loading Rack Fugitives** (5)	VOC	0.09	0.04
		PM	0.03	0.01
		PM <sub>10</sub>	0.03	0.01
		PM <sub>2.5</sub>	0.02	0.01
		CO	0.01	<0.01

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31	BD Oil Loading (5)	VOC	0.13	0.56
33	Asphalt Solvent Cold Cleaner (5)	VOC	0.12	0.50
63	Asphalt 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	Asphalt 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
		CO	0.12	0.54
		HAPs	<0.01	0.01
65	Asphalt 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	Asphalt Tank 402B Heater Stack*	VOC	0.01	0.04
		NO <sub>x</sub>	0.15	0.64

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		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
70	Thermal Liquid Heater Stack	VOC	0.04	0.19
		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
30-SC2	Unoxidized Loading Rack Fugitives	VOC	1.81	0.87
		PM	0.51	0.25
		PM <sub>10</sub>	0.51	0.25
		PM <sub>2.5</sub>	0.47	0.23
		CO	0.15	0.06
ET201	Tank 201 (Raw Material)	VOC	0.22	0.92
		PM	0.06	0.26
		PM <sub>10</sub>	0.06	0.26
		PM <sub>2.5</sub>	0.06	0.25
		CO	0.03	0.11
ET202	Tank 202 (Raw Material)	VOC	0.22	0.92
		PM	0.06	0.26
		PM <sub>10</sub>	0.06	0.26
		PM <sub>2.5</sub>	0.06	0.25
		CO	0.03	0.11
ET401	Tank 401 (Raw	VOC	1.09	4.47

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		PM	0.31	1.26
		PM <sub>10</sub>	0.31	1.26
		PM <sub>2.5</sub>	0.29	1.19
		CO	0.14	0.56
ET402	Tank 402 (Raw Material)	VOC	1.09	4.47
		PM	0.31	1.26
		PM <sub>10</sub>	0.31	1.26
		PM <sub>2.5</sub>	0.29	1.19
		CO	0.14	0.56
ET403	Tank 403 (Raw Material)	VOC	0.41	1.51
		PM	0.12	0.43
		PM <sub>10</sub>	0.12	0.43
		PM <sub>2.5</sub>	0.11	0.40
		CO	0.05	0.19
ET404	Tank 404 (Raw Material)	VOC	0.41	1.51
		PM	0.12	0.43
		PM <sub>10</sub>	0.12	0.43
		PM <sub>2.5</sub>	0.11	0.40
		CO	0.05	0.19

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ET405	Tank 405 (Raw Material)	VOC	0.41	1.51
		PM	0.12	0.43
		PM <sub>10</sub>	0.12	0.43
		PM <sub>2.5</sub>	0.11	0.40
		CO	0.05	0.19
ET406	Tank 406 (Raw Material)	VOC	0.41	1.51
		PM	0.12	0.43
		PM <sub>10</sub>	0.12	0.43
		PM <sub>2.5</sub>	0.11	0.40
		CO	0.05	0.19

- (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 - 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  
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

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- (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.

Date: October 13, 2016