

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 9203

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)
ST-11	Phase II (TK) Stack	VOC	0.22	0.98
		NO <sub>x</sub>	7.83	4.05
		SO <sub>2</sub>	0.02	0.10
		PM	1.04	4.57
		CO	20.25	66.78
		NH <sub>3</sub>	18.27	42.16
ST-13 (6)	Phase I (VK) Stack	VOC	0.02	0.09
		NO <sub>x</sub>	7.4	32.60
		SO <sub>2</sub>	1.4	6.00
		PM <sub>10</sub>	0.98	4.29
		CO	20.58	90.14
		H <sub>2</sub> SO <sub>4</sub>	1.57	6.88
ST-14	Phase II (TK) Stack (Baghouse)	VOC	0.03	0.13
		NO <sub>x</sub>	0.59	2.58
		SO <sub>2</sub>	0.01	0.02
		PM	1.30	5.70
		CO	0.49	2.15
ST-15A	Silo S-1501	PM	0.22	0.44
ST-15B	Silo S-1502	PM	0.22	0.44
ST-15C	Silo S-1503	PM	0.22	0.44

## Emission Sources - Maximum Allowable Emission Rates

ST-18A	Transfer Filter Vent	PM <sub>10</sub>	0.04	0.18
ST-18B	Grinder Vent	PM <sub>10</sub>	0.01	0.04
ST-19 (7)	VK Stack	NO <sub>x</sub>	1.12	4.91
		CO	11.66	51.07
		VOC	0.05	0.22
		PM	0.87	3.81
		PM <sub>10</sub>	0.87	3.81
		PM <sub>2.5</sub>	0.87	3.81
		SO <sub>2</sub>	1.02	4.47
		H <sub>2</sub> SO <sub>4</sub>	1.56	6.83
ST-20 (7)	VK Dust Collection System	PM	1.11	0.90
		PM <sub>10</sub>	1.11	0.90
		PM <sub>2.5</sub>	1.11	0.90
C-T-1	Fugitives (5)	NH <sub>3</sub>	0.01	0.02
		VOC	0.48	2.11
C-T-2	Fugitives (5)	NH <sub>3</sub>	0.01	0.01
C-T-3	H <sub>2</sub> O <sub>2</sub> Fugitives (5)	H <sub>2</sub> O <sub>2</sub>	0.01	0.04
TK-VKFUG (8)	VK and TK Production Building Fugitives (5)	PM	1.52	6.66
		PM <sub>10</sub>	1.52	6.66
		PM <sub>2.5</sub>	1.52	6.66
TKFUG (8)	TK Production Building Fugitives (5)	PM	1.11	4.86
		PM <sub>10</sub>	1.11	4.86
		PM <sub>2.5</sub>	1.11	4.86
VKFUG (7)	VK Production Building Fugitives (5)	PM	0.44	1.93
		PM <sub>10</sub>	0.44	1.93

Emission Sources - Maximum Allowable Emission Rates

		PM <sub>2.5</sub>	0.44	1.93
T-1102	Storage Tank Vent	VOC	0.06	0.01
T-1107	Storage Tank Vent	NH <sub>3</sub>	0.65	0.12
T-1113	Storage Tank Vent	NH <sub>3</sub>	0.15	0.03
T-1114	Storage Tank Vent	NH <sub>3</sub>	0.14	0.03
T-1115	H <sub>2</sub> O <sub>2</sub> Storage Tank	H <sub>2</sub> O <sub>2</sub>	0.03	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
- NH<sub>3</sub> - ammonia
- H<sub>2</sub>SO<sub>4</sub> - sulfuric acid
- H<sub>2</sub>O<sub>2</sub> - hydrogen peroxide
- (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) Will be taken out of service once the VK Production is established in the new VK Building.
- (7) Will begin once the VK Production is established in the new VK Building.
- (8) TK-VKFUG will be renamed TKFUG once the VK Production is established in the new VK Building. At that time, the maximum allowable emissions will be as listed under TKFUG.

Date: November 16, 2012