

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	0.78	3.36
		NO _x	10.32	18.84
		SO ₂	0.02	0.12
		PM	0.77	3.40
		PM ₁₀	0.77	3.40
		PM _{2.5}	0.77	3.40
		CO	12.68	24.20
		NH ₃	10.60	25.53
ST-14	Phase II (TK) Stack (Baghouse)	VOC	0.05	0.22
		NO _x	0.36	1.58
		SO ₂	0.01	0.03
		PM	0.93	3.51
		PM ₁₀	0.93	3.51
		PM _{2.5}	0.93	3.51
		CO	0.74	3.24
ST-18B	Grinder Blower Vent	PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04

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ST-19	VK Stack	NO _x	1.12	4.91
		CO	11.66	51.07
		VOC	0.05	0.22
		PM	0.87	3.81
		PM ₁₀	0.87	3.81
		PM _{2.5}	0.87	3.81
		SO ₂	1.02	4.47
		H ₂ SO ₄	1.56	6.83
ST-20	VK Dust Collection System	PM	1.11	0.90
		PM ₁₀	1.11	0.90
		PM _{2.5}	1.11	0.90
ST-23	Silo S-2402	PM	0.09	0.23
		PM ₁₀	0.09	0.23
		PM _{2.5}	0.09	0.23
ST-24	TopFrax Catalytic Filter Operations (Slurry Application and Microwave Oven)	NH ₃	0.24	1.06
		NO _x	0.04	0.15
		VOC	0.18	0.8
		SO ₂	0.10	0.44
C-T-1	Fugitives, East Tank Farm (5)	NH ₃	0.01	0.04
		VOC	0.34	1.50
C-T-2	Fugitives, West Tank Farm (5)	NH ₃	0.02	0.09
C-T-3	H ₂ O ₂ Fugitives (5)	H ₂ O ₂	0.01	0.04
TKFUG	TK Production Building Fugitives (5)	VOC	0.04	0.19
		NH ₃	0.58	1.28
		PM	1.18	5.19
		PM ₁₀	1.18	5.19
		PM _{2.5}	1.18	5.19
VKFUG	VK Production Building Fugitives (5)	PM	0.44	1.93
		PM ₁₀	0.44	1.93

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		PM _{2.5}	0.44	1.93
T-1115	H ₂ O ₂ Storage Tank	H ₂ O ₂	0.03	0.01
T-1116	Lactic Acid Storage Tank	VOC	0.04	0.01
ST-28	New TK DeNOx Unit	NO _x	7.65	1.52
		CO	2.10	2.31
		VOC	5.57	6.23
		PM	0.58	2.43
		PM ₁₀	0.58	2.43
		PM _{2.5}	0.58	2.43
		SO ₂	0.03	0.14
		NH ₃	8.12	10.09
		HNO ₃	0.71	<0.01
		H ₂ O ₂	<0.01	<0.01
		H ₃ PO ₄	0.32	<0.01
ST-29	New TK Dust Filtration	PM	0.45	1.41
		PM ₁₀	0.45	1.41
		PM _{2.5}	0.45	1.41
		NH ₃	0.45	0.97
C-T-4	New TK Tank Farm Fugitives (5)	VOC	0.02	0.07
		NH ₃	<0.01	<0.01
		HNO ₃	0.07	0.31
		H ₂ O ₂	<0.01	0.01
		H ₃ PO ₄	0.02	0.07
CTOWER5	New TK Cooling Tower	PM	0.02	0.09
		PM ₁₀	0.01	0.06
		PM _{2.5}	<0.01	<0.01
		Cl ₂	<0.01	<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_x - total oxides of nitrogen
SO₂ - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented

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| PM ₁₀ | - total particulate matter equal to or less than 10 microns in diameter, including PM _{2.5} , as represented |
| PM _{2.5} | - particulate matter equal to or less than 2.5 microns in diameter |
| CO | - carbon monoxide |
| NH ₃ | - ammonia |
| H ₂ SO ₄ | - sulfuric acid |
| H ₂ O ₂ | - hydrogen peroxide |
| HNO ₃ | - nitric acid |
| H ₃ PO ₄ | - phosphoric acid |
| Cl ₂ | - chlorine |
- (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.

Date: March 22, 2022