

Emission Sources - Maximum Allowable Emission Rates

Permit Number 20688

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)
1	Flash Calciner Bag Filter Vent	PM	0.06	0.26
		PM ₁₀	0.06	0.26
		PM _{2.5}	0.06	0.26
		NO _x	0.10	0.45
		SO ₂	<0.01	<0.01
		CO	0.09	0.38
		VOC	0.01	0.02
5A	Kiln No. 1 Stacks (3 stacks)	PM	0.06	0.28
		PM ₁₀	0.06	0.28
		PM _{2.5}	0.06	0.28
		NO _x	0.83	3.65
		SO ₂	0.01	0.02
		CO	0.70	3.07
		VOC	0.05	0.20
5B	Kiln No. 2 Stacks (3 stacks)	PM	0.06	0.28
		PM ₁₀	0.06	0.28
		PM _{2.5}	0.06	0.28
		NO _x	0.83	3.65
		SO ₂	0.01	0.02
		CO	0.70	3.07
		VOC	0.05	0.20
5C	Kiln No. 3 Stack	PM	0.05	0.23

Emission Sources - Maximum Allowable Emission Rates

		PM ₁₀	0.05	0.23
		PM _{2.5}	0.05	0.23
		NO _x	0.69	3.01
		SO ₂	<0.01	0.02
		CO	0.58	2.52
		VOC	0.04	0.17
5C-1	Kiln No. 3 Cooling Air Stack	PM	0.26	1.13
		PM ₁₀	0.26	1.13
		PM _{2.5}	0.26	1.13
5E	Kiln No. 5 (direct vent)	PM	0.09	0.39
		PM ₁₀	0.09	0.39
		PM _{2.5}	0.09	0.39
5E	Kiln No. 5 (indirect vent)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
5F	Test Kiln Stack	PM	0.01	0.02
		PM ₁₀	0.01	0.02
		PM _{2.5}	0.01	0.02
		NO _x	0.06	0.26
		SO ₂	0.01	0.01
		CO	0.05	0.22
		VOC	0.01	0.01
16A	Boiler No. 1 Stack	PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04
		NO _x	0.13	0.58
		SO ₂	<0.01	<0.01
		CO	0.11	0.49
		VOC	0.01	0.03

Emission Sources - Maximum Allowable Emission Rates

16B	Boiler No. 2 Stack	PM	0.02	0.07
		PM ₁₀	0.02	0.07
		PM _{2.5}	0.02	0.07
		NO _x	0.21	0.90
		SO ₂	0.01	0.01
		CO	0.17	0.76
		VOC	0.01	0.05
17A	Hot Oil Heater No. 1 Stack	PM	0.01	0.06
		PM ₁₀	0.01	0.06
		PM _{2.5}	0.01	0.06
		NO _x	0.18	0.77
		SO ₂	<0.01	<0.01
		CO	0.15	0.65
		VOC	0.01	0.04
17B	Hot Oil Heater No. 2 Stack	PM	0.02	0.07
		PM ₁₀	0.02	0.07
		PM _{2.5}	0.02	0.07
		NO _x	0.20	0.86
		SO ₂	<0.01	<0.01
		CO	0.16	0.72
		VOC	0.01	0.05
18	Process Dryer Bag Filter Vent	PM	0.03	0.15
		PM ₁₀	0.03	0.15
		PM _{2.5}	0.03	0.15
19	RH Dryer No. 1 Stack	PM	0.01	0.02
		PM ₁₀	0.01	0.02
		PM _{2.5}	0.01	0.02
		NO _x	0.07	0.32
		SO ₂	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

		CO	0.06	0.27
		VOC	<0.01	0.02
20	Tornesh Dryer Baghouse Stack	PM	0.15	0.68
		PM ₁₀	0.15	0.68
		PM _{2.5}	0.15	0.68
		NO _x	0.12	0.52
		SO ₂	<0.01	<0.01
		CO	0.10	0.43
		VOC	0.01	0.03
21	Micronizer Bag Filter 1 Vent	PM	0.03	0.15
		PM ₁₀	0.03	0.15
		PM _{2.5}	0.03	0.15
FUG1G	Vacuum System No. 1 Bag Filter (5)	PM	0.03	0.05
		PM ₁₀	0.03	0.05
		PM _{2.5}	0.03	0.05
23	Micronizer Bag Filter 2 Vent	PM	0.01	0.06
		PM ₁₀	0.01	0.06
		PM _{2.5}	0.01	0.06
FUG1A	RH Dust Collector (5)	PM	0.02	0.07
		PM ₁₀	0.02	0.07
		PM _{2.5}	0.02	0.07
FUG1B	BM Dust Collector (5)	PM	0.02	0.08
		PM ₁₀	0.02	0.08
		PM _{2.5}	0.02	0.08
FUG1C	Process Fugitives (5)	PM	0.50	0.20
		PM ₁₀	0.50	0.20
		PM _{2.5}	0.50	0.20
FUG1D	RH Scale Transfer Dust Collector (5)	PM	<0.01	0.01
		PM ₁₀	<0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

		PM _{2.5}	<0.01	0.01
FUG1E	Screen Room Dust Collector (5)	PM	<0.01	0.01
		PM ₁₀	<0.01	0.01
		PM _{2.5}	<0.01	0.01
FUG1F	Kiln Room Dust Collector (5)	PM	<0.01	0.01
		PM ₁₀	<0.01	0.01
		PM _{2.5}	<0.01	0.01
FUG2	Kiln No. 3 Fugitives (5)	PM	0.19	0.26
		PM ₁₀	0.19	0.26
		PM _{2.5}	0.19	0.26
FUG3A	Alumina Slurry Dust Collector (5)	PM	0.03	0.07
		PM ₁₀	0.03	0.07
		PM _{2.5}	0.03	0.07
FUG3B	Vacuum System No. 2 Bag Filter (5)	PM	0.03	0.05
		PM ₁₀	0.03	0.05
		PM _{2.5}	0.03	0.05
FUG4	Micronizer Bag Filter 3 (5)	PM	0.03	0.15
		PM ₁₀	0.03	0.15
		PM _{2.5}	0.03	0.15

- (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
- PM₁₀ - 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
- (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.

Permit Number 20688

Page

Emission Sources - Maximum Allowable Emission Rates

(6) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit.

Date: December 21, 2015