Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 4335A and PSDTX31M1

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 (4)	
			lbs/hour	TPY (5)
LK-1	Kiln No. 1 Scrubber Stack	PM	27.92	122.00
		PM_{10}	27.92	122.00
		$PM_{2.5}$	10.65	46.51
		VOC	0.29	1.28
		NO_x	100.00	438.00
		SO_2	58.30	255.00
		CO	25.00	109.50
		H_2SO_4	0.64	2.80
		HCl	0.81	3.50
		Dioxins/furans	2.86E-09	1.25E-08
		Pb	5.58E-04	2.44E-03
		Hg	1.88E-04	8.23E-04
		Ni	1.26E-02	5.49E-02
		V_2O_5	3.35E-02	1.46E-01
LK-2	Kiln No. 2 Stack	PM	8.77	38.42
		PM_{10}	8.77	38.42
		$PM_{2.5}$	4.31	18.86
		VOC	0.58	2.56
		NO_x	125.00	547.5
		SO_2 (6)	320.00	1100.00
		SO_2	450.00	
		CO	50.00	219.00
		H_2SO_4	0.87	3.83
		HCl	10.00	9.66
		Dioxins/furans	5.73E-09	2.51E-08

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		Pb	5.88E-04	2.58E-03
		Hg	3.75E-04	1.64E-03
		V_2O_5	0.1142	0.5002
		Cr	0.0010	0.0044
		NiO	0.0127	0.0556
	Kilns No. 1 and 2 Annual Cap	HCl	---	9.66
702	Hydrator Baghouse Stack	PM	0.56	2.45
		PM_{10}	0.56	2.45
		$PM_{2.5}$	0.29	1.27
		VOC	0.01	0.05
		NO_x	0.22	0.95
		SO_2	0.03	0.11
		CO	0.18	0.80
DC-8	1617 Crusher and Conveyor Baghouse Stack	PM	0.21	0.94
		PM_{10}	0.21	0.94
		$PM_{2.5}$	0.11	0.46
DC-9	1627 Screening and Conveying Baghouse Stack	PM	0.21	0.94
		PM_{10}	0.21	0.94
		$PM_{2.5}$	0.11	0.46
DC-10	Quicklime Loadout Baghouse Stack	PM	0.60	1.75
		PM_{10}	0.60	1.75
		$PM_{2.5}$	0.29	0.86
DC-11	Quicklime Silos Baghouse Stack	PM	0.13	0.57
		PM_{10}	0.13	0.57
		$PM_{2.5}$	0.06	0.28
DC-12	515 Crusher Baghouse Stack	PM	0.21	0.94
		PM_{10}	0.21	0.94
		$PM_{2.5}$	0.11	0.46
DC-13	Blending / Crusher /	PM	1.71	4.99

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		PM_{10}	1.71	4.99
		$PM_{2.5}$	0.84	2.40
DC-15	720 Hydrator Air Separator Baghouse	PM	1.30	1.30
		PM_{10}	1.30	1.30
		$PM_{2.5}$	0.64	0.64
DC-16	Hydration Silo Vent Baghouse Stack	PM	0.09	0.09
		PM_{10}	0.09	0.09
		$PM_{2.5}$	0.04	0.04
DC-17	Silo Bin Vent Baghouse Stack	PM	0.04	0.04
		PM_{10}	0.04	0.04
		$PM_{2.5}$	0.02	0.02
DC-18	Hydrated Lime Truck Loadout Baghouse Stack	PM	0.02	0.01
		PM_{10}	0.02	0.01
		$PM_{2.5}$	0.01	< 0.01
DC-21	Cycal Loadout Baghouse Stack	PM	0.09	0.22
		PM_{10}	0.09	0.22
		$PM_{2.5}$	0.04	0.11
DC-22	Cycal Loadout Baghouse Stack	PM	0.12	0.11
		PM_{10}	0.12	0.11
		$PM_{2.5}$	0.06	0.05
DC-23	Railcar Loading Baghouse Stack	PM	0.21	0.86
		PM_{10}	0.21	0.86
		$PM_{2.5}$	0.11	0.42
DC-24	Railcar Loading Baghouse Stack	PM	0.04	0.17
		PM_{10}	0.04	0.17
		$PM_{2.5}$	0.02	0.08
DC-29	Cycal Loadout baghouse Stack	PM	0.12	0.11
		PM_{10}	0.12	0.11
		$PM_{2.5}$	0.06	0.05

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DC-30	Kiln Dust Bin	PM	0.12	0.53
		PM_{10}	0.12	0.53
		$PM_{2.5}$	0.06	0.26
DC-31	Primary Truck Loadout	PM	0.19	0.83
		PM_{10}	0.19	0.83
		$PM_{2.5}$	0.09	0.41
DC-32	Secondary Truck Loadout	PM	0.19	0.83
		PM_{10}	0.19	0.83
		$PM_{2.5}$	0.09	0.41
DC-33	Hydrate Loadout Silo	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	< 0.01
DC-643	Dust Collector 643 Stack	PM	0.21	0.94
		PM_{10}	0.21	0.94
		$PM_{2.5}$	0.11	0.46
DC-646	Dust Collector 646 Stack	PM	0.21	0.94
		PM_{10}	0.21	0.94
		$PM_{2.5}$	0.11	0.46
REJSILO	Reject Stone Silo Baghouse Stack	PM	0.17	0.75
		PM_{10}	0.17	0.75
		$PM_{2.5}$	0.08	0.37
REJECT1	Reject Stone Stockpile (7)	PM	0.04	0.15
		PM_{10}	0.02	0.08
		$PM_{2.5}$	0.01	< 0.01
REJECT3	Reject Stone Stockpile (7)	PM	0.31	1.40
		PM_{10}	0.16	0.69
		$PM_{2.5}$	0.02	0.10
REJECT4	Reject Stone Stockpile (7)	PM	0.08	0.36
		PM_{10}	0.04	0.18

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		$PM_{2.5}$	0.01	0.03
STOCK1	Stone Stockpile (7)	PM	0.19	0.82
		PM_{10}	0.09	0.41
		$PM_{2.5}$	0.01	0.06
STOCK2	Stone Stockpile (7)	PM	0.12	0.53
		PM_{10}	0.06	0.26
		$PM_{2.5}$	0.01	0.04
CRUSH1	Primary Crusher (7)	PM	0.84	1.09
		PM_{10}	0.41	0.54
		$PM_{2.5}$	0.08	0.10
SCREEN1	Primary Screen (7)	PM	0.19	0.24
		PM_{10}	0.09	0.12
		$PM_{2.5}$	0.01	0.01
CRUSH2	Secondary Crusher (7)	PM	0.26	0.21
		PM_{10}	0.13	0.10
		$PM_{2.5}$	0.01	0.01
SCREEN2	Secondary Screen	PM	0.45	1.61
		PM_{10}	0.21	0.76
		$PM_{2.5}$	0.01	0.05
SCREEN3	Tertiary Screen	PM	0.45	1.61
		PM_{10}	0.21	0.76
		$PM_{2.5}$	0.01	0.05
Fug-1	Limestone Handling (7)	PM	0.17	0.33
		PM_{10}	0.07	0.15
		$PM_{2.5}$	0.02	0.04
Cyc-1	Cycal Handling (7)	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	< 0.01	< 0.01
CC-1	Coke Crusher (7)	PM	0.02	< 0.01

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		PM_{10}	0.01	< 0.01
		$PM_{2.5}$	< 0.01	< 0.01
Fug-2, Fug-3	Coal/Coke Handling (7)	PM	0.70	0.46
		PM_{10}	0.33	0.22
		$PM_{2.5}$	0.05	0.03
Fug-2A, Fug-3A	Coal/Coke Stockpile (Rail and Plant Areas) (7)	PM	0.56	2.47
		PM_{10}	0.28	1.24
		$PM_{2.5}$	0.04	0.19
RCLSLOAD	Limestone Railcar Loading (7)	PM	0.68	2.67
		PM_{10}	0.34	1.33
		$PM_{2.5}$	0.05	0.20

(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
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
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
H_2SO_4 - sulfuric acid
HCl - hydrochloric acid
Pb - lead
Hg - mercury
Ni - nickel
V_2O_5 - vanadium pentoxide
Cr - chromium
NiO - nickel oxide
(4) Planned startup and shutdown emissions are included.
(5) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(6) Compliance with the lb/hr emission rates for SO_2 is based on a 30 operating day rolling average.
(7) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: June 9, 2020