Emission Sources - Maximum Allowable Emission Rates

Permit Number 7808 and PSDTX256M3

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)
13KLN2STCK	Rotary Kiln 2 Baghouse Stack	PM	5.02	21.98
		PM_{10}	5.02	21.98
		$PM_{2.5}$	2.46	10.79
		NO_x (6)	105.00	459.90
		CO (6)	63.00	276.00
		VOC	0.83	3.61
		SO_2	53.60	234.77
		H_2SO_4	2.04	8.96
		HCl (7)	1.52	6.63
9KLN3STCK	Rotary Kiln 3 Baghouse Stack	PM	7.71	33.78
		PM_{10}	7.71	33.78
		$PM_{2.5}$	3.78	16.58
		NO_x (6)	91.00	398.58
		CO (6)	77.00	337.26
		VOC	1.10	4.82
		SO_2	71.52	313.26
		H_2SO_4	2.73	11.94
		HCl (7)	1.52	6.63
10CLSURGE	Surge Pile, Coal Storage (8)	PM	--	0.14
		PM_{10}	--	0.07
		$PM_{2.5}$	--	0.01
10COALBHFN	Coal Unload and Reclaim Dust Collector Stack	PM	0.24	1.05
		PM_{10}	0.24	1.05
		$PM_{2.5}$	0.12	0.51

Emission Sources - Maximum Allowable Emission Rates

11CLCRFN	Coal Crush and Bins Dust Collector Stack	PM	0.10	0.45
		PM_{10}	0.10	0.45
		$PM_{2.5}$	0.05	0.22
14COALYARD	Coal Handling Facility Storage (8)	PM	--	6.09
		PM_{10}	--	3.05
		$PM_{2.5}$	--	0.46
15Q2-3CNFN	Quicklime Conveyor in Kiln Dust Collector Stack	PM	0.26	1.13
		PM_{10}	0.26	1.13
		$PM_{2.5}$	0.13	0.55
16QL1-2FN	1rk and 2rk Quicklime Conveyors Dust Collector Stack	PM	0.49	2.16
		PM_{10}	0.49	2.16
		$PM_{2.5}$	0.24	1.06
17QL1-2FN	QL Convey/Elevator Dust Collector Stack	PM	0.39	1.73
		PM_{10}	0.39	1.73
		$PM_{2.5}$	0.19	0.85
18KSILOFN	K Silo Quicklime Storage Bin Vent	PM	0.20	0.88
		PM_{10}	0.20	0.88
		$PM_{2.5}$	0.10	0.43
19GSILOFN	G Silo Quicklime Storage Bin Vent	PM	0.25	1.09
		PM_{10}	0.25	1.09
		$PM_{2.5}$	0.12	0.53
19HSILOFN	H Silo Quicklime Storage Bin Vent	PM	0.11	0.50
		PM_{10}	0.11	0.50
		$PM_{2.5}$	0.05	0.25
21DOLGRDFN	Dolomite, Grind, Store, and Load Dust Collector Stack	PM	0.43	1.88
		PM_{10}	0.43	1.88
		$PM_{2.5}$	0.21	0.92
22QLHYFN	Quicklime Hydrated Feed Bin Dust Collector Stack	PM	0.24	1.03
		PM_{10}	0.24	1.03

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.12	0.50
23CORSNSTK	Corson Hydrator Dryer Stack	PM	0.03	0.13
		PM_{10}	0.03	0.13
		$PM_{2.5}$	0.03	0.13
		NO_x	0.39	1.72
		CO	0.33	1.44
		VOC	0.02	0.1
		SO_2	0.06	0.25
23CORSNSTK	Corson Hydrator Dust Collector Stack	PM	0.32	1.40
		PM_{10}	0.32	1.40
		$PM_{2.5}$	0.32	1.40
24HYSCBR	No. 2 HI-CAL Hydrator Vent	PM	1.20	5.30
		PM_{10}	0.66	2.90
		$PM_{2.5}$	0.324	1.43
25HYSCBR	No. 1 HI-CAL Hydrator Vent	PM	1.20	5.30
		PM_{10}	0.66	2.90
		$PM_{2.5}$	0.324	1.43
26HCCONFN	Conveyor HI-CAL Hydrate Pneumatic Dust Collector Stack	PM	0.20	0.88
		PM_{10}	0.20	0.88
		$PM_{2.5}$	0.10	0.43
27CMNTFN	Cement Bin, Mixing Area Dust Collector Stack	PM	0.20	0.88
		PM_{10}	0.20	0.88
		$PM_{2.5}$	0.10	0.43
28SAFN	Silo#6 in Hydrator/Packaging Area Dust Collector Stack	PM	0.15	0.39
		PM_{10}	0.15	0.39
		$PM_{2.5}$	0.07	0.19
29DLQKFN	Dolo Quicklime Conveyor Dust	PM	0.20	0.88

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	0.20	0.88
		$PM_{2.5}$	0.10	0.43
30PACFDFN	SA Silo Bin Vent	PM	0.20	0.88
		PM_{10}	0.20	0.88
		$PM_{2.5}$	0.10	0.43
31DOLHYFN	Dolo Hydrator Bin Baghouse Stack	PM	0.13	0.56
		PM_{10}	0.13	0.56
		$PM_{2.5}$	0.06	0.27
33DOMILLFN	Dolomitic Hydrate Tube Mill Dust Collector Stack	PM	0.11	0.50
		PM_{10}	0.11	0.50
		$PM_{2.5}$	0.05	0.25
33HCHYFN	HI-CAL Hydrate Silos Bin Vent	PM	0.09	0.38
		PM_{10}	0.09	0.38
		$PM_{2.5}$	0.04	0.19
34HCHY4FN	Silo #4 Hydrated Lime Storage Dust Collector Stack	PM	0.21	0.18
		PM_{10}	0.21	0.18
		$PM_{2.5}$	0.10	0.09
35HCLDFN	HI-CAL Bulk Load Dust Collector Stack	PM	0.05	0.23
		PM_{10}	0.05	0.23
		$PM_{2.5}$	0.02	0.11
35HCLDFUG	Silo 8 Truck Loading (8)	PM	0.38	0.46
		PM_{10}	0.21	0.25
		$PM_{2.5}$	0.10	0.12
36IRRFN	Rail Loading, I Silo Bin Vent	PM	0.37	1.63
		PM_{10}	0.37	1.63
		$PM_{2.5}$	0.18	0.80
36IRRLDFUG	I Silo Rail Loading (8)	PM	0.76	0.38
		PM_{10}	0.42	0.21
		$PM_{2.5}$	0.21	0.10

Emission Sources - Maximum Allowable Emission Rates

36JRRLDFUG	J Silo Rail Loading (8)	PM	0.46	0.38
		PM_{10}	0.25	0.21
		$PM_{2.5}$	0.12	0.10
37FBNFN	F Silo Baghouse Stack	PM	0.09	0.38
		PM_{10}	0.09	0.38
		$PM_{2.5}$	0.04	0.19
37FBNLDFUG	F Silo Rail Loading (8)	PM	0.92	0.76
		PM_{10}	0.50	0.42
		$PM_{2.5}$	0.25	0.21
38KRRFN	Rail Loading, K Silo Baghouse Stack	PM	0.13	0.58
		PM_{10}	0.13	0.58
		$PM_{2.5}$	0.06	0.28
38KRRLDFUG	K Silo Rail Loading (8)	PM	0.90	0.14
		PM_{10}	0.50	0.07
		$PM_{2.5}$	0.24	0.04
39DOMILLFN	Dolomitic Hydrate Tube Mill Dust Collector Stack	PM	0.09	0.41
		PM_{10}	0.09	0.41
		$PM_{2.5}$	0.04	0.20
3CRUSHPILE	Primary Crusher Stone Storage (8)	PM	--	2.22
		PM_{10}	--	1.11
		$PM_{2.5}$	--	0.17
3PCRSHRFN	Primary Crusher Dust Collector Stack	PM	0.24	0.74
		PM_{10}	0.24	0.74
		$PM_{2.5}$	0.12	0.36
40TRKFN	Truck Loading Dust Collector Stack	PM	0.11	0.49
		PM_{10}	0.11	0.49
		$PM_{2.5}$	0.05	0.24
40TRKLDFUG	Silo 5 Truck Loading (8)	PM	0.31	0.15
		PM_{10}	0.17	0.08

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.08	0.04
41HYTRKFN	Hydrated Lime Truck Loading Dust Collector Stack	PM	0.06	0.05
		PM_{10}	0.06	0.05
		$PM_{2.5}$	0.03	0.03
41QLLDFUG	Quicklime Truck Loading (8)	PM	0.15	0.61
		PM_{10}	0.08	0.34
		$PM_{2.5}$	0.04	0.16
41QLTRKFN	Quicklime Truck Loading Dust Collector Stack	PM	0.11	0.50
		PM_{10}	0.11	0.50
		$PM_{2.5}$	0.05	0.25
42HCPACFN	Packing 2 Spout Dust Collector Stack	PM	0.36	1.60
		PM_{10}	0.36	1.60
		$PM_{2.5}$	0.18	0.78
42SAPACFN	Packaging Area Dust Collector Stack	PM	0.43	1.27
		PM_{10}	0.43	1.27
		$PM_{2.5}$	0.21	0.62
4SCRSHRFN	Secondary Crusher Baghouse Stack	PM	0.54	1.66
		PM_{10}	0.54	1.66
		$PM_{2.5}$	0.26	0.81
5CRSHLDFUG	Crusher Fines Truck Loading (8)	PM	1.00	1.55
		PM_{10}	0.48	0.74
		$PM_{2.5}$	0.07	0.11
5FINESFN	Secondary Crusher Fines Dust Collector Stack	PM	0.06	0.26
		PM_{10}	0.06	0.26
		$PM_{2.5}$	0.03	0.13
6HCLSTONE	HI-CAL Storage Pile (8)	PM	--	12.50
		PM_{10}	--	6.25
		$PM_{2.5}$	--	0.94
7SCLPLDFUG	Scalping Bin Truck	PM	0.62	0.17

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	0.30	0.08
		$PM_{2.5}$	0.05	0.01
7SCLPSCNFN	Conveyor and Scalp Screen Dust Collector Stack	PM	0.12	0.53
		PM_{10}	0.12	0.53
		$PM_{2.5}$	0.06	0.26
8RK3DSTFN	No. 3 Dust Bin Baghouse Stack	PM	0.21	0.93
		PM_{10}	0.21	0.93
		$PM_{2.5}$	0.10	0.46
8RK3LDFUG	No. 3 Dust Bin Truck Loading (8)	PM	9.00	4.50
		PM_{10}	4.95	2.48
		$PM_{2.5}$	2.43	1.22
COKEPILE	Coke Pile, Coke Storage (8)	PM	--	6.09
		PM_{10}	--	3.05
		$PM_{2.5}$	--	0.46
HICALBLDFN	HI-CAL Building Dust Collector Stack	PM	0.62	2.71
		PM_{10}	0.62	2.71
		$PM_{2.5}$	0.30	1.33
HYD1FN	No. 1 Hydrator Dust Collector Stack	PM	0.31	1.35
		PM_{10}	0.31	1.35
		$PM_{2.5}$	0.15	0.66
HYD1FN	No. 1 Hydrator Dryer Baghouse Stack	PM	0.02	0.10
		PM_{10}	0.02	0.10
		$PM_{2.5}$	0.02	0.10
		NO_x	0.29	1.29
		CO	0.25	1.08
		VOC	0.02	0.07
		SO_2	0.04	0.18
HYDLDFUG	Hydrate Tailings Truck Loading (8)	PM	0.29	0.10
		PM_{10}	0.16	0.06

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.08	0.03
HYDTAILVNT	Hydrate Tailing Silo Bin Vent	PM	0.03	0.11
		PM_{10}	0.03	0.11
		$PM_{2.5}$	0.01	0.05
LIMEDUMP	Lime Dump Storage Pile (8)	PM	--	2.41
		PM_{10}	--	1.21
		$PM_{2.5}$	--	0.18
NWBIN2FN	No. 2 (NW) Dust Bin Dust Collector Stack	PM	0.40	1.76
		PM_{10}	0.40	1.76
		$PM_{2.5}$	0.20	0.86
NWBN2LDFUG	No. 2 Dust Bin Truck Loading (8)	PM	0.05	0.06
		PM_{10}	0.03	0.03
		$PM_{2.5}$	0.01	0.02
TRANS1FUG	Conveyor Transfer 1 (8)	PM	0.20	0.44
		PM_{10}	0.10	0.21
		$PM_{2.5}$	0.01	0.03
TRANS2FUG	Conveyor Transfer 2 (8)	PM	0.20	0.44
		PM_{10}	0.10	0.21
		$PM_{2.5}$	0.01	0.03
TRANS3FUG	Conveyor Transfer 3 (8)	PM	0.20	0.44
		PM_{10}	0.10	0.21
		$PM_{2.5}$	0.01	0.03
TRANS4FUG	Conveyor Transfer 4 (8)	PM	0.05	0.21
		PM_{10}	0.02	0.10
		$PM_{2.5}$	<0.01	0.01
TRANS5FUG	Conveyor Transfer 5 (8)	PM	0.02	0.08
		PM_{10}	0.01	0.04
		$PM_{2.5}$	<0.01	0.01
TRANS6FUG	Conveyor Transfer 6 (8)	PM	0.01	0.03

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	<0.01	0.01
		$PM_{2.5}$	<0.01	<0.01
TRANS7FUG	Conveyor Transfer 7 (8)	PM	0.05	0.22
		PM_{10}	0.03	0.11
		$PM_{2.5}$	<0.01	0.01
6140-Db02	Kiln No. 4 Baghouse Stack	PM	4.01	17.57
		PM_{10}	4.01	17.57
		$PM_{2.5}$	1.97	8.61
		NO_x	9.63	42.16
		CO	17.88	78.29
		SO_2	1.25	5.48
		VOC	0.54	2.34
		HCl	0.55	2.41
SCREEN	Screening Operations (5)	PM	0.05	0.22
		PM_{10}	0.02	0.07
		$PM_{2.5}$	0.01	0.01
CONVEY	Conveyance Operations (5)	PM	0.26	0.58
		PM_{10}	0.09	0.19
		$PM_{2.5}$	0.02	0.05
TRANSFER	Material Transfer Operations (5)	PM	0.24	0.53
		PM_{10}	0.08	0.17
		$PM_{2.5}$	0.02	0.05
STOCKPILES	Material Stockpiles (5)	PM	--	0.73
		PM_{10}	--	0.36
		$PM_{2.5}$	--	0.05
OFFLDFUG	Off-Spec Lime and Reject Stone Loading (5)	PM	0.02	0.04
		PM_{10}	0.01	0.02
		$PM_{2.5}$	<0.01	<0.01
PRODLDFUG	Product Loading Fugitives (5)	PM	0.07	0.07

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	0.04	0.04
		$PM_{2.5}$	0.02	0.02
NW-CRUSH	Crusher (5)	PM	<0.01	0.02
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
NW-SCREEN	Vibrating Screens (5)	PM	0.23	0.51
		PM_{10}	0.08	0.18
		$PM_{2.5}$	0.01	0.03
NW-Convey	Conveyance Operations (5)	PM	0.07	0.15
		PM_{10}	0.02	0.05
		$PM_{2.5}$	<0.01	0.01
NW-TRANSFER	Material Transfer Operations (5)	PM	0.20	0.45
		PM_{10}	0.07	0.15
		$PM_{2.5}$	0.02	0.04
NW-PILES	Material Stockpiles (5)	PM	--	3.61
		PM_{10}	--	1.81
		$PM_{2.5}$	--	0.27
HYDRDC	Hydrator Vent Dust Collector Stack	PM	0.15	0.53
		PM_{10}	0.15	0.53
		$PM_{2.5}$	0.07	0.26
HYDOSDC	Hydrator Dosing Bin Dust Collector Stack	PM	0.03	0.11
		PM_{10}	0.03	0.11
		$PM_{2.5}$	0.02	0.05
HYBINDC	Hydrator Quicklime Silo Dust Collector Stack	PM	0.21	0.72
		PM_{10}	0.21	0.72
		$PM_{2.5}$	0.10	0.35
HYLOADDC	Hydrated Lime Truck Loading Dust Collector Stack	PM	0.04	0.09
		PM_{10}	0.04	0.09
		$PM_{2.5}$	0.02	0.05

Emission Sources - Maximum Allowable Emission Rates

HYHCBINDC	Hydrated Lime Rail Bin Dust Collector Stack	PM	0.15	0.10
		PM_{10}	0.15	0.10
		$PM_{2.5}$	0.07	0.05
HYRLOADDC	Hydrator Rail Loading Dust Collector Stack	PM	0.08	0.05
		PM_{10}	0.08	0.05
		$PM_{2.5}$	0.04	0.02
42SAPLDFUG	Hydrate Truck Loadout at Silo 6 (5)	PM	0.03	0.03
		PM_{10}	0.02	0.02
		$PM_{2.5}$	<0.01	<0.01
41HYLDFUG	Hydrate Truck Loadout at Silo 4 (5)	PM	0.03	0.03
		PM_{10}	0.02	0.02
		$PM_{2.5}$	<0.01	<0.01
HYHCLDFUG	Hydrate Truck/Rail Loadout (5)	PM	0.06	<0.01
		PM_{10}	0.03	<0.01
		$PM_{2.5}$	0.02	<0.01
4140-Db08a	Vibrating Feeders Dust Collector 4140-Db08a Stack	PM	0.04	0.08
		PM_{10}	0.04	0.08
		$PM_{2.5}$	0.02	0.04
4140-Db08b	Vibrating Feeders Dust Collector 4140-Db08b Stack	PM	0.04	0.08
		PM_{10}	0.04	0.08
		$PM_{2.5}$	0.02	0.04
4140-Db17	Conveyor 4140-Hb05 Dust Collector 4140-Db17 Stack	PM	0.08	0.33
		PM_{10}	0.08	0.33
		$PM_{2.5}$	0.04	0.16
4140-Db76	Top of Run of Kiln Silos Dust Collector 4140-Db76 Stack	PM	0.18	0.79
		PM_{10}	0.18	0.79
		$PM_{2.5}$	0.09	0.39
4140-Db83a	Conveyor 4140-Hb72 Dust Collector 4140-Db83a Stack	PM	0.04	0.12
		PM_{10}	0.04	0.12

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.02	0.06
4140-Db83b	Conveyor 4140-Hb72 Dust Collector 4140-Db83b Stack	PM	0.04	0.12
		PM_{10}	0.04	0.12
		$PM_{2.5}$	0.02	0.06
4140-Db87	Bottom of Run of Kiln Silos Dust Collector 4140-Db87 Stack	PM	0.21	0.92
		PM_{10}	0.21	0.92
		$PM_{2.5}$	0.10	0.45
6240-Db06	Product Surge Bins Dust Collector 6240-Db06 Stack	PM	0.04	0.09
		PM_{10}	0.04	0.09
		$PM_{2.5}$	0.02	0.05
6240-Db23	Product Loading Spout Dust Collector 6240-Db23 Stack	PM	0.08	0.17
		PM_{10}	0.08	0.17
		$PM_{2.5}$	0.04	0.08
2440-Db21	Off-Spec and Reject Stone Silo Dust Collector 2440-Db21 Stack	PM	0.05	0.23
		PM_{10}	0.05	0.23
		$PM_{2.5}$	0.03	0.11
1-TRNSFR	2" x 5" Material Transfer Operations	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
1-PILES	Existing Kiln Area 2" x 5" Material Stockpile	PM	-	1.08
		PM_{10}	-	0.54
		$PM_{2.5}$	-	0.08
Before Construction of EPNs 6200-Db34, 6200-Db52, 6200-Db58, and GYPLDFUG				
GYPLOAD	Gypsum Loading (8)	PM	0.11	0.08
		PM_{10}	0.05	0.04
		$PM_{2.5}$	0.01	<0.01
After Construction of EPNs 6200-Db34, 6200-Db52, 6200-Db58, and GYPLDFUG				
6200-Db34	Gypsum Silo Dust Collector 6200-Db34 Stack	PM	0.04	0.02
		PM_{10}	0.04	0.02

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.02	<0.01
6200-Db52	Gypsum Loading Spout Dust Collector 6200-Db52 Stack	PM	0.07	0.05
		PM_{10}	0.07	0.05
		$PM_{2.5}$	0.03	0.02
6200-Db58	Gypsum Loading Spout Dust Collector 6200-Db58 Stack	PM	0.07	0.05
		PM_{10}	0.07	0.05
		$PM_{2.5}$	0.03	0.02
GYPLDFUG	Gypsum Truck/Rail Loading Fugitives	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<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
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
HCl - hydrogen chloride
H_2SO_4 - sulfuric acid
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Planned startup and shutdown emissions are included.
(6) The hourly (lb/hr) emission rate for this air contaminant is on a 30-day rolling average basis.
(7) The combined HCl emissions from Kiln Nos. 2 and 3 shall not exceed these rates. Any stack testing that the TCEQ Executive Director might require to demonstrate compliance with this limit shall be conducted on Kiln Nos. 2 and 3 simultaneously.
(8) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: March 30, 2023