

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 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. 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)	<u>Emission Rates *</u>	
			lb/hr	TPY **
13KLN2STCK	Rotary Kiln 2	PM/PM <sub>10</sub>	5.02	21.98
		NO <sub>x</sub> (5)	105.00	459.90
		CO (5)	63.0	276.0
		VOC	0.83	3.61
		SO <sub>2</sub> (6)	53.6	234.77
		SO <sub>2</sub> (7)	68.16	298.54
		H <sub>2</sub> SO <sub>4</sub>	2.04	8.96
		HCl	1.52***	6.63***
		D/F	3.73E-10	1.63E-09
		Cr	2.51E-04	1.10E-03
		Pb	5.02E-05	2.20E-04
		Hg	3.15E-04	1.38E-03
		Ni	3.01E-03	1.32E-02
		V	1.76E-02	7.69E-02
9KLN3STCK	Rotary Kiln 3	PM/PM <sub>10</sub>	7.71	33.78
		NO <sub>x</sub> (5)	91.00	398.58
		CO (5)	77.00	337.26
		VOC	1.10	4.82
		SO <sub>2</sub> (6)	71.52	313.26
		SO <sub>2</sub> (7)	90.88	398.05
		H <sub>2</sub> SO <sub>4</sub>	2.73	11.94
		HCl	1.52***	6.63***
		D/F	5.73E-10	2.51E-09
		Cr	3.86E-04	1.69E-03
		Pb	7.71E-05	3.38E-04
		Hg	5.25E-04	2.30E-03
		Ni	4.63E-03	2.03E-02
		V	2.70E-02	1.18E-01

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10CLSURGE	Surge Pile, Coal Storage (4)	PM PM <sub>10</sub>		0.14 0.07
10COALBHFN	Coal Unload and Reclaim	PM/PM <sub>10</sub>	0.24	1.05
11CLCRFN	Coal Crush and Bins	PM/PM <sub>10</sub>	0.10	0.45
14COALYARD	Coal Handling Facility Storage (4)	PM PM <sub>10</sub>		6.09 3.05
15Q2-3CNFN	Quicklime Conveyor in Kiln	PM/PM <sub>10</sub>	0.26	1.13
16QL1-2FN	1rk and 2rk Quicklime Conveyors	PM/PM <sub>10</sub>	0.49	2.16
17QL1-2FN	QL Convey/Elevator	PM/PM <sub>10</sub>	0.39	1.73
18KSILOFN	K Silo Quicklime Storage	PM/PM <sub>10</sub>	0.20	0.88
19GSILOFN	G Silo Quicklime Storage	PM/PM <sub>10</sub>	0.25	1.09
19HSILOFN	H Silo Quicklime Storage	PM/PM <sub>10</sub>	0.11	0.50
21DOLGRDFN	Dolomite, Grind, Store, and Load	PM/PM <sub>10</sub>	0.43	1.88
22QLHYFN	Quicklime Hydrated Feed Bin	PM/PM <sub>10</sub>	0.24	1.03
23CORSNSTK	Corson Hydrator Baghouse Dryer	PM/PM <sub>10</sub> NO <sub>x</sub> CO VOC SO <sub>2</sub>	0.03 0.39 0.33 0.02 0.06	0.13 1.72 1.44 0.10 0.25
23CORSNSTK	Corson Hydrator	PM/PM <sub>10</sub>	0.32	1.40
24HYSCBR	No. 2 HI-CAL Hydrator	PM PM <sub>10</sub>	1.20 0.66	5.30 2.90

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25HYSCBR	No. 1 HI-CAL Hydrator	PM	1.20	5.30
		PM <sub>10</sub>	0.66	2.90
26HCCONFN	Conveyor HI-CAL Hydrate Pneumatic	PM/PM <sub>10</sub>	0.20	0.88
27CMNTFN	Cement Bin, Mixing Area	PM/PM <sub>10</sub>	0.20	0.88
28SAFN	SA Lime Bin	PM/PM <sub>10</sub>	0.20	0.88
29DLQKFN	Dolo Quicklime Conveyor	PM/PM <sub>10</sub>	0.20	0.88
30PACDFDN	SA Silo	PM/PM <sub>10</sub>	0.20	0.88
31DOLHYFN	Dolo Hydrator Bin	PM/PM <sub>10</sub>	0.13	0.56
33DOMILLFN	Dolomitic Hydrate Tube Mill	PM/PM <sub>10</sub>	0.11	0.50
33HCHYFN	HI-CAL Hydrate Silos	PM/PM <sub>10</sub>	0.09	0.38
34HCHY4FN	HI-CAL Hydrate Storage	PM/PM <sub>10</sub>	0.26	1.13
35HCLDFN	HI-CAL Bulk Load	PM/PM <sub>10</sub>	0.05	0.23
35HCLDFUG	Silo 8 Truck Loading (4)	PM	0.38	0.46
		PM <sub>10</sub>	0.21	0.25
36IRRFN	Rail Loading, I Silo	PM/PM <sub>10</sub>	0.37	1.63
36IRRLDFUG	I Silo Rail Loading (4)	PM	0.76	0.38
		PM <sub>10</sub>	0.42	0.21
36JRRLDFUG	J Silo Rail Loading (4)	PM	0.46	0.38
		PM <sub>10</sub>	0.25	0.21
37FBNFN	F Silo	PM/PM <sub>10</sub>	0.09	0.38
37FBNLDFUG	F Silo Rail Loading (4)	PM	0.92	0.76
		PM <sub>10</sub>	0.50	0.42
38KRRFN	Rail Loading, K Silo	PM/PM <sub>10</sub>	0.13	0.58

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38KRRLDFUG	K Silo Rail Loading (4)	PM	0.90	0.14
		PM <sub>10</sub>	0.50	0.07
39DOMILLFN	Dolomitic Hydrate Tube Mill	PM/PM <sub>10</sub>	0.09	0.41
3CRUSHPILE	Primary Crusher Stone Storage (4)	PM		2.22
		PM <sub>10</sub>		1.11
3PCRSHRFN	Primary Crusher	PM/PM <sub>10</sub>	0.24	1.05
40TRKFN	Truck Loading	PM/PM <sub>10</sub>	0.11	0.49
40TRKLDUG	Silo 5 Truck Loading (4)	PM	0.31	0.15
		PM <sub>10</sub>	0.17	0.08
41HYLDUG	Silo 4 Truck Loading (4)	PM	0.15	0.15
		PM <sub>10</sub>	0.08	0.08
41HYTRKFN	HI-CAL Truck Load	PM/PM <sub>10</sub>	0.12	0.53
41QLLDUG	Quicklime Truck Loading (4)	PM	0.15	0.61
		PM <sub>10</sub>	0.08	0.34
41QLTRKFN	Quicklime Truck Loading	PM/PM <sub>10</sub>	0.11	0.50
42HCPACFN	Packing 2 Spout	PM/PM <sub>10</sub>	0.36	1.60
42SAPACFN	Package Dolomite	PM/PM <sub>10</sub>	0.35	1.54
4SCRSHRFN	Secondary Crusher	PM/PM <sub>10</sub>	0.54	2.37
5CRSHLDUG	Crusher Fines Truck Loading (4)	PM	1.00	1.55
		PM <sub>10</sub>	0.48	0.74
5FINESFN	Secondary Crusher Fines	PM/PM <sub>10</sub>	0.06	0.26
6HCLSTONE	HI-CAL Storage Pile (4)	PM		12.50
		PM <sub>10</sub>		6.25
7SCLPLDUG	Scalping Bin Truck Loading	PM	0.62	0.17
		PM <sub>10</sub>	0.30	0.08

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7SCLPSCNFN	(4) Conveyor and Scalp Screen	PM/PM <sub>10</sub>	0.12	0.53
8RK3DSTFN	No. 3 Dust Bin	PM/PM <sub>10</sub>	0.21	0.93
8RK3LDFUG	No. 3 Dust Bin Truck Loading (4)	PM PM <sub>10</sub>	9.00 4.95	4.50 2.48
COKEPILE	Coke Pile, Coke Storage (4)	PM PM <sub>10</sub>		6.09 3.05
HICALBLDFN	HI-CAL Building	PM/PM <sub>10</sub>	0.62	2.71
HYD1FN	No. 1 Hydrator	PM/PM <sub>10</sub>	0.31	1.35
HYD1FN	No. 1 Hydrator Baghouse Dryer	PM/PM <sub>10</sub> NO <sub>x</sub> CO VOC SO <sub>2</sub>	0.022 0.29 0.25 0.02 0.04	0.098 1.29 1.08 0.07 0.18
HYDLDFUG	Hydrate Tailings Truck Loading (4)	PM PM <sub>10</sub>	0.29 0.16	0.10 0.06
HYDTAILVNT	Hydrate Tailing Silo	PM/PM <sub>10</sub>	0.03	0.11
LIMEDUMP	Lime Dump Storage Pile (4)	PM PM <sub>10</sub>		2.41 1.21
NWBIN2FN	No. 2 (NW) Dust Bin	PM/PM <sub>10</sub>	0.40	1.76
NWBN2LDFUG	No. 2 Dust Bin Truck Loading (4)	PM PM <sub>10</sub>	0.05 0.03	0.06 0.03
TRANS1FUG	Conveyor Transfer 1 (4)	PM PM <sub>10</sub>	0.20 0.10	0.44 0.21

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TRANS2FUG	Conveyor Transfer 2 (4)	PM	0.20	0.44
		PM <sub>10</sub>	0.10	0.21
TRANS3FUG	Conveyor Transfer 3 (4)	PM	0.20	0.44
		PM <sub>10</sub>	0.10	0.21
TRANS4FUG	Conveyor Transfer 4 (4)	PM	0.05	0.21
		PM <sub>10</sub>	0.02	0.10
TRANS5FUG	Conveyor Transfer 5 (4)	PM	0.02	0.08
		PM <sub>10</sub>	0.01	0.04
TRANS6FUG	Conveyor Transfer 6 (4)	PM	0.01	0.03
		PM <sub>10</sub>	0.003	0.01
TRANS7FUG	Conveyor Transfer 7 (4)	PM	0.05	0.22
		PM <sub>10</sub>	0.03	0.11

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an 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 - particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>
- PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
- PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter
- CO - carbon monoxide
- HCl - hydrogen chloride
- D/F - dioxins/furans
- Cr - chromium
- Pb - lead
- Hg - mercury
- Ni - nickel
- V - vanadium

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H<sub>2</sub>SO<sub>4</sub> - sulfuric acid

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) The hourly (lb/hr) emission rate for this air contaminant is on a 30-day rolling average basis.
- (6) These hourly and annual SO<sub>2</sub> emissions limits apply unless and until the Kiln No. 3 stack is extended by 25 feet to a total height of approximately 145 feet.
- (7) These hourly and annual SO<sub>2</sub> emissions limits apply if the Kiln No. 3 stack is extended by 25 feet to a total height of approximately 145 feet.

\* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

\*\* Compliance with annual emission limits is based on a rolling 12-month period.

\*\*\* The combined HCl emissions from Kiln Nos. 2 and 3 shall not exceed this rate. 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.

Dated March 8, 2010