EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 7369 and PSD-TX-120M3

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)	Emission Rates * lb/hr	TPY
KS-1	Dry/Wet Kiln Exhaust (5)(11)	PM (total)	193.53	847.85
		PM_{10} (total)	164.20	719.34
		NO_x (7)(8)	824.00	3175.00
		SO_2	2760.00	6299.42
		H_2SO_4	249.00	567.66
		CO	702.50	3076.55
		VOC	115.42	395.58
		HCl	4.64	20.50
KS-1a	Dry Kiln Exhaust Baghouse Duct (5)(6)	PM (filterable)	14.44	63.24
		PM_{10} (filterable)	12.13	53.12
		PM (total)	25.44	111.42
		PM_{10} (total)	21.37	93.59
		NO_x (7)(8)	337.00	1478.00
		SO_2	(9)	(9)
		H_2SO_4	(9)	(9)
		CO	522.50	2288.55
		VOC	97.55	320.44
		HCl	2.74	12.00
9a	Alkali Bypass Baghouse Stack (6)	PM (filterable)	3.06	13.41
		PM_{10} (filterable)	2.57	11.27
		PM (total)	5.39	23.63
		PM_{10} (total)	4.53	19.85
		NO_x (7)	150.00	219.00
		SO_2	(9)	(9)
		H_2SO_4	(9)	(9)
		CO	100.00	438.00
		VOC	2.87	9.44
4	Coal Bins Baghouse Stack	PM	0.17	0.75
		PM_{10}	0.17	0.75

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
7	Blend Silo Roof Baghouse Stack	PM	0.69	3.00
		PM_{10}	0.69	3.00
7A	Dry Kiln Preheat Tower Baghouse	PM	0.35	1.52
		PM_{10}	0.35	1.52
8	Dry Process Blend Tanks Bottom Baghouse Stack	PM_{10}	0.11	0.48
		PM_{10}	0.11	0.48
9b	Alkali Bypass Bin Baghouse Stack	PM_{10}	0.21	0.90
		PM_{10}	0.21	0.90
10	Coke Silo Dust Collector	PM	0.17	0.75
		PM_{10}	0.17	0.75
11	Dry System Clinker Cooler Baghouse Stack	PM	12.25	53.66
		PM_{10}	12.25	53.66
14	Underground Clinker Tunnel Baghouse Stack	PM	0.28	1.22
		PM_{10}	0.28	1.22
15	Lime Injection Silo Baghouse	PM	0.09	0.38
		PM_{10}	0.09	0.38
25	Cement Silo No. 12 Baghouse	PM	0.30	1.31
		PM_{10}	0.30	1.31
26	Cement Silo No. 14 Baghouse	PM	0.30	1.31
		PM_{10}	0.30	1.31
31	Solid Fuel Mill and Heater Dust Collectors	PM	2.54	11.11
		PM_{10}	2.54	11.11
		SO_2	0.17	0.76

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		NO_x	1.21	5.32
		CO	1.02	4.47
		VOC	0.07	0.29
32	Fuel Bin Baghouse Stack	PM	1.18	5.18
		PM_{10}	1.18	5.18
35	Diesel Fuel Tank	VOC	0.01	0.12
36	Gasoline Fuel Tank	VOC	0.18	1.67
38	Fringe Material Baghouse Stack	PM	0.13	0.56
		PM_{10}	0.13	0.56
39	Turn Head Material Diverter Baghouse Stack	PM	0.26	1.13
		PM_{10}	0.26	1.13
40	Feed Tank Baghouse Stack	PM	0.26	1.13
		PM_{10}	0.26	1.13
41a	Separator Baghouse Stack (4)	PM	2.98	13.06
		PM_{10}	2.98	13.06
41b	Mill Baghouse Stack (4)	PM	1.20	5.26
		PM_{10}	1.20	5.26
43a	Limestone Feeding Bin Baghouse	PM	0.86	3.75
		PM_{10}	0.86	3.75
45	Cement Storage Silo 15A	PM	0.77	3.38
		PM_{10}	0.77	3.38
46	Cement Storage Silo 15B	PM	0.77	3.38
		PM_{10}	0.77	3.38
47	Cement Storage Silo 16	PM	0.77	3.38
		PM_{10}	0.77	3.38

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
48	Cement Bulk Loadout Baghouse	PM_{10}	0.26	1.13
		PM_{10}	0.26	1.13
49	Cement Bulk Loadout Baghouse	PM	0.26	1.13
		PM_{10}	0.26	1.13
61	Cement Storage Silo	PM	0.43	1.88
		PM_{10}	0.43	1.88
321	CKD Return Baghouse	PM	0.04	0.19
		PM_{10}	0.04	0.19
411	Bagging Machine Feed Bin Baghouse	PM	0.13	0.56
		PM_{10}	0.13	0.56
F-B-1	Solid Fuel Drop to Bin (10)	PM	0.04	0.02
		PM_{10}	0.02	0.01
F-B-2	Solid Fuel Bin Drop to Conveyor (10)	PM	<0.01	0.02
		PM_{10}	<0.01	0.01
F-B-3	Solid Fuel Conveyor Drop to Bins (10)	PM	<0.01	0.02
		PM_{10}	<0.01	0.01
F-B-4	Feed Tank Drop to Drag Chain (10)	PM	<0.01	0.02
		PM_{10}	<0.01	0.01
F-C-1	Clinker Drop to Shuttle Belt (10)	PM	0.30	1.30
		PM_{10}	0.14	0.61
F-C-2	Shuttle Belt Drop to Clinker Barn (10)	PM	0.30	1.30

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		PM_{10}	0.14	0.61
F-H-2	Solid Fuel Drop to Conveyor (10)	PM	0.04	0.02
		PM_{10}	0.02	0.01
F-LC-1	Solid Fuel Lump Crusher (10)	PM	0.04	0.02
		PM_{10}	0.02	0.01
F-L-2	Solid Fuel Drop to Hopper (10)	PM	0.04	0.02
		PM_{10}	0.02	0.01
F-P-1	Solid Fuel Storage Drop to Pile (10)	PM	0.37	0.16
		PM_{10}	0.18	0.07
F-P-2	Wind Pile Erosion (10)	PM	---	0.36
		PM_{10}	---	0.18
F-P-7	Kiln Dust Drop to Piles (10)	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
F-P-12	CKD Dry Kiln Pug Mill to Truck (10)	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
F-Q-4	Quarry Loader Drop to Truck (10)	PM	0.13	0.59
		PM_{10}	0.06	0.28
F-Q-6	Primary Crusher (10)	PM	0.01	0.03
		PM_{10}	<0.01	0.01
F-R-2	Belt Transfer Drop (10)	PM	0.13	0.59
		PM_{10}	0.06	0.28
F-R-3	Belt Drop to Tabernacle Transfer (10)	PM	0.13	0.59
		PM_{10}	0.06	0.28

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
F-R-6	Feed Belt Drop to RMS Shuttle Belt (10)	PM	0.09	0.40
		PM_{10}	0.04	0.19
F-R-7	RMS Shuttle Belt Drop to Pile (10)	PM	0.09	0.40
		PM_{10}	0.04	0.19
F-R-8	RMS Feeder Drop to Belt (10)	PM	0.09	0.40
		PM_{10}	0.04	0.19
F-R-9	RMS Belt Drop to Cross Plant Belt (10)	PM	0.09	0.40
		PM_{10}	0.04	0.19
F-R-10	Cross Plant Belt Drop to Shuttle Belt (10)	PM	0.09	0.40
		PM_{10}	0.04	0.19
F-R-11	Shuttle Belt Drop to Dry Feed Bins (10)	PM	0.09	0.40
		PM_{10}	0.04	0.19
F-R-12	Feed Bins Drop to Roller Mill Belt (10)	PM	0.09	0.40
		PM_{10}	0.04	0.19
F-TR-2	Solid Fuel Truck Unloading Drop (10)	PM	0.37	0.16
		PM_{10}	0.18	0.07
D-1	Wet Kiln Emergency Diesel Engine	NO_x	8.68	3.80
		CO	1.87	0.82
		VOC	0.70	0.31
		PM_{10}	0.62	0.27
		SO_2	0.57	0.25
D-2	Dry Kiln Emergency Diesel Engine	NO_x	2.26	0.99
		CO	0.49	0.21
		VOC	0.18	0.08
		PM_{10}	0.16	0.07
		SO_2	0.15	0.07

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
D-3	Emergency Fire Pump Diesel Engine	NO_x	3.88	1.70
		CO	0.84	0.37
		VOC	0.31	0.14
		PM_{10}	0.28	0.12
		SO_2	0.26	0.11
FEL-WET	Front End Loader (Wet Process) (10)	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
FEL-DRY	Front End Loader (Dry Process) (10)	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
DROP-WET	Conveyor Drop (Wet Process) (10)	PM	0.12	0.01
		PM_{10}	0.06	0.01
DROP-DRY	Conveyor Drop (Dry Process) (10)	PM	0.28	0.03
		PM_{10}	0.13	0.01
DEG 1- 6	Degreasers (10)	VOC	10.31	1.34
TMH 1	Synthetic Gypsum Unloading (10)	PM	0.02	0.07
		PM_{10}	0.01	0.04
TMH 2	Synthetic Gypsum Hopper Loading (10)	PM	0.01	0.02
		PM_{10}	<0.01	<0.01
TMH 3	Synthetic Gypsum Transfer Drop (10)	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
TMH 4	Synthetic Gypsum Transfer Drop (10)	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
TMH 5	Synthetic Gypsum Pile (10)	PM	---	0.60
		PM_{10}	---	0.30
TMH 6	Synthetic Gypsum Unloading (10)	PM	0.01	0.02

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		PM_{10}	<0.01	0.01
TMH 7	Synthetic Gypsum Hopper Loading (10)	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
TMH 8	Synthetic Gypsum Transfer Drop (10)	PM	<0.01	<0.01
		PM_{10}	<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) PM - particulate matter suspended in the atmosphere, including PM_{10}.
PM_{10} - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
H_2SO_4 - sulfuric acid
CO - carbon monoxide
VOC - volatile organic compounds
HCl - hydrogen chloride
(4) The EPNs 41a and 41b will never exhaust to the atmosphere simultaneously.
(5) The EPN KS-1 is the sum total of EPNs KS-1a and KS-1b. The individual allowable emissions for each of EPNs KS-1a and KS-1b are for compliance purposes.
(6) The PM and PM_{10} filterable rates are based on front-half of sampling train only.
(7) The hourly NO_x emission limit is based on a 30-day rolling NO_x emissions average. A 30-day rolling average is generated for each day as the average of all the day's hourly NO_x emission data and the preceding 29 days of hourly emission data (representing only those hours during kiln operation). The gaseous monitoring data shall be reduced to units of the permit allowable emission rate in lb/hr, calculated as a 30-day rolling average for NO_x at least once every week.
(8) The NO_x emission limits set in Standard Permit Number 45068 have not been incorporated to this permit since the facility is complying with the alternative reduction technologies allowed under 30 Texas Administrative Code Chapter 117.
(9) The SO_2 emissions from EPNs KS-1a and 9a combined are limited to 1,560.00 pounds per hour (lb/hr) and 1,043.42 tons per year (tpy). The H_2SO_4 emissions from EPNs KS-1a and 9a combined are limited to 138.00 lb/hr and 81.48 tpy.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

(10) Emission limits are an estimate only and only the represented throughputs presented in the permit application are enforceable. **(08/07)**

(11) The Wet Kiln (EPN KS1-b) has been dismantled and removed from the permit. This EPN will be modified as necessary based on a permit alteration application to be submitted no later than 90 days after the issuance of the permit**. (08/07)**

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

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

Dated August 27, 2007