EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 5933 and PSD-TX-63M3

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
Baghouse Controls				
1-AE-1	Rock Crushing and Transfer Baghouse (5)(6) 4.04	PM_{10}	2.11	9.26
		(5)(7) PM_{10}		0.92
1-AE-2	Sampling Tower Baghouse (5)	PM_{10}	0.43	1.88
1-BE-1	Raw Material Baghouse (5)	PM_{10}	0.43	1.88
1-BE-2	Raw Material Bin (5) Baghouse	PM_{10}	0.43	1.88
1-DE-1	Transfer Blend Silos(5) Baghouse	PM_{10}	0.59	2.58
1-DE-2	Blend Silos Pneumatic (5) System Baghouse	PM_{10}	0.29	1.29
1-DE-2a	Air Slide Feed Bucket (5)(6)	PM_{10}	0.42	1.88
	Elevator Baghouse(7)	PM_{10}	0.21	0.94
1-DE-3	No. 1 Kiln System Stack	CO	660.2	2,891.8

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			AIR CONTAMINANTS DATA		
Emission Point No. (1)	Source Name (2)		Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		(5)	SO_2	50.0	35.00
			H_2SO_4	5.0	3.5
		(5)	PM_{10}	50.0	219.0
			VOC	20.0	87.6
		(9)	HC1	3.6	3.8
		(5)(6)	NO_x	390.0	1,708.0
		(5)(7)	NO_x (April 1 - Oct 31)	232.0	595.7
		(5)(7)	NO_x (Nov 1 - Mar 31)	390.0	706.7
		(8)	NH_3	51.0	37.9
1-DE-4	Clinker Cooler Exhaust Baghouse	(5)	PM_{10}	13.5	59.13
1-EE-1	Coal Mill Baghouse	(5)	PM_{10}	1.33	5.8
1-FE-1	Clinker Bin Baghouse	(5)(6)	PM_{10}	0.43	1.88
		(7)	PM_{10}	0.21	0.94
1-FE-2	Clinker Storage Building Baghouse	(5)(6)	PM_{10}	0.86	3.75
		(7)	PM_{10}	0.43	1.88
1-FE-3	Gypsum and Anhydrite Silos Transfer Baghouse	(5)(6)	PM_{10}	0.43	1.88
		(7)	PM_{10}	0.21	0.94
1-FE-4	Gypsum and Anhydrite Silos Bin Baghouse	(5)(6)	PM_{10}	0.43	1.88
		(7)	PM_{10}	0.21	0.94
1-FE-5	Transfer Tower No. 2 Baghouse	(5)	PM_{10}	0.26	1.13
1-FE-6	Clinker Merrick Feeder Baghouse	(5)(6)	PM_{10}	0.43	1.88
		(7)	PM_{10}	0.21	0.94
1-FE-7	Clinker Transfer Point No. 1 Baghouse	(5)(6)	PM_{10}	0.86	3.75
		(7)	PM_{10}	0.43	1.88

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
1-FE-8	Fringe Cement Tank (5)(6)	PM_{10}	1.88	0.43
	Baghouse (7)	PM_{10}	0.21	0.94
1-FE-9	Fringe Cement Tank (5)(6)	PM_{10}	1.88	0.43
	Baghouse (7)	PM_{10}	0.21	0.94
1-FE-14	Gypsum Merrick Feeder (5)(6)	PM_{10}	0.43	1.88
	Baghouse (7)	PM_{10}	0.21	0.94
1-FE-16	Clinker Bin Drop (5)(6)	PM_{10}	0.43	1.88
	Baghouse (7)	PM_{10}	0.21	0.94
1-FE-17	Clinker Reclaim (5)(6)	PM_{10}	0.86	1.13
	Building Baghouse (7)	PM_{10}	0.43	1.88
1-GE-1	Finish Mill No. 1 Baghouse (5)(6)	PM_{10}	1.96	8.58
	(7)	PM_{10}	0.88	3.86
1-GE-2	Finish Mill No. 2 Baghouse (5)(6)	PM_{10}	1.81	7.94
	(7)	PM_{10}	0.95	4.17
1-GE-4	Gypsum Transfer Tower No. 1 (5)(6)	PM_{10}	0.26	1.13
	Baghouse (7)	PM_{10}	0.13	0.56
1-GE-5	Gypsum Transfer Tower No. 2 Baghouse (5)	PM_{10}	0.26	1.13
1-GE-7	Finish Mill No. 2 Baghouse (5)	PM_{10}	0.49	2.15
1-GE-8	Finish Mill No. 1 Baghouse (5)	PM_{10}	0.64	2.79
1-HE-1	Cement Silo Baghouse (5)(6)	PM_{10}	0.43	1.88
	(7)	PM_{10}	0.21	0.94

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		AIR CONTAMINANTS DATA		
1-HE-2	Cement Silo Baghouse (5)(6)	PM_{10}	0.43	1.88
	(7)	PM_{10}	0.21	0.94
1-HE-3	Cement Loadout Pump (5)(6)	PM_{10}	0.26	1.13
	No. 1 Baghouse (7)	PM_{10}	0.21	0.94
1-HE-4	Loadout Bin No. 1 (5)(6)	PM_{10}	0.43	1.88
	Baghouse (7)	PM_{10}	0.21	0.94
1-HE-5	Loadout Bin No. 2 (5)(6)	PM_{10}	0.43	1.88
	Baghouse (7)	PM_{10}	0.21	0.94
1-HE-6	Cement Loadout Pump (5)(6)	PM_{10}	0.26	1.13
	No. 2 Baghouse (7)	PM_{10}	0.21	0.94
1-HE-7	Truck/Rail Loadout (5)(6)	PM_{10}	0.43	1.88
	Baghouse (7)	PM_{10}	0.21	0.94
1-HE-8	Truck/Rail Loadout (5)(6)	PM_{10}	0.43	1.88
	Baghouse (7)	PM_{10}	0.21	0.94
1-HE-10	Loadout Bin Baghouse (5)(6)	PM_{10}	0.43	1.88
	(7)	PM_{10}	0.21	0.94
2-BE-1	Steel Slag Feed Baghouse (5)	PM_{10}	0.25	1.09
2-DE-1	Feed No. 1 Transfer to Raw (5) Bins Baghouse	PM_{10}	0.26	1.13
2-DE-1a	Limestone/Clay and Sand (5) Feed Bins Baghouse	PM_{10}	0.21	0.94
2-DE-1b	Feed No. 2 Transfer to Raw (5) Bins Baghouse	PM_{10}	0.19	0.84

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		AIR CONTAMINANTS DATA		
2-DE-1c	Limestone/Fluid Catalytic Cracking Catalyst Feed Bins Baghouse (5)	PM_{10}	0.19	0.84
2-DE-1d	Raw Bins Feed Conveyor Baghouse (5)	PM_{10}	0.43	1.88
2-DE-2	Raw Bins to Roller Mill Pneumatic System Baghouse (5)	PM_{10}	0.15	0.66
2-DE-2a	Air Slide to Blend Silo Baghouse (5)	PM_{10}	0.02	0.09
2-DE-2b	Air Slide/Screw Pump to Blend Silo Baghouse (5)	PM_{10}	0.30	1.31
2-DE-2c	Air Slide to Blend Silo Baghouse (5)	PM_{10}	0.94	4.13
2-DE-2d	Blend Silo Baghouse	(5)	PM_{10} 0.94	0.21
2-DE-2e	Raw Feed to Preheater Baghouse (5)	PM_{10}	0.04	0.19
2-DE-2f	Recirculating Filter Dust Baghouse (5)	PM_{10}	0.26	1.13
2-DE-3	No. 2 Kiln System Stack	PM_{10} total	34.20	144.68
	(5)	PM_{10} filterable	10.20	44.68
		PM_{10} condensible	24.00	100.00
	(5)	NO_x	292.50	1218.75
	(5)	SO_2	100.00	50.00
		H_2SO_4	10.00	5.00
	(5)	VOC	15.00	62.50

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
	(5)	CO	237.00	987.50
		HCl	4.50	18.97
	(8)	NH_3	9.02	39.51
1-DE-3 and 2-DE-3	Combined Annual NO_x (5) Nos. 1 and 2 Kiln Stacks	NO_x	--	2,521.08
2-DE-4	No. 2 Clinker Cooler(5) Exhaust Baghouse	PM_{10}	4.76	20.85
2-DE-5	Cement Kiln Dust Bin (5) Baghouse	PM_{10}	0.25	1.09
2-EE-1	Coal Mill (B) Feed System (5) Baghouse	PM_{10}	0.25	1.09
2-EE-2	Coal Mill Pumps (4)(5)	PM_{10}	0.09	0.38
2-FE-1	Clinker Dome/Feed System (5) Baghouse	PM_{10}	0.64	2.82
2-FE-1a	No. 1 Clinker Outhaul (5) Baghouse	PM_{10}	0.13	0.56
2-FE-2a	No. 2 Clinker Outhaul (5) Baghouse	PM_{10}	0.24	1.03
2-FE-2	Offspec Clinker Bin (5) Baghouse	PM_{10}	0.34	1.50
2-FE-3	Clinker Belt to Feed Bin (5) Baghouse	PM_{10}	0.34	1.50
2-FE-4	Clinker Feed Bin (5) Baghouse	PM_{10}	0.34	1.50

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
2-FE-5	Clinker Feed Belt to Mill (5) Baghouse	PM_{10}	0.15	0.66
2-FE-6	Gypsum/Anhydrite and (5) Limestone Finish Bins Baghouse	PM_{10}	0.30	1.31
2-FE-7	Gypsum/Anhydrite and (5) Limestone Feeder Belts Baghouse	PM_{10}	0.34	1.50
2-FE-8	Gypsum/Anhydrite and (5) Limestone Bucket Elevator Baghouse	PM_{10}	0.34	1.50
2-FE-10	Finish Mill No. 3 Material (5) Feed Baghouse	PM_{10}	0.09	0.38
2-GE-1	Finish Mill No. 3 Baghouse (5)	PM_{10}	2.70	11.81
2-GE-2	Finish Mill No. 3 Air Slides/ (5) Bucket Elevator Baghouse	PM_{10}	0.21	0.94
2-GE-3	Finish Mill No. 3 Air Slides/ (5) Cement Coolers Baghouse	PM_{10}	0.10	0.43
2-HE-1	Cement Dome Baghouse (5)	PM_{10}	1.07	4.69
2-HE-1a	Cement Dome Baghouse (5)	PM_{10}	0.34	1.50
2-HE-2	Cement Loadout Truck (5) Terminal Baghouse	PM_{10}	0.54	2.35
2-HE-3	Cement Loadout Rail (5) Terminal Baghouse	PM_{10}	2.35	0.54

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		AIR CONTAMINANTS DATA		
Fugitive Emissions from Material Drops				
1-AE-4	Limestone Drop f/FE Loader to Truck (Q)	(4)(5)	PM 8.30 PM_{10} 3.93	4.36 2.06
1-AE-6	Off-Spec Clinker Drop f/Truck to Pile (Q)	(4)(5) PM PM_{10}	0.35 0.17	0.17 0.28
1-AE-11	Limestone Drop from Truck to Crusher Bldg. Hopper	(4)(5) PM_{10}	PM 2.49 0.62	1.31 1.18
1-AE-12	Clay Drop from Front End Loader to Clay Hopper	(4)(5) PM PM_{10}	0.06 0.03	0.08 0.39
1-AE-14	Clay Drop from Truck to Clay Storage Shed	(4)(5) PM 0.04	0.06 PM_{10}	0.08 0.03
1-AE-15	Clinker Drop f/ FE Loader to Crusher Hopper (Q)	(4)(5) PM PM_{10}	0.70 0.33	1.19 0.56
1-AE-16	Hopper Drop to Stacker (Q)	(4)(5) PM PM_{10}	0.70 0.33	1.19 0.56
1-AE-17	Clinker Drop from FE Loader to Truck (Q)	(4)(5) PM 0.56	0.70 PM_{10}	1.19 0.33
1-AE-18	Clinker Drop f/FE Loader to Crusher Hopper (Q)	(4)(5) PM PM_{10}	0.70 0.33	1.19 0.56
1-AE-19	Hopper Drop to Crusher	(4)(5) PM	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
	and Crushing (Q)	PM_{10}	0.004	0.02
1-AE-20	Reclaimed Clinker Drop (4)(5)	PM_{10}	0.3319	0.564
1-AE-21	Reclaimed Clinker Drop (4)(5) to Feed Hopper No. 1	PM_{10}	0.13	0.56
1-AE-22	Feed Hopper Drop (4)(5) to Screw Conveyor	PM_{10}	0.02	0.08
1-BE-10	Iron Additive Drop from (4)(5) FE Loader to Hopper	PM PM_{10}	0.02 0.02	0.04 0.01
1-DE-5	CKD Drop to Outhaul 0.0017 Truck (4)(5)	PM_{10}		0.0011
1-EE-2	Dump Truck Emissions (4)(5)	PM PM_{10}	0.12 0.05	0.5 0.2
1-EE-3	Dump to Pile Fugitives (4)(5)	PM PM_{10}	0.07 0.03	0.3 0.1
1-EE-4	Loader to Coal Hopper (4)(5)	PM PM_{10}	0.07 0.01	0.3 <0.1
1-EE-4PC	Loader to Coke Hopper (4)(5)	PM PM_{10}	0.04 <0.01	0.2 <0.1
1-EE-5	Hopper to Coal Belt (4)(5)	PM PM_{10}	0.07 0.03	0.3 0.1
1-EE-5PC	Hopper to Coke Belt(4)(5)	PM PM_{10}	0.04 0.02	0.2 0.1
1-EE-6PC	Coke Belt to Coke (4)(5)	PM	0.04	0.2

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
	Feeder	PM_{10}	0.02	0.1
1-EE-7PC	Coke Feeder to Coke Belt (4)(5)	PM	0.04	0.2
		PM_{10}	0.02	0.1
1-EE-8	Coal Belt to Coal Bin (4)(5)	PM	0.1	0.01
		PM_{10}	<0.01	<0.1
1-EE-8a	Belt A Drop to Coal Mill Belt B (4)(5)	PM_{10}	0.0196	0.0137
1-EE-9	Coal Belt B to Coal Bin B (4)(5)	PM	<0.01	0.01
		PM_{10}	<0.01	<0.01
2-EE-3	Belt B to Coal Mill (C) Belt (4)(5)	PM_{10}	0.02	0.01
1-GE-9	Coal Railcar to Rail Hopper (4)(5)	PM	0.01	<0.1
	(6)	PM_{10}	<0.01	<0.1
	(7)	PM	0.043	0.055
		PM_{10}	0.02	0.026
1-GE-10	Coal Rail Hopper to Outhaul Belt (4)(5)	PM	0.01	<0.1
	(6)	PM_{10}	<0.01	<0.1
	(7)	PM	0.043	0.055
		PM_{10}	0.02	0.026
1-GE-11	Coal Outhaul Belt to Dump Truck via Chute (4)(5)	PM	0.07	0.3
	(6)	PM_{10}	0.03	0.1
	(7)	PM	0.17	0.37
		PM_{10}	0.08	0.17
1-FE-18	Reclaim Clinker Drop from Truck to Hopper (4)(5)	PM	0.35	0.60
		PM_{10}	0.17	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
2-FE-9	Truck to Samson Apron Feeder	(4)(5)	PM	0.10	0.10
			PM_{10}	0.05	0.05
PC-1A	FE Loader Drop to Grizzly Feeder	(4)(5)	PM_{10}	1.11	1.11
Fugitive Emissions from Outdoor Material Storage Piles (includes windblown erosion and drops to piles)					
1-BE-3	Sand Stockpile	(4)(5)	PM	0.21	0.90
			PM_{10}	0.10	0.45
1-BE-6	Iron Additive Stockpile	(4)(5)	PM	0.12	0.54
			PM_{10}	0.06	0.27
1-BE-7	Coal Pile Wind Erosion	(4)(5)	PM	0.16	0.7
			PM_{10}	0.07	0.3
1-BE-7PC	Coke Pile Wind Erosion	(4)(5)	PM	0.16	0.7
			PM_{10}	0.07	0.3
1-GE-13	Gypsum Additive Stockpile	(4)(5)	PM	0.07	0.33
			PM_{10}	0.04	0.16
1-GE-14	Anhydrite Additive Stockpile	(4)(5)	PM	0.02	0.11
			PM_{10}	0.01	0.05
1-I-1	Clinker Stockpile (Q)		(4)(5)	PM 0.87	0.20
			PM_{10}	0.09	0.41
Ammonia Emissions from SNCR Storage Tanks and Equipment Fugitive					
Tank-NH_3	Ammonia Storage Tank		NH_3	1.33	5.91
F-NH_3	Component Fugitive	(4)	NH_3	0.48	2.12

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

(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.
CO - carbon monoxide
SO_2 - sulfur dioxide
H_2SO_4 - sulfuric acid
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code ' 101.1
HCl - hydrogen chloride
NO_x - total oxides of nitrogen, calculated as nitrogen dioxide
NH_3 - ammonia
(4) Fugitive emissions are an estimate only.
(5) Emission limits applicable to State and PSD Permit.
(6) Before initial start-up of Kiln/Precalciner No. 2.
(7) After initial start-up of Kiln/Precalciner No. 2.
(8) Based on a 24-hour rolling average.
(9) Maximum hourly HCl rate occurs during kiln system operation with mill down.
(Q) Source located in quarry area.

* Emission rates are based on, and the facilities are limited to, maximum rates of:

195 tons per hour of dry feed to the preheater tower Kiln/Precalciner No. 1; and

150 tons per hour of clinker from Kiln/Precalciner No. 2.

The following is the maximum operating schedule:

Hrs/day 24 Days/Week 7 Weeks/Year 52 or Hrs/Year 8,760

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Dated December 30, 2008