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)	PM_{10}	2.11	9.26
	(5)(7)	PM_{10} 0.92	4.04	
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 Baghouse (5)	PM_{10}	0.43	1.88
1-DE-1	Transfer Blend Silos Baghouse	(5) 2.58	PM_{10}	0.59
1-DE-2	Blend Silos Pneumatic System Baghouse (5)	PM_{10}	0.29	1.29
1-DE-2a	Air Slide Feed Bucket Elevator Baghouse (5)(6)	PM_{10}	0.42	1.88
	(7)	PM_{10} 0.21	0.94	

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-DE-3	No. 1 Kiln System Stack	CO	660.2	2,891.8
	(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 (5) Baghouse	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 (5)(6) Baghouse	PM_{10}	0.86	3.75
	(7) PM_{10}	0.43	1.88	
1-FE-3	Gypsum and Anhydrite (5)(6) Silos Transfer Baghouse	PM_{10}	0.43	1.88
	(7)	PM_{10}	0.21	0.94
1-FE-4	Gypsum and Anhydrite (5)(6) Silos Bin Baghouse	PM_{10}	0.43	1.88
	(7)	PM_{10}	0.21	0.94
1-FE-5	Transfer Tower No. 2 (5) Baghouse	PM_{10}	0.26	1.13

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-6	Clinker Merrick Feeder (5)(6)	PM_{10}	0.43	1.88
	Baghouse (7)	PM_{10}	0.21	0.94
1-FE-7	Clinker Transfer Point (5)(6) No. 1 Baghouse	PM_{10}	0.86	3.75
	(7)	PM_{10}	0.43	1.88
1-FE-8	Fringe Cement Tank	(5)(6) 1.88 PM_{10}		0.43
	Baghouse (7)	PM_{10}	0.21	0.94
1-FE-9	Fringe Cement Tank	(5)(6) 1.88 PM_{10}		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) Building Baghouse	PM_{10}	0.86	1.13
	(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

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	AIR CONTAMINANTS DATA Emission Rates * lb/hr	TPY
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 Baghouse (5)(6)	PM_{10}	0.26	1.13
	(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
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 No. 1 Baghouse (5)(6)	PM_{10}	0.26	1.13
	(7)	PM_{10}	0.21	0.94
1-HE-4	Loadout Bin No. 1 Baghouse (5)(6)	PM_{10}	0.43	1.88
	(7)	PM_{10}	0.21	0.94
1-HE-5	Loadout Bin No. 2 Baghouse (5)(6)	PM_{10}	0.43	1.88
	(7)	PM_{10}	0.21	0.94
1-HE-6	Cement Loadout Pump No. 2 Baghouse (5)(6)	PM_{10}	0.26	1.13

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)	PM_{10}	0.21	0.94
1-HE-7	Truck/Rail Loadout Baghouse	(5)(6) PM_{10}	0.43	1.88
		(7) PM_{10}	0.21	0.94
1-HE-8	Truck/Rail Loadout Baghouse	(5)(6) PM_{10}	0.43	1.88
		(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 Bins Baghouse	(5) PM_{10}	0.26	1.13
2-DE-1a	Limestone/Clay and Sand Feed Bins Baghouse	(5) PM_{10}	0.21	0.94
2-DE-1b	Feed No. 2 Transfer to Raw Bins Baghouse	(5) PM_{10}	0.19	0.84
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

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-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 (5)	PM_{10} total	34.20	144.68
		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
	(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 Exhaust Baghouse (5)	PM_{10}	20.85	4.76
2-DE-5	Cement Kiln Dust Bin (5)	PM_{10}	0.25	1.09

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
	Baghouse			
2-EE-1	Coal Mill (B) Feed System (5) Baghouse	PM_{10}	0.25	1.09
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
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

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-10	Finish Mill No. 3 Material Feed Baghouse (5)	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/ Bucket Elevator Baghouse (5)	PM_{10}	0.21	0.94
2-GE-3	Finish Mill No. 3 Air Slides/ Cement Coolers Baghouse (5)	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 Terminal Baghouse (5)	PM_{10}	0.54	2.35
2-HE-3	Cement Loadout Rail Terminal Baghouse (5)	PM_{10}	0.54	2.35
Fugitive Emissions from Material Drops				
1-AE-4	Limestone Drop f/FE	(4)(5) PM	4.36	8.30
	Loader to Truck (Q)	PM_{10}	2.06	3.93
1-AE-6	Off-Spec Clinker Drop (4)(5) f/Truck to Pile (Q)	PM	0.35	0.17
		PM_{10}	0.17	0.28
1-AE-11	Limestone Drop from	(4)5) PM	1.31	2.49

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
	Truck to Crusher Bldg. Hopper	PM_{10}	0.62	1.18
1-AE-12	Clay Drop from Front End (4)(5)	PM	0.06	0.08
	Loader to Clay Hopper	PM_{10}	0.03	0.39
1-AE-14	Clay Drop from Truck to (4)(5)	PM	0.06	0.08
	Clay Storage Shed	PM_{10}		0.03
	0.04			
1-AE-15	Clinker Drop f/ FE Loader (4)(5)	PM	0.70	1.19
	to Crusher Hopper (Q)	PM_{10}	0.33	0.56
1-AE-16	Hopper Drop to Stacker (Q) (4)(5)	PM	0.70	1.19
		PM_{10}	0.33	0.56
1-AE-17	Clinker Drop from FE (4)(5)	PM	0.70	1.19
	Loader to Truck (Q)	PM_{10}		0.33
	0.56			
1-AE-18	Clinker Drop f/FE Loader (4)(5)	PM	0.70	1.19
	to Crusher Hopper (Q)	PM_{10}	0.33	0.56
1-AE-19	Hopper Drop to Crusher (4)(5)	PM	0.06	0.28
	and Crushing (Q)	PM_{10}	0.004	0.02
1-AE-21	Reclaimed Clinker Drop (4)(5)	PM_{10}	0.13	0.56
	to Feed Hopper No. 1			
1-AE-22	Feed Hopper Drop (4)(5)	PM_{10}	0.02	0.08
	to Screw Conveyor			
1-BE-10	Iron Additive Drop from (4)(5)	PM	0.02	0.04
	FE Loader to Hopper	PM_{10}	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
1-EE-2	Dump Truck Emissions (4)(5)	PM	0.12	0.5
		PM_{10}	0.05	0.2
1-EE-3	Dump to Pile Fugitives (4)(5)	PM	0.07	0.3
		PM_{10}	0.03	0.1
1-EE-4	Loader to Coal Hopper (4)(5)	PM	0.07	0.3
		PM_{10}	0.01	<0.1
1-EE-4PC	Loader to Coke Hopper (4)(5)	PM	0.04	0.2
		PM_{10}	<0.01	<0.1
1-EE-5	Hopper to Coal Belt (4)(5)	PM	0.07	0.3
		PM_{10}	0.03	0.1
1-EE-5PC	Hopper to Coke Belt (4)(5)	PM	0.2	0.04
		PM_{10}	0.02	0.1
1-EE-6PC	Coke Belt to Coke Feeder (4)(5)	PM	0.04	0.2
		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-9	Coal Belt B to Coal Bin B (4)(5)	PM	<0.01	0.01
		PM_{10}	<0.01	<0.01
1-GE-9	Coal Railcar to Rail Hopper (4)(5)(6)	PM	0.01	<0.1
		PM_{10}	<0.01	<0.1

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)	PM	0.043	0.055
			PM_{10}	0.02	0.026
1-GE-10	Coal Rail Hopper to Outhaul Belt	(4)(5)(6)	PM	0.01	<0.1
			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)(6)	PM	0.07	0.3
			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
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

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-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	0.20
		0.87		
		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		

(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

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

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, a 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

Dated December 21, 2007