Permit Number 82775 and PSD-TX-1101

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The PM/PM_{10} emissions on this table are the only contaminants subject to Prevention of Significant Deterioration requirements, under Permit Number PSD-TX-1101. The emissions 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.

Emission	Source	Air Contaminant	<u>Emis</u>	sion_
Rates* Po	oint No. (1) Name (2)	Name (3)	lb/hr	TPY
Point Sou	urces			
S-C-36	Preheater/Precalciner Kiln and Inline Raw Mill	NO_x (5)(6) NO_x (5)(7) CO(5) $SO_2(8)$ PM/PM_{10} (filterable) PM/PM_{10} (Total) H_2SO_4 (9) VOC (9) Lead (9) Hg (9) HCl (9) HF (9) Ammonia (9)	420 272 233 478 15.5 171 20.1 33.9 0.09 0.039 19.5 1.0 33.94	1,839 1,072 919 104 61.3 331 27.6 121 0.34 0.17 77 3.3 121
S-A-26	Limestone Hopper, Primary Crushing, and Conveying	PM PM ₁₀	3.29 2.79	12.96 11.02
S-A-27	Limestone Conveying from Belt 201014 to Belt 201018	PM PM ₁₀	0.27 0.23	1.05 0.89
S-A-28	Limestone Conveying from Belt 201018 to Storage Dome	PM PM ₁₀	1.64 1.40	6.48 5.51
S-A-29	Limestone Storage Dome	PM PM ₁₀	0.46 0.39	1.83 1.56
S-A-30	Limestone Storage Dome to Reclaim Feeder 201036	PM PM ₁₀	0.26 0.22	1.01 0.86

Emission Point No.	Source (1) Name (2)	Air Contaminant Name (3)	Emission lb/hr	Rates* TPY
S-A-31	Raw Material Truck and FEL Dump to Hopper	PM PM ₁₀	2.39 2.03	9.41 8.00
S-A-32	Raw Material Hopper Pan Conveyor Transfer to Belt 210008	PM PM ₁₀	0.08 0.07	0.31 0.27
S-A-33	Raw Material Crusher and conveying to Belt 210016	PM PM ₁₀	0.39 0.33	1.52 1.30
S-A-34	Raw Material Conveying to Belts 330008 and 210020	PM PM ₁₀	0.16 0.14	0.64 0.54
S-A-35	Raw Material Shuttle Belt Conveyor to Silos	PM PM ₁₀	0.16 0.14	0.65 0.55
S-A-36	Limestone Silo	PM PM ₁₀	0.08 0.07	0.32 0.28
S-A-37	Clay Silo	PM PM ₁₀	0.08 0.07	0.32 0.28
S-A-38	Iron Oxide Silo	PM PM ₁₀	0.08 0.07	0.32 0.28
S-A-39	Alumina Silo	PM PM ₁₀	0.08 0.07	0.32 0.28
S-A-40	Silica Silo	PM PM ₁₀	0.08 0.07	0.32 0.28
S-A-41	Limestone Silo Weigh Feeder	PM PM ₁₀	0.08 0.07	0.32 0.28
S-A-42	Clay Silo Weigh Feeder	PM PM ₁₀	0.08 0.07	0.32 0.28

Emission	Source	Air Contaminant	Emission	Rates*
Point No.	(1) Name (2)	Name (3)	lb/hr	TPY
S-A-43	Iron Oxide Silo Weigh Feeder	PM PM ₁₀	0.08 0.07	0.32 0.28
S-A-44	Alumina Silo Weigh Feeder	PM PM ₁₀	0.08 0.07	0.32 0.28
S-A-45	Silica Silo Weigh Feeder	PM PM ₁₀	0.08 0.07	0.32 0.28
S-A-46	Limestone Transfer from Silo to Belt 330010	PM PM ₁₀	0.16 0.14	0.65 0.55
S-B-17	Raw Mill Feed Conveying and Bucket Elevator	PM PM ₁₀	0.25 0.21	0.97 0.83
S-B-18	Raw Mill Airslides and Bucket Elevator to Blending Silo	PM PM ₁₀	0.27 0.23	1.07 0.91
S-B-19	Airslides to Blending Silo	PM PM ₁₀	0.24 0.21	0.96 0.81
S-B-20	Blending Silo	PM PM ₁₀	0.40 0.34	1.59 1.35
S-B-21	Surge Bin and Discharge from Blending Silo to Airslides	PM PM ₁₀	0.33 0.28	1.31 1.12
S-C-34	Kiln Feed Bucket Elevator 301018 and Kiln Feed Weigh Bin	PM PM ₁₀	0.37 0.31	1.44 1.23
S-C-35	Kiln Feed Bucket Elevator 301030 and Conveying	PM PM ₁₀	0.26 0.22	1.03 0.88
S-C-37	Clinker Cooler Transfer to Clinker Cooler Pan Conveyor 330002	PM PM ₁₀	0.10 0.08	0.39 0.33

Emission Point No.	Source (1) Name (2)	Air Contaminant Name (3)	<u>Emission</u> lb/hr	Rates* TPY
S-C-38	Clinker Conveying	PM PM ₁₀	0.58 0.49	2.27 1.93
S-C-39	Off-Spec Clinker Bin	PM PM ₁₀	0.11 0.09	0.42 0.36
S-C-40	Oil Well Clinker Storage Dome	PM PM ₁₀	1.54 1.31	6.08 5.17
S-C-41	Clinker Storage Dome	PM PM ₁₀	1.54 1.31	6.08 5.17
S-C-42	Reclaim from Clinker Domes to Pan Conveyor 330034	PM PM ₁₀	0.24 0.21	0.96 0.81
S-C-43	FM Additives Conveying to Pan Conveyor 330034	PM PM ₁₀	0.20 0.17	0.79 0.68
S-C-44	Pan Conveyor 330034 Discharge to Conveyor 530002	PM PM ₁₀	0.40 0.34	1.59 1.35
S-C-45	Conveyor 530002 To Clinker and FM Additives Feed Bins	PM PM ₁₀	0.40 0.34	1.59 1.35
S-C-46	Type I and II Clinker Feed Bin	PM PM ₁₀	0.08 0.07	0.31 0.26
S-C-47	Oil Well Clinker Feed Bin	PM PM ₁₀	0.08 0.07	0.31 0.26
S-C-48	Limestone Feed Bin	PM PM ₁₀	0.08 0.07	0.32 0.28
S-C-49	Gypsum Feed Bin	PM PM ₁₀	0.08 0.07	0.32 0.28

Emission	Source	Air Contaminant	Emission	Rates*
Point No.	(1) Name (2)	Name (3)	lb/hr	TPY
S-C-50	Anhydrite Feed Bin	PM PM ₁₀	0.08 0.07	0.32 0.28
S-C-51	Type I and II Clinker Feed Bin	PM	0.08	0.32
	Weigh Feeder No. 1	PM ₁₀	0.07	0.28
S-C-52	Type I and II Clinker Feed Bin	PM	0.08	0.32
	Weigh Feeder No. 2	PM ₁₀	0.07	0.28
S-C-53	Oil Well Clinker Feed Bin	PM	0.08	0.32
	Weigh Feeder No. 1	PM ₁₀	0.07	0.28
S-C-54	Oil Well Clinker Feed Bin	PM	0.08	0.32
	Weigh Feeder No. 2	PM ₁₀	0.07	0.28
S-C-55	Limestone Feed Bin Weigh	PM	0.08	0.32
	Feeder No.1	PM ₁₀	0.07	0.28
S-C-56	Limestone Feed Bin Weigh	PM	0.08	0.32
	Feeder No.2	PM ₁₀	0.07	0.28
S-C-57	Gypsum Feed Bin Weigh	PM	0.08	0.32
	Feeder No. 1	PM ₁₀	0.07	0.28
S-C-58	Gypsum Feed Bin Weigh	PM	0.08	0.32
	Feeder No. 2	PM ₁₀	0.07	0.28
S-C-59	Anhydrite Feed Bin Weigh	PM	0.08	0.32
	Feeder No. 1	PM ₁₀	0.07	0.28
S-C-60	Anhydrite Feed Bin Weigh	PM	0.08	0.32
	Feeder No. 2	PM ₁₀	0.07	0.28
S-C-61	Clinker Bins Discharge to Finish	PM	0.16	0.63
	Mill No. 1 Feed Belt 530086	PM ₁₀	0.14	0.53
S-C-62	Clinker Bins Discharge to Finish	PM	0.16	0.63
	Mill No. 2 Feed Belt 530088	PM ₁₀	0.14	0.53

Emission Point No.		Air Contaminant Name (3)	Emission lb/hr	Rates* TPY
S-C-63	Additives Bins Discharge to Finish Mill No. 1 Feed Belt 530086	PM PM ₁₀	0.16 0.14	0.65 0.55
S-C-64	Additives Bins Discharge to Finish Mill No. 2 Feed Belt 530088	PM PM ₁₀	0.16 0.14	0.65 0.55
S-D-20	Finish Mill No. 1 Feed Belt 530086	PM PM ₁₀	0.14 0.12	0.53 0.45
S-D-21	Finish Mill No. 1 Mill Grinding and Mill Discharge Bucket Elevator	PM PM ₁₀	0.81 0.69	3.18 2.71
S-D-22	Finish Mill No. 1 Separator	PM PM ₁₀	5.19 4.42	20.48 17.40
S-D-23	Finish Mill No. 1 Cement Conveying to Belt 501058	PM PM ₁₀	0.29 0.25	1.14 0.97
S-D-24	Finish Mill No. 2 Feed Belt 530088	PM PM ₁₀	0.14 0.12	0.53 0.45
S-D-25	Finish Mill No. 2 Mill Grinding and Mill Discharge Bucket Elevator	PM PM ₁₀	0.81 0.69	3.18 2.71
S-D-26	Finish Mill No. 2 Separator	PM PM ₁₀	5.19 4.42	20.48 17.40
S-D-27	Finish Mill No. 2 Cement Conveying to Belt 502058	PM PM ₁₀	0.29 0.25	1.14 0.97
S-D-28	Belt 501058 Discharge to Bucket Elevator and FM No. 1 Air Slides	PM PM ₁₀	0.27 0.23	1.07 0.91

Emission Point No.	Source	Air Contaminant	Emission	Rates*
	(1) Name (2)	Name (3)	lb/hr	TPY
S-D-29	FM No. 1 Air Slides to	PM	0.22	0.87
	Westernmost Cement Silos	PM ₁₀	0.19	0.74
S-D-30	FM No. 1 Air Slides to West	PM	0.22	0.87
	Cement Silos	PM ₁₀	0.19	0.74
S-D-31	FM No. 1 Air Slides to East	PM	0.22	0.87
	Cement Silos	PM ₁₀	0.19	0.74
S-D-32	Belt 502058 Discharge to Bucket Elevator and FM No. 2 Air Slides	PM PM ₁₀	0.27 0.23	1.07 0.91
S-D-33	FM No. 2 Air Slides to	PM	0.22	0.87
	Westernmost Cement Silos	PM ₁₀	0.19	0.74
S-D-34	FM No. 2 Air Slides to West	PM	0.22	0.87
	Cement Silos	PM ₁₀	0.19	0.74
S-D-35	FM No. 2 Air Slides to East	PM	0.22	0.87
	Cement Silos	PM ₁₀	0.19	0.74
S-D-7	Westernmost Masonry	PM	0.16	0.63
	Cement Silo	PM ₁₀	0.14	0.53
S-D-5	Westernmost Cement Silos	PM PM ₁₀	0.16 0.14	0.63 0.53
S-D-36	West Cement Silos	PM PM ₁₀	0.16 0.14	0.63 0.53
S-D-6	East Cement Silos	PM PM ₁₀	0.16 0.14	0.63 0.53
S-D-37	Westernmost Cement Silos	PM	0.08	0.31
	Reclaim Belt 530222 No. 1	PM ₁₀	0.07	0.27

Emission	Source	Air Contaminant	Emission	
Point No.	(1) Name (2)	Name (3)	lb/hr	<u>TPY</u>
S-D-38	Westernmost Cement Silos	PM	0.08	0.31
	Reclaim Belt 530222 No. 2	PM ₁₀	0.07	0.27
S-D-39	Westernmost Cement Silos	PM	0.08	0.31
	Reclaim Belt 530222 No. 3	PM ₁₀	0.07	0.27
S-D-40	West Cement Silos Reclaim	PM	0.08	0.31
	Belt 530262 No. 1	PM ₁₀	0.07	0.27
S-D-41	West Cement Silos Reclaim	PM	0.08	0.31
	Belt 530262 No. 2	PM ₁₀	0.07	0.27
S-D-42	West Cement Silos Reclaim Belt	PM	0.08	0.31
	530262 No. 3	PM ₁₀	0.07	0.27
S-D-43	East Cement Silos Reclaim	PM	0.08	0.31
	Belt 530306 No. 1	PM ₁₀	0.07	0.27
S-D-44	East Cement Silos Reclaim	PM	0.08	0.31
	Belt 530306 No. 2	PM ₁₀	0.07	0.27
S-D-45	East Cement Silos Reclaim	PM	0.08	0.31
	Belt 530306 No. 3	PM ₁₀	0.07	0.27
S-D-46	Westernmost Cement Silos Belt 530222 To Bucket Elevator	PM PM ₁₀	0.24 0.20	0.94 0.80
S-D-47	West Cement Silos Belt 530262	PM	0.24	0.94
	to Bucket Elevator	PM ₁₀	0.20	0.80
S-D-48	East Cement Silos Reclaim	PM	0.24	0.94
	Belt 530306 to Bucket Elevator	PM ₁₀	0.20	0.80
S-E-27	Discharge to Track No. 2 Rail	PM	0.11	0.45
	Loading Bin	PM ₁₀	0.10	0.38
S-E-28	Discharge to Track No. 3 Rail	PM	0.11	0.45
	Loading Bin	PM ₁₀	0.10	0.38

Emission Point No.	Source	Air Contaminant	Emission	Rates*
	(1) Name (2)	Name (3)	lb/hr	TPY
		•		
S-E-29	Discharge to Track No. 4 Rail	PM	0.11	0.45
	Loading Bin	PM ₁₀	0.10	0.38
S-E-30	Track No. 2 Rail Loading Bin	PM	0.08	0.31
	Loadout	PM ₁₀	0.07	0.27
S-E-31	Track No. 3 Rail Loading Bin	PM	0.08	0.31
	Loadout	PM ₁₀	0.07	0.27
S-E-32	Track No. 4 Rail Loading Bin	PM	0.08	0.31
	Loadout	PM ₁₀	0.07	0.27
S-E-33	Discharge to South End Truck	PM	0.27	1.07
	Loading Bins	PM ₁₀	0.23	0.91
S-E-8	Discharge to North End Truck	PM	0.12	0.47
	Loadout Bins	PM ₁₀	0.10	0.40
S-E-34	South End Truck Loading Bins	PM	0.10	0.41
	Loadout	PM ₁₀	0.09	0.35
S-E-1	North End Truck Loadout Spout and Transport System	PM PM ₁₀	0.38 0.32	1.50 1.28
S-E-9	Discharge to North End Truck	PM	0.16	0.62
	Loadout Bins	PM ₁₀	0.13	0.53
S-E-4	No. 1 Packing Machine	PM PM ₁₀	0.71 0.60	2.79 2.37
S-E-5	No. 2 Packing Machine	PM PM ₁₀	0.71 0.60	2.79 2.37
S-E-6	No. 3 Packing Machine	PM PM ₁₀	0.71 0.60	2.79 2.37
S-E-7	No. 4 Packing Machine	PM PM ₁₀	0.71 0.60	2.79 2.37

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EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No.	Source (1) Name (2)	Air Contaminant Name (3)	Emission lb/hr	Rates* TPY
S-G-25	Carbon Black Silo	PM PM ₁₀	0.08 0.07	0.31 0.27
S-G-26	Coal/Coke Conveying to Screen	PM PM ₁₀	0.08 0.07	0.32 0.28
S-G-27	Coal/Coke Crusher	PM PM ₁₀	0.33 0.28	1.30 1.10
S-G-28	Coal Coke Screening and Conveying	PM PM ₁₀	0.66 0.56	2.61 2.22
S-G-3	Existing Solid Fuel Silo - Coke (West Silo)	PM PM ₁₀	0.21 0.18	0.81 0.69
S-G-2	Existing Solid Fuel Silo - Coal (East Silo)	PM PM ₁₀	0.36 0.30	1.41 1.20
S-G-29	Raw Coal/Coke Bin	PM PM ₁₀	0.08 0.07	0.32 0.28
S-G-30	Coal/Coke Conveyor 351020 from Bin to Ball Mill	PM PM ₁₀	0.16 0.14	0.65 0.55
S-G-31	Coal/Coke Ball Mill	PM PM ₁₀	2.95 2.51	11.62 9.87
S-G-32	Kiln Pulverized Coal/Coke Bin	PM PM ₁₀	0.12 0.10	0.47 0.40
S-G-33	Precalciner Pulverized Coal/Coke Bin	PM PM ₁₀	0.12 0.10	0.48 0.40

Fugitive Emissions from Material Drops (10)

Emission Point No.	Source (1) Name (2)	Air Contaminant Name (3)	Emission lb/hr	Rates* TPY
FUIII NO.	(1) Name (2)	Name (5)	10/111	IFI
F-A-8	Quarry Loader Drop to Truck	PM	8.21	29.96
I -A-0	Quarry Loader Brop to Truck	PM ₁₀	3.88	23.30 14.17
		1 14110	3.00	14.17
F-A-25	Limestone Truck Dump to	PM	1.23	4.49
F-A-25	Hopper	PM ₁₀	0.58	2.13
	Поррег	FIVI ₁₀	0.56	2.13
F-G-7	Rail Car Drop to Coal System	PM	0.05	0.18
1 0 7	Hopper	PM ₁₀	0.03	0.10
	Поррег	1 14110	0.02	0.03
F-G-8	Rail Feeder Drop to Coal Belt	PM	0.01	0.03
. 00	ran recaci brop to coal ben	PM ₁₀	0.00	0.01
		. 14110	0.00	0.01
F-G-23	Coal Silos Feeders Drop to Belt	PM	0.01	0.03
1-0-23	Coal Silos i eeders brop to beit	PM ₁₀	0.01	0.03
		FIVI ₁₀	0.00	0.01
F-G-21	Coal Loader Drop to Hopper	PM	0.01	0.05
1-0-21	Coal Loader Drop to Hopper	PM ₁₀	0.01	0.03
		L IAITO	0.01	0.02
F-G-24	Coal Hoppor Drop to Bolt	PM	0.00	0.01
F-G-24	Coal Hopper Drop to Belt			
		PM_{10}	0.00	0.00
F-G-20	Coal Return Belt Transfer Drop	PM	0.01	0.03
F-G-20	Coal Retuin Beit Hansier Drop	PM ₁₀	0.01	0.03
		FIVI ₁₀	0.00	0.01
Fugitive F	Emissions from Outdoor Material Storage	Piles (wind erosion and dror	ne to nilee)(1	0)
i ugitive L	inissions nom Oddoor waterar Storage	i lies (willa crosion and drop	73 to piic3)(1	.0)
F-A-14	Cyncum Dilo	PM	0.01	0.04
F-A-14	Gypsum Pile			
		PM_{10}	0.01	0.02
F-A-15	Silica Pile	PM	0.01	0.04
L-A-13	Silica File	PM ₁₀	0.01	0.04
		FIVI ₁₀	0.01	0.02
F-A-16B	Iron Oxide Pile	PM	0.01	0.04
I -V-TOD	HOH OXIDE FILE	PM ₁₀	0.01	0.04
		r 1V110	0.01	0.02
F-A-17	Anhydrite Pile	PM	0.01	0.04
I -\(\tau_\tau_\tau_\tau_\tau_\tau_\tau_\tau_	Aimyante i ne	PM ₁₀	0.01	0.04
		1 14110	0.01	0.02

Emission	Source	Air Contaminant	Emission	Rates*
Point No.	(<u>1) Name (2)</u>	Name (3)	lb/hr	TPY
F-A-18	Clay Pile	PM PM ₁₀	0.04 0.02	0.14 0.07
F-A-20B	Alumina Pile	PM PM ₁₀	0.01 0.01	0.04 0.02
F-A-12	Coal Storage Pile	PM PM ₁₀	0.02 0.01	0.09 0.05
F-A-13	Coke Storage Pile	PM PM ₁₀	0.02 0.01	0.09 0.05
Fugitive E	Emissions from Roadways (10)			
F-A-3	Quarry Loader Road Emission	PM PM ₁₀	1.26 0.36	4.59 1.31
F-M-1	Quarry Trucks Road Emission	PM PM ₁₀	15.22 4.33	55.55 15.80
F-A-23	Raw Material Deliveries Road Emissions	PM PM ₁₀	3.58 0.70	13.05 2.55
F-A-24	Fuel Deliveries Road Emissions	PM PM ₁₀	0.23 0.04	0.83 0.16
F-E-26	Product Trucks Road Emissions	PM PM ₁₀	5.33 1.04	19.47 3.80
Fugitive E	Emissions from Quarry Blasting (10)			
F-A-1	Blasting Hole Drill Fugitives	PM PM ₁₀	0.04 0.02	0.15 0.07

Emission Point No.	Source (1) Name (2)	Air Contaminant Name (3)	Emission lb/hr	Rates* TPY
F-A-10	Blasting	PM PM ₁₀	0.31 0.16	1.12 0.58
Emissions from Tanks (including fueling activities)				
L-47	Gasoline Tank	VOC	0.24	0.94
L-48	Main Diesel Tank	VOC	< 0.01	< 0.01
L-49	Quarry Diesel Tank	VOC	< 0.01	< 0.01
L-50	Gasoline Fueling	VOC	< 0.01	< 0.01
L-51	Diesel Fueling (Main)	VOC	< 0.01	< 0.01
L-52	Diesel Fueling (Quarry)	VOC	< 0.01	< 0.01

- (1) Emission point identification either specific equipment designation or emission point number from plot plan.
- (2) Specific point source names. For fugitive sources, use area name or fugitive source name.
- (3) NO_x total oxides of nitrogen, collectively expressed (calculated) as nitrogen dioxide
 - CO carbon monoxide
 - PM particulate matter, suspended in the atmosphere, including PM₁₀
 - 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.
 - SO₂ sulfur dioxide
 - H₂SO₄ sulfuric acid
 - VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - HCl hydrogen chloride
 - Hg mercury (elemental)

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EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (4) Compliance with all annual emission rates is based on a rolling 12-month basis.
- (5) Compliance with hourly emission rate is based on a 30-day rolling average.
- (6) Limit is applicable for first 12 months of kiln operation.
- (7) Limit is applicable on the 30th day after 12 months of kiln operation.
- (8) Compliance with hourly limit is based on a three-hour rolling average.
- (9) Compliance with hourly limit is based on the average of three one-hour test runs.
- (10) Fugitive emission rates are an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
- * 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

Dated April 10, 2009