

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 7369 and PSDTX120M4

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, sources, and related activities. 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 (4)	
			lbs/hour	TPY (5)
SK-320	Dry Kiln Dust Collector (Kiln 1 Main Baghouse)	PM (total)	27.64	116.24
		PM <sub>10</sub> (total)	25.33	106.12
		PM <sub>2.5</sub> (total)	19.70	81.46
		NO <sub>x</sub> (7)(8)	280.00	-
		CO	522.50	2,288.55
		VOC	97.55	83.81
		HCl	2.74	12.00
		NH <sub>3</sub>	6.34	3.70
SK-350	Alkali Bypass Dust Collector Stack (Kiln 1 Alkali Bypass)	PM total	5.86	24.65
		PM <sub>10</sub> total	5.37	22.51
		PM <sub>2.5</sub> total	4.18	17.28
		NO <sub>x</sub> (7)	60.00	219.00
		CO	100.00	438.00
		VOC	2.87	9.44
SK-320 and SK-350 Combined	Kiln 1 Main Baghouse and Alkali Bypass	SO <sub>2</sub> (7)	750.00	1043.42
		H <sub>2</sub> SO <sub>4</sub>	110.40	81.48
SK-880	Kiln 870 Stack (Kiln2 Main Baghouse)	PM (7)	18.00	59.62
		PM <sub>10</sub> (7)	17.68	58.56
		PM <sub>2.5</sub> (7)	16.90	55.98
		NO <sub>x</sub> (7)	210.00	-
		SO <sub>2</sub> (7)	40.00	161.28

## Emission Sources - Maximum Allowable Emission Rates

		VOC (7)	50.00	112.42
		CO (7)	300.00	1205.37
		H <sub>2</sub> SO <sub>4</sub>	110.40	81.48
		HCl (7)	2.64	11.58
		NH <sub>3</sub>	52.21	38.70
		Hg (7)	<0.01	<0.01
SK-320 and SK-880 Combined	Kiln 1 and Kiln 2 Main Baghouses	NO <sub>x</sub>	-	1075.70
SK-721	Coal Bins Baghouse Stack	PM	0.17	0.75
		PM <sub>10</sub>	0.17	0.75
SK-310	Blend Silo Roof Baghouse Stack	PM	0.69	3.00
		PM <sub>10</sub>	0.69	3.00
SK-314	Dry Kiln Preheat Tower Baghouse	PM	0.35	1.52
		PM <sub>10</sub>	0.35	1.52
SK-311	Dry Process Blend Tank Bottom Baghouse Stack	PM	0.25	1.10
		PM <sub>10</sub>	0.25	1.10
		PM <sub>2.5</sub>	0.04	0.17
SK-351	Alkali Bypass Bin Baghouse Stack	PM	0.21	0.90
		PM <sub>10</sub>	0.21	0.90
SK-720	Coke Silo Dust Collector	PM	0.17	0.75
		PM <sub>10</sub>	0.17	0.75
SK-360	Dry System Clinker Cooler Baghouse Stack	PM(7)	7.00	29.16
		PM <sub>10</sub> (7)	7.00	29.16
		PM <sub>2.5</sub> (7)	0.44	1.83
SK-30	Underground Clinker Tunnel Baghouse Stack	PM	0.28	1.22
		PM <sub>10</sub>	0.28	1.22

## Emission Sources - Maximum Allowable Emission Rates

SK-300	Lime Injection Silo Baghouse	PM	0.09	0.38
		PM <sub>10</sub>	0.09	0.38
SK-3	Finish Mill 1 and 2 Separator	PM	0.64	2.82
		PM <sub>10</sub>	0.32	1.41
SK-401	Silo 400 Baghouse Stack	PM	0.26	1.13
		PM <sub>10</sub>	0.13	0.56
SK-400	Finish Mill 1 Fringe Bin	PM	0.13	0.56
		PM <sub>10</sub>	0.06	0.28
SK-13	Finish Mill 1 Separator	PM	0.60	2.63
		PM <sub>10</sub>	0.30	1.31
SK-34	Finish Mill 5 Separators	PM	0.92	4.04
		PM <sub>10</sub>	0.46	2.02
SK-42	Finish Mill 5	PM	4.29	18.77
		PM <sub>10</sub>	2.14	9.39
SK-11	Cement Storage Silos	PM	0.60	2.63
		PM <sub>10</sub>	0.30	1.31
SK-12	Cement Storage Silos	PM	0.39	1.73
		PM <sub>10</sub>	0.20	0.86
SK-18	Cement Storage Silos	PM	0.12	0.52
		PM <sub>10</sub>	0.06	0.26
SK-44	Cement Silo No. 12 Baghouse	PM	0.69	3.00
		PM <sub>10</sub>	0.69	3.00
		PM <sub>2.5</sub>	0.10	0.45
SK-45	Cement Silo No. 14 Baghouse	PM	0.18	0.77
		PM <sub>10</sub>	0.18	0.77

Emission Sources - Maximum Allowable Emission Rates

		PM <sub>2.5</sub>	0.03	0.12
SK-46	Cement Silo No. 14 Baghouse	PM	0.18	0.77
		PM <sub>10</sub>	0.18	0.77
		PM <sub>2.5</sub>	0.03	0.12
SK-21	Cement Bulk Loadout	PM	0.30	1.31
		PM <sub>10</sub>	0.15	0.66
SK-21A	Cement Bulk Loadout	PM	0.30	1.31
		PM <sub>10</sub>	0.15	0.66
SK-8	Cement Bagging Bins	PM	0.39	0.49
		PM <sub>10</sub>	0.20	0.25
SK-9	Cement Bagging Bins	PM	0.39	0.49
		PM <sub>10</sub>	0.2	0.25
SK-722	Solid Fuel Mill and Heater Dust Collectors	PM	2.63	11.51
		PM <sub>10</sub>	2.63	11.51
		SO <sub>2</sub>	0.17	0.76
		NO <sub>x</sub>	1.21	5.32
		CO	1.02	4.47
		VOC	0.07	0.29
SK-740	Fuel Bin Baghouse Stack	PM	1.18	5.18
		PM <sub>10</sub>	1.18	5.18
TANK-3	Diesel Fuel Tank	VOC	0.01	0.12
TANK-4	Gasoline Fuel Tank	VOC	0.18	1.67
SK-54	No. 5 Fringe Bin	PM	0.26	1.13
		PM <sub>10</sub>	0.26	1.13
		PM <sub>2.5</sub>	0.04	0.17

## Emission Sources - Maximum Allowable Emission Rates

SK-610	Fringe Material Baghouse Stack	PM	0.13	0.56
		PM <sub>10</sub>	0.13	0.56
SK-600	Turn Head Material Diverter Baghouse Stack	PM	0.26	1.13
		PM <sub>10</sub>	0.26	1.13
SK-55	Finish Mill 5 Feed Bins Baghouse	PM	0.60	2.63
		PM <sub>10</sub>	0.30	1.31
SK-601	Feed Tank Baghouse Stack	PM	0.26	1.13
		PM <sub>10</sub>	0.26	1.13
SK-606	Separator Baghouse Stack (9)	PM	2.98	13.06
		PM <sub>10</sub>	2.98	13.06
SK-602	Mill Baghouse Stack (9)	PM	1.20	5.26
		PM <sub>10</sub>	1.20	5.26
SK-43	Limestone Feeding Bin Baghouse	PM	0.86	3.75
		PM <sub>10</sub>	0.86	3.75
SK-56	Cement Storage Silo 15A	PM	0.77	3.38
		PM <sub>10</sub>	0.77	3.38
SK-57	Cement Storage Silo 15B	PM	0.77	3.38
		PM <sub>10</sub>	0.77	3.38
SK-58	Cement Storage Silo 16	PM	0.77	3.38
		PM <sub>10</sub>	0.77	3.38
SK-59	Cement Bulk Loadout Baghouse	PM	0.26	1.13
		PM <sub>10</sub>	0.26	1.13
SK-60	Cement Bulk Loadout Baghouse	PM	0.26	1.13
		PM <sub>10</sub>	0.26	1.13
SK-61	Cement Storage Silo	PM	0.43	1.88

## Emission Sources - Maximum Allowable Emission Rates

		PM <sub>10</sub>	0.43	1.88
SK-62	Dust Collector for FM Fly Ash Bin	PM	0.17	0.75
		PM <sub>10</sub>	0.17	0.75
		PM <sub>2.5</sub>	0.03	0.11
SK-63	Fluidized Conveyor Dust Collector	PM	0.03	0.14
		PM <sub>10</sub>	0.03	0.14
		PM <sub>2.5</sub>	0.01	0.02
SK-321	CKD Return Baghouse	PM	0.04	0.19
		PM <sub>10</sub>	0.04	0.19
SK-361	Clinker Conveyor Belt	PM	0.38	1.65
		PM <sub>10</sub>	0.38	1.65
		PM <sub>2.5</sub>	0.02	0.10
SK-411	Bagging Machine Feed Bin Baghouse	PM	0.13	0.56
		PM <sub>10</sub>	0.13	0.56
SK-700	Coal Railcar Unloading	PM	0.51	2.25
		PM <sub>10</sub>	0.51	2.25
		PM <sub>2.5</sub>	0.08	0.34
F-U-GYP	Additives Trucks Drop (10)(11)	PM	0.56	1.40
		PM <sub>10</sub>	0.27	0.66
F-L-GYP	Additives Loader Drops (10)(11)	PM	0.56	1.40
		PM <sub>10</sub>	0.27	0.66
F-HP-GYP	Additives Hopper Drop (10)(11)	PM	0.56	1.40
		PM <sub>10</sub>	0.27	0.66
F-A-8	Additives Drop (10)(11)	PM	0.04	0.07
		PM <sub>10</sub>	0.02	0.03

## Emission Sources - Maximum Allowable Emission Rates

F-C-711	Solid Fuel Drop to Bin (10)	PM	0.04	0.02
		PM <sub>10</sub>	0.02	0.01
F-BN-721	Solid Fuel Bin Drop to Conveyor (10)	PM	<0.01	0.02
		PM <sub>10</sub>	<0.01	0.01
F-BN-720	Solid Fuel Conveyor Drop to Bins (10)	PM	<0.01	0.02
		PM <sub>10</sub>	<0.01	0.01
F-C-720	Feed Tank Drop to Drag Chain (10)	PM	<0.01	0.02
		PM <sub>10</sub>	<0.01	0.01
F-C-360	Clinker Drop to Shuttle Belt (10)(11)	PM	0.30	1.30
		PM <sub>10</sub>	0.14	0.61
F-C-22	Shuttle Belt Drop to Clinker Barn (10)(11)	PM	0.30	1.30
		PM <sub>10</sub>	0.14	0.61
F-C-8	Clinker Belt Transfer (10)(11)	PM	0.15	0.07
		PM <sub>10</sub>	0.07	0.03
F-BN-25	Enclosed Weigh Feeder Fugitives (10)	PM	0.45	0.7
		PM <sub>10</sub>	0.21	0.33
F-C-57	Feed Belt Drop (10)	PM	0.45	0.7
		PM <sub>10</sub>	0.21	0.33
F-CH-702	Solid Fuel Drop to Conveyor (10)	PM	0.04	0.02
		PM <sub>10</sub>	0.02	0.01
F-IC-710	Solid Fuel Lump Crusher (10)	PM	0.04	0.02
		PM <sub>10</sub>	0.02	0.01
F-C-710	Solid Fuel Drop to Hopper (10)	PM	0.04	0.02
		PM <sub>10</sub>	0.02	0.01
F-C-701	Solid Fuel Storage Drop to Pile (10)	PM	---	0.29

## Emission Sources - Maximum Allowable Emission Rates

		PM <sub>10</sub>	---	0.15
		PM <sub>2.5</sub>	---	0.02
F-P-FUEL	Wind Pile Erosion (10)	PM	---	3.61
		PM <sub>10</sub>	---	1.81
		PM <sub>2.5</sub>	---	0.27
F-P-OMAT	Material Pile (10)	PM	---	14.45
		PM <sub>10</sub>	---	7.23
		PM <sub>2.5</sub>	---	1.04
F-R-CKD	CKD Loader (10)	PM	-	1.24
		PM <sub>10</sub>	-	0.32
F-P-RMS1/F-P-CKD	Kiln Dust Drop to Piles (10)	PM	---	0.60
		PM <sub>10</sub>	---	0.30
		PM <sub>2.5</sub>	---	0.05
F-PM-350	CKD Dry Kiln Pug Mill to Truck (10)	PM	0.01	<0.01
		PM <sub>10</sub>	0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
F-BM-1	Bagging Machine Fugitives (10)	PM	0.06	0.12
		PM <sub>10</sub>	0.03	0.06
F-Q-DRILL	Quarry Drilling (10)	PM	-	10.88
		PM <sub>10</sub>	-	8.16
F-R-DZR	Dozer Ripping Fugitives (10)	PM	-	1.93
		PM <sub>10</sub>	-	0.50
F-R-FEL	Quarry Loader (10)	PM	-	0.94
		PM <sub>10</sub>	-	0.25
F-R-GRDR	Grader (10)	PM	-	0.06



## Emission Sources - Maximum Allowable Emission Rates

		PM <sub>10</sub>	-	0.02
F-L-TRK	Quarry Loader Drop to Truck (10)	PM	0.14	0.44
		PM <sub>10</sub>	0.06	0.21
		PM <sub>2.5</sub>	0.01	0.03
F-IC-1	Primary Crusher (10)	PM	0.03	0.05
		PM <sub>10</sub>	0.01	0.02
		PM <sub>2.5</sub>	<0.01	<0.01
F-C-1	Primary Crush Conveyor Drop to Conveyor (10)	PM	0.05	0.09
		PM <sub>10</sub>	0.02	0.04
		PM <sub>2.5</sub>	<0.01	<0.01
F-C-2	Conveyor Drop to Transfer (10)	PM	0.05	0.09
		PM <sub>10</sub>	0.02	0.04
		PM <sub>2.5</sub>	<0.01	<0.01
F-C-3	Shuttle Belt Drop (10)	PM	0.32	0.11
		PM <sub>10</sub>	0.15	0.05
F-C-300	Feed Belt Drop to RMS Shuttle Belt (10)	PM	0.05	0.09
		PM <sub>10</sub>	0.02	0.04
		PM <sub>2.5</sub>	<0.01	<0.01
F-C-301	RMS Shuttle Belt Drop to Pile (10)(11)	PM	0.09	0.4
		PM <sub>10</sub>	0.04	0.19
F-C-RM	RMS Feeder Drop to Belt (10)	PM	0.15	0.13
		PM <sub>10</sub>	0.07	0.06
		PM <sub>2.5</sub>	0.01	0.01
F-C-302	RMS Belt Drop to Cross Plant Belt (10)	PM	0.05	0.04
		PM <sub>10</sub>	0.02	0.02

## Emission Sources - Maximum Allowable Emission Rates

		PM <sub>2.5</sub>	<0.01	<0.01
F-C-305	Cross Plant Belt Drop to Shuttle Belt (10)	PM	0.05	0.04
		PM <sub>10</sub>	0.02	0.02
		PM <sub>2.5</sub>	<0.01	<0.01
F-C-306	Shuttle Belt Drop to Dry Feed Bins (10)	PM	0.3	0.27
		PM <sub>10</sub>	0.14	0.13
		PM <sub>2.5</sub>	0.02	0.02
F-C-307	Feed Bins Drop to Roller Mill Belt (10)	PM	0.06	0.22
		PM <sub>10</sub>	0.03	0.10
		PM <sub>2.5</sub>	<0.01	0.02
F-RC-700	Coal Railcar Unloading Fugitives (10)	PM	0.05	0.02
		PM <sub>10</sub>	0.02	0.01
		PM <sub>2.5</sub>	<0.01	<0.01
F-U-FUEL	Solid Fuel Truck Unloading Drop (10)	PM	0.37	0.16
		PM <sub>10</sub>	0.18	0.07
D-2	Dry Kiln Emergency Diesel Engine	NO <sub>x</sub>	2.26	0.99
		CO	0.49	0.21
		VOC	0.18	0.08
		PM <sub>10</sub>	0.16	0.07
		SO <sub>2</sub>	0.15	0.07
D-3	Emergency Fire Pump Diesel Engine	NO <sub>x</sub>	3.88	1.70
		CO	0.84	0.37
		VOC	0.31	0.14
		PM <sub>10</sub>	0.28	0.12
		SO <sub>2</sub>	0.26	0.11

## Emission Sources - Maximum Allowable Emission Rates

FEL-DRY	Front End Loader (Dry Process) (10)(11)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
DROP-DRY	Conveyor Drop (Dry Process) (10)(11)	PM	0.09	0.01
		PM <sub>10</sub>	0.04	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
DEG 1 through DEG-6 (Total)	Degreasers 1 through 6 (10)	VOC	10.31	1.34
F-U-SYN	Synthetic Gypsum Unloading (10)	PM	0.01	0.03
		PM <sub>10</sub>	0.01	0.01
		PM <sub>2.5</sub>	<0.01	<0.01
F-FEL-601	Synthetic Gypsum Hopper Loading (10)	PM	0.01	0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
F-HP-601	Synthetic Gypsum Transfer Drop (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
F-C-601	Synthetic Gypsum Transfer Drop (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
F-L-52	Synthetic Gypsum Unloading (10)	PM	<0.01	0.01
		PM <sub>10</sub>	<0.01	0.01
		PM <sub>2.5</sub>	<0.01	<0.01
F-HP-52	Synthetic Gypsum Hopper Loading (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

F-C-52	Synthetic Gypsum Transfer Drop (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
NH3 FUG	Ammonia Piping Fugitives (10)	NH <sub>3</sub>	2.25	9.84
Blast-1	Abrasive Blasting	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
SK-902	KC-900 Clinker Cooler	PM	2.00	8.33
		PM <sub>10</sub>	2.00	8.33
		PM <sub>2.5</sub>	0.13	0.52
SK-805	Truck Unloading Station 805 (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-806	1st Transport to RMS No. 1 building (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-807	2nd Transport to RMS No. 1 building (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-808	3rd Transport to RMS No. 1 building (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-810	Truck Unloading station 810 (10)	PM	0.02	0.02
		PM <sub>10</sub>	<0.01	0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-812	1st Transport to RMS No. 2 building (10)	PM	0.02	0.02

## Emission Sources - Maximum Allowable Emission Rates

		PM <sub>10</sub>	<0.01	0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-813	Transport from RMS No. 2 building (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-823	Transport from RMS No. 2 building (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-824	Transport from storage buildings (10)	PM	<0.01	0.02
		PM <sub>10</sub>	<0.01	0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-825	Transport from storage buildings (10)	PM	<0.01	0.02
		PM <sub>10</sub>	<0.01	0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-826	Transport to Raw Mill (10)	PM	<0.01	0.02
		PM <sub>10</sub>	<0.01	0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-827	Raw Mill Feed Bins	PM	0.32	1.41
		PM <sub>10</sub>	0.32	1.41
		PM <sub>2.5</sub>	0.05	0.21
SK-821	Transport to Finish mill (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-817	Transport from RMS No. 2 building (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01

## Emission Sources - Maximum Allowable Emission Rates

		PM <sub>2.5</sub>	<0.01	<0.01
SK-814	Transport from RMS No. 2 building (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-819	Transport from RMS No. 2 building (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-820	Transport from RMS No. 2 building (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-815	Transport to Raw Mill (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
SK-833	Raw Mill Feed Belt 1	PM	0.63	2.75
		PM <sub>10</sub>	0.63	2.75
		PM <sub>2.5</sub>	0.09	0.41
SK-834	Raw Mill Feed Belt 2	PM	0.67	2.92
		PM <sub>10</sub>	0.67	2.92
		PM <sub>2.5</sub>	0.10	0.44
SK-835	Raw Mill Bucket Elevator	PM	0.56	2.44
		PM <sub>10</sub>	0.56	2.44
		PM <sub>2.5</sub>	0.08	0.37
SK-837	Raw Mill Rejects	PM	0.37	1.64
		PM <sub>10</sub>	0.37	1.64
		PM <sub>2.5</sub>	0.06	0.25

## Emission Sources - Maximum Allowable Emission Rates

SK-849	Raw Meal Bucket elevator	PM	0.12	0.54
		PM <sub>10</sub>	0.12	0.54
		PM <sub>2.5</sub>	0.02	0.08
SK-848	Blend Silo	PM	0.08	0.37
		PM <sub>10</sub>	0.08	0.37
		PM <sub>2.5</sub>	0.01	0.06
SK-846	Blend Silo Bucket Elevator (10)	PM	0.10	0.45
		PM <sub>10</sub>	0.10	0.45
		PM <sub>2.5</sub>	0.02	0.07
SK-856	Raw Meal from mill (10)	PM	0.16	0.69
		PM <sub>10</sub>	0.16	0.69
		PM <sub>2.5</sub>	0.02	0.10
SK-890	Blend Silo Buffer Bin	PM	0.09	0.41
		PM <sub>10</sub>	0.09	0.41
		PM <sub>2.5</sub>	0.01	0.06
SK-898	Byp. Dust Bin	PM	0.19	0.82
		PM <sub>10</sub>	0.19	0.82
		PM <sub>2.5</sub>	0.03	0.12
SK-910	Transport to Clinker Silo (10)	PM	0.35	1.55
		PM <sub>10</sub>	0.35	1.55
		PM <sub>2.5</sub>	0.05	0.23
SK-950	Clinker Silo 950	PM	0.34	1.50
		PM <sub>10</sub>	0.34	1.50
		PM <sub>2.5</sub>	0.05	0.22
SK-930	Clinker Silo 960	PM	0.29	1.28

Emission Sources - Maximum Allowable Emission Rates

		PM <sub>10</sub>	0.29	1.28
		PM <sub>2.5</sub>	0.04	0.19
SK-940	to Clinker Silos from existing line (10)	PM	0.07	0.29
		PM <sub>10</sub>	0.07	0.29
		PM <sub>2.5</sub>	<0.01	0.04
SK-970	Clinker Silo 970	PM	0.49	2.16
		PM <sub>10</sub>	0.49	2.16
		PM <sub>2.5</sub>	0.07	0.32
SK-971	Cement additives	PM	0.54	2.37
		PM <sub>10</sub>	0.54	2.37
		PM <sub>2.5</sub>	0.08	0.36
SK-974	clinker and additives to new FM Feed Bins (10)	PM	0.33	1.44
		PM <sub>10</sub>	0.33	1.44
		PM <sub>2.5</sub>	0.05	0.22
SK-975	Clinker transport to existing FM Feed Bins 1 (10)	PM	0.28	1.22
		PM <sub>10</sub>	0.28	1.22
		PM <sub>2.5</sub>	0.04	0.18
SK-976	Clinker transport to existing FM Feed Bins 2 (10)	PM	0.28	1.22
		PM <sub>10</sub>	0.28	1.22
		PM <sub>2.5</sub>	0.04	0.18
SK-977	FM Bucket Elevator	PM	0.54	2.36
		PM <sub>10</sub>	0.54	2.36
		PM <sub>2.5</sub>	0.08	0.35
SK-979	FM Feed Conveyor	PM	0.54	2.35
		PM <sub>10</sub>	0.54	2.35



## Emission Sources - Maximum Allowable Emission Rates

		PM <sub>2.5</sub>	0.08	0.35
SK-994	Cement Transport	PM	0.18	0.78
		PM <sub>10</sub>	0.18	0.78
		PM <sub>2.5</sub>	0.03	0.12
SK-991	Finish Mill # 7 Stack	PM	12.67	55.50
		PM <sub>10</sub>	12.67	55.50
		PM <sub>2.5</sub>	1.90	8.32
SK-700	Solid Fuel Railcar Unloading Baghouse	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
F-U-805	Raw Material Truck Unloading Station 1	PM	0.05	0.14
		PM <sub>10</sub>	0.03	0.06
		PM <sub>2.5</sub>	<0.01	<0.01
F-U-810	Raw Material Truck Unloading Station 2	PM	0.05	0.07
		PM <sub>10</sub>	0.03	0.03
		PM <sub>2.5</sub>	<0.01	<0.01
F-C-ALT1	Alternative fuel Transport Fugitive 1	PM	0.03	<0.01
		PM <sub>10</sub>	0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
F-C-ALT2	Alternative fuel Transport Fugitive 2 (10)	PM	0.03	<0.01
		PM <sub>10</sub>	0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
F-L-CKD	Loader Drop to Truck at CKD Pile (10)	PM	0.15	0.01
		PM <sub>10</sub>	0.07	<0.01
		PM <sub>2.5</sub>	0.01	<0.01

## Emission Sources - Maximum Allowable Emission Rates

F-PM-898	Pug Mill drop to loader (10)	PM	0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
F-C-300	Conveyor Drop to RMS Shuttle Conveyor (10)	PM	0.05	0.09
		PM <sub>10</sub>	0.02	0.04
		PM <sub>2.5</sub>	<0.01	<0.01
F-P-RMS2	RMS Building No. 2 Pile (10)	PM	--	0.50
		PM <sub>10</sub>	--	0.25
		PM <sub>2.5</sub>	--	0.04
F-P-RMS1	RMS Building No. 1 Pile (10)	PM	--	0.94
		PM <sub>10</sub>	--	0.47
		PM <sub>2.5</sub>	--	0.07
F-P-ALTF	Alternative Fuel Pile (10)	PM	--	0.36
		PM <sub>10</sub>	--	0.18
		PM <sub>2.5</sub>	--	0.03
D-4	Tier 4 Engine	PM	0.02	0.01
		PM <sub>10</sub>	0.02	0.01
		PM <sub>2.5</sub>	0.02	0.01
		NO <sub>x</sub>	0.48	0.21
		SO <sub>2</sub>	<0.01	<0.01
		VOC	0.23	0.10
		CO	4.19	1.84
MSSFUG1	All MSSFUG FINs	PM	3.57	1.01
		PM <sub>10</sub>	1.80	0.81
		PM <sub>2.5</sub>	0.46	0.37

## Emission Sources - Maximum Allowable Emission Rates

		NO <sub>x</sub>	0.02	<0.01
		SO <sub>2</sub>	0.03	<0.01
		VOC	6.81	0.04
		CO	0.12	<0.01
NH3 FUG2	Ammonia Piping Fugitives (10)	NH <sub>3</sub>	0.06	0.28
TANK-5	Engine Fuel Tank Vent	VOC	0.02	<0.01
TANK-6	Alternative Liquid Fuel Tank Vent	VOC	0.64	0.03

- (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 emissions, as defined in Title 30 Texas Administrative Code (TAC) § 101.1, including PM<sub>10</sub> and PM<sub>2.5</sub>
  - PM<sub>10</sub> - particulate matter emissions equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>.
  - PM<sub>2.5</sub> - direct particulate matter emissions equal to or less than 2.5 microns in diameter.
  - NO<sub>x</sub> - total oxides of nitrogen
  - SO<sub>2</sub> - sulfur dioxide
  - H<sub>2</sub>SO<sub>4</sub> - sulfuric acid
  - CO - carbon monoxide
  - VOC - volatile organic compounds as defined in Title 30 TAC § 101.1
  - HCl - hydrogen chloride
  - NH<sub>3</sub> - ammonia
  - Hg - mercury
- (4) Planned maintenance, startup, and shutdown (MSS) emissions are included.
- (5) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (6) The PM and PM<sub>10</sub> filterable rates are based on front-half of sampling train only.
- (7) The hourly emission limit is based on a 30-day rolling emissions average. A 30-day rolling average is generated for each day as the average of all the day's hourly emission data and the preceding 29 days of hourly emission data (representing only those hours during kiln operation including all hours of planned maintenance, startup, and shutdown). 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 at least once every week. **(11/10)**
- (8) The facility is complying with the alternative reduction technologies allowed under Title 30 Texas Administrative Code Chapter 117.
- (9) EPNs SK-606 and SK-602 will not exhaust to the atmosphere simultaneously.
- (10) Emission rate is an estimate and is enforceable through compliance with the applicable special conditions and permit application representations.
- (11) This emission source shall no longer retain permit authorization upon 60 days following the initial startup of Kiln SK-880.

Date: June 30, 2017

## Emission Sources - Maximum Allowable Emission Rates

Permit Number GHGPSDTX146

This table lists the maximum allowable emission rates of greenhouse gas (GHG) emissions, as defined in Title 30 Texas Administrative Code § 101.1, for all sources of GHG air contaminants on the applicant's property that are authorized 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, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities authorized by this permit.

### Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates
			TPY (4)
SK-880	Kiln 870 Stack (Kiln2 Main Baghouse)	CO <sub>2</sub> (5)	779715
		CH <sub>4</sub> (5)	41.85
		N <sub>2</sub> O (5)	6.08
		CO <sub>2</sub> e	782574
D-4	Tier 4 Engine	CO <sub>2</sub> (5)	114
		CH <sub>4</sub> (5)	<0.01
		N <sub>2</sub> O (5)	<0.01
		CO <sub>2</sub> e	115
MSSFUG1	All MSSFUG FINs	CO <sub>2</sub> (5)	<0.01
		CH <sub>4</sub> (5)	0.10
		CO <sub>2</sub> e	2.58

- (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) CO<sub>2</sub> - carbon dioxide  
N<sub>2</sub>O - nitrous oxide  
CH<sub>4</sub> - methane  
CO<sub>2</sub>e - carbon dioxide equivalents based on the following Global Warming Potentials (1/2015):  
CO<sub>2</sub> (1), N<sub>2</sub>O (298), CH<sub>4</sub>(25)
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. These rates include emissions from maintenance, startup, and shutdown.
- (5) Emission rate is given for informational purposes only and does not constitute enforceable limit.

Date: June 30, 2017