

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 3611D, PSDTX194M5, and PSDTX1552

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

EPN Emission Rates per 2019 Amendment Application				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
FUG-1A	Solid Fuel Stockpile (10)	PM	-	2.00
		PM <sub>10</sub>	-	1.00
		PM <sub>2.5</sub>	-	0.15
FUG-1B	Solid Fuel Stockpile (10)	PM	-	0.61
		PM <sub>10</sub>	-	0.31
		PM <sub>2.5</sub>	-	0.05
FUG-2A	Iron Stockpile (10)	PM	-	0.45
		PM <sub>10</sub>	-	0.23
		PM <sub>2.5</sub>	-	0.03
FUG-2B	Iron Stockpile (10)	PM	-	0.18
		PM <sub>10</sub>	-	0.09
		PM <sub>2.5</sub>	-	0.01
FUG-2C	Iron Stockpile (10)	PM	-	0.21
		PM <sub>10</sub>	-	0.10
		PM <sub>2.5</sub>	-	0.02
FUG-3A	Sand Stockpile (10)	PM	-	0.46
		PM <sub>10</sub>	-	0.23
		PM <sub>2.5</sub>	-	0.03
FUG-5	Street Sweeper Dump (10)	PM	-	<0.01
		PM <sub>10</sub>	-	<0.01
		PM <sub>2.5</sub>	-	<0.01
FUG-7A	Gypsum Stockpile (10)	PM	-	0.14
		PM <sub>10</sub>	-	0.07
		PM <sub>2.5</sub>	-	0.01
FUG-7B	Gypsum Stockpile (10)	PM	-	0.38

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		PM <sub>10</sub>	-	0.19
		PM <sub>2.5</sub>	-	0.03
FUG-7C	Gypsum Stockpile (10)	PM	-	0.03
		PM <sub>10</sub>	-	0.02
		PM <sub>2.5</sub>	-	<0.01
FUG-11	Belt 104/105 Fugitives from Raw Material Storage Building (10)	PM	0.04	0.05
		PM <sub>10</sub>	0.01	0.02
		PM <sub>2.5</sub>	<0.01	<0.01
FUG-13	Clinker Stockpile (10)	PM	-	0.39
		PM <sub>10</sub>	-	0.19
		PM <sub>2.5</sub>	-	0.03
RAWBLDG	Limestone Material Handling (10)	PM	0.10	0.45
		PM <sub>10</sub>	0.05	0.23
		PM <sub>2.5</sub>	<0.01	0.03
SOLIDFUEL	Solid Fuel Storage Building (10)	PM	0.06	0.02
		PM <sub>10</sub>	0.02	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
RAWBLDG	Raw Material Storage Building (10)	PM	0.60	0.11
		PM <sub>10</sub>	0.22	0.04
		PM <sub>2.5</sub>	0.03	<0.01
RAWBINS	Raw Material Bins (10)	PM	<0.01	0.03
		PM <sub>10</sub>	<0.01	0.01
		PM <sub>2.5</sub>	<0.01	<0.01
RAWHANDLING	Raw Material Handling (10)	PM	1.78	0.42
		PM <sub>10</sub>	0.65	0.14
		PM <sub>2.5</sub>	0.10	0.03
RAWMILL1	Raw Mill 1 (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
RAWMILL2 Project Number: 356732	Raw Mill 2 (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01

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DB-1	Dropout Box (10)	PM	0.02	0.10
		PM <sub>10</sub>	<0.01	0.04
		PM <sub>2.5</sub>	<0.01	<0.01
MSSFUG	ILE Maintenance Fugitives (10)	NO <sub>x</sub>	0.13	<0.01
		CO	1.84	0.02
		VOC	0.36	<0.01
		PM	0.68	0.17
		PM <sub>10</sub>	0.31	0.09
		PM <sub>2.5</sub>	0.06	0.03
		SO <sub>2</sub>	<0.01	<0.01

EPN Emission Rates Contingent Upon Construction and Operation of Kiln #2 Buda 2 Project				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
DC-1A	Raw Crusher Dust Collector Stack	PM	0.81	3.54
		PM <sub>10</sub>	0.81	3.54
		PM <sub>2.5</sub>	0.12	0.54
DC-1C	Belt 202B/213 Dust Collector Stack	PM	0.04	0.18
		PM <sub>10</sub>	0.04	0.18
		PM <sub>2.5</sub>	<0.01	0.03
DC-2 and DC-9	Kiln #1 Exhaust Stacks	NO <sub>x</sub> (30-day rolling average lb/hr)	600	2628
		SO <sub>2</sub> (30-day rolling average lb/hr) (7)	416	1822
		PM (front half) (8)	11.99	52.50
		PM (front half + back half) (9)	65.29	234.20
		PM <sub>10</sub>	63.37	225.80
		PM <sub>2.5</sub>	58.69	205.33
		CO	5298.00	5528.00
		VOC	64.54	229.63

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		H <sub>2</sub> SO <sub>4</sub>	33.95	148.69
		Pb	0.03	0.13
		HCl	2.07	9.09
DC-3A	Blend Silo Nos. 1 and 2 Dust Collector Stack	PM	0.61	2.65
		PM <sub>10</sub>	0.61	2.65
		PM <sub>2.5</sub>	0.09	0.40
DC-3B	Kiln Feed System Dust Collector Stack	PM	0.18	0.78
		PM <sub>10</sub>	0.18	0.78
		PM <sub>2.5</sub>	0.03	0.12
DC-3C	Blend Silo No. 3 Dust Collector Stack	PM	0.61	2.65
		PM <sub>10</sub>	0.61	2.65
		PM <sub>2.5</sub>	0.09	0.40
DC-3D1	Kiln Feed Pump Dust Collector Stack	PM	0.04	0.18
		PM <sub>10</sub>	0.04	0.18
		PM <sub>2.5</sub>	<0.01	0.03
DC-3D2	Kiln Feed Pump Dust Collector Stack	PM	0.04	0.18
		PM <sub>10</sub>	0.04	0.18
		PM <sub>2.5</sub>	<0.01	0.03
DC-3D3	Kiln Feed Pump Dust Collector Stack	PM	0.04	0.18
		PM <sub>10</sub>	0.04	0.18
		PM <sub>2.5</sub>	<0.01	0.03
DC-4	Clinker Cooler Dust Collector Stack (6)	PM	1.04	4.54
		PM <sub>10</sub>	1.04	4.54
		PM <sub>2.5</sub>	0.07	0.29
DC-4A-1	Conveyor 413/448 Dust Collector Stack	PM	0.13	0.58
		PM <sub>10</sub>	0.13	0.58
		PM <sub>2.5</sub>	0.02	0.09
DC-5	Finish Mill No. 1 Dust Collector Stack	PM	0.61	2.65
		PM <sub>10</sub>	0.61	2.65

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		PM <sub>2.5</sub>	0.09	0.40
DC-5A-1	Finish Feed No. 1 Feed Belt 806 Dust Collector Stack	PM	0.24	1.06
		PM <sub>10</sub>	0.24	1.06
		PM <sub>2.5</sub>	0.04	0.16
DC-6A	Finish Cement Silos A 1-9 Dust Collector Stack	PM	0.36	1.56
		PM <sub>10</sub>	0.36	1.56
		PM <sub>2.5</sub>	0.05	0.24
DC-6B	Rail Bulk Loadout - A Silos Dust Collector Stack	PM	0.01	0.05
		PM <sub>10</sub>	0.01	0.05
		PM <sub>2.5</sub>	<0.01	<0.01
DC-6C	Truck Bulk Loadout - A Silos Dust Collector Stack	PM	0.01	0.05
		PM <sub>10</sub>	0.01	0.05
		PM <sub>2.5</sub>	<0.01	<0.01
DC-6D	Masonry Cement Loading Dust Collector Stack	PM	0.10	0.42
		PM <sub>10</sub>	0.10	0.42
		PM <sub>2.5</sub>	0.01	0.06
DC-7B	Finish Mill No. 1 Feed Silos Dust Collector Stack	PM	0.81	3.54
		PM <sub>10</sub>	0.81	3.54
		PM <sub>2.5</sub>	0.12	0.54
DC-8	Cement Bag Packhouse No. 1 Dust Collector Stack	PM	0.46	2.00
		PM <sub>10</sub>	0.46	2.00
		PM <sub>2.5</sub>	0.07	0.30
DC-10A	Finish Mill No. 2 Dust Collector Stack	PM	0.55	2.40
		PM <sub>10</sub>	0.55	2.40
		PM <sub>2.5</sub>	0.08	0.36
DC-10B	Finish Mill No. 2 Dust Collector Stack	PM	1.94	8.49
		PM <sub>10</sub>	1.94	8.49
		PM <sub>2.5</sub>	0.29	1.29
DC-10C-1	Finish Mill No. 2 Feed Belt 806B Dust	PM	0.24	1.06

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		PM <sub>10</sub>	0.24	1.06
		PM <sub>2.5</sub>	0.04	0.16
DC-11A	Finish Cement Silos B 4-7 Dust Collector Stack	PM	0.36	1.56
		PM <sub>10</sub>	0.36	1.56
		PM <sub>2.5</sub>	0.05	0.24
DC-11B	Finish Cement Silos B 1, 2, 3, and 8 Dust Collector Stack	PM	0.36	1.56
		PM <sub>10</sub>	0.36	1.56
		PM <sub>2.5</sub>	0.05	0.24
DC-11C	Truck Bulk Loadout No. 1 - B Silos Dust Collector Stack	PM	0.01	0.05
		PM <sub>10</sub>	0.01	0.05
		PM <sub>2.5</sub>	<0.01	<0.01
DC-11D	Truck Bulk Loadout No. 2 - B Silos Dust Collector Stack	PM	0.01	0.05
		PM <sub>10</sub>	0.01	0.05
		PM <sub>2.5</sub>	<0.01	<0.01
DC-11E	Clinker Loadout Silos Dust Collector Stack	PM	0.24	1.06
		PM <sub>10</sub>	0.24	1.06
		PM <sub>2.5</sub>	0.04	0.16
DC-13	Clinker Storage Building Dust Collector Stack	PM	0.89	3.90
		PM <sub>10</sub>	0.89	3.90
		PM <sub>2.5</sub>	0.13	0.59
DC-13A	Fringe Bin Dust Collector Stack	PM	0.16	0.71
		PM <sub>10</sub>	0.16	0.71
		PM <sub>2.5</sub>	0.02	0.11
DC-20	Clinker Fines Dust Bin Dust Collector Stack	PM	0.11	0.47
		PM <sub>10</sub>	0.11	0.47
		PM <sub>2.5</sub>	0.02	0.07

EPN Emission Rates Prior to 2019 Amendment Application			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)

Emission Sources - Maximum Allowable Emission Rates

			lbs/hour	TPY (4)
DC-1A	Raw Crusher	PM	3.24	14.16
		PM <sub>10</sub>	3.24	14.16
DC-1C	Belt 202B/213	PM	0.16	0.71
		PM <sub>10</sub>	0.16	0.71
DC-2 and DC-9	Kiln Exhaust	NO <sub>x</sub> (30-day rolling average lb/hr)	600	2628
		SO <sub>2</sub> (24-hour rolling average) (7)	416	1822
		PM (front half) (8)	27.69	118.29
		PM (front half + back half) (9)	80.99	299.99
		CO	5298.00	5528.00
		VOC	64.54	229.63
		H <sub>2</sub> SO <sub>4</sub>	33.95	148.69
		Pb	0.03	0.13
		HCl	2.07	9.09
DC-3A	Blend Silo Nos. 1 and 2	PM	2.43	10.60
		PM <sub>10</sub>	2.43	10.60
DC-3B	Kiln Feed System	PM	0.71	3.10
		PM <sub>10</sub>	0.71	3.10
DC-3C	Blend Silo No. 3	PM	2.43	10.60
		PM <sub>10</sub>	2.43	10.60
DC-3D1	Kiln Feed Pump	PM	0.16	0.71
		PM <sub>10</sub>	0.16	0.71
DC-3D2	Kiln Feed Pump	PM	0.16	0.71
		PM <sub>10</sub>	0.16	0.71
DC-3D3	Kiln Feed Pump	PM	0.16	0.71
		PM <sub>10</sub>	0.16	0.71
DC-4	Clinker Cooler (6)	PM	10.00	43.80
		PM <sub>10</sub>	10.00	43.80

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DC-4A-1	Conveyor 413/448	PM	0.45	2.00
		PM <sub>10</sub>	0.45	2.00
DC-5	Finish Mill No. 1	PM	7.8	34.2
		PM <sub>10</sub>	7.8	34.2
DC-5A-1	Finish Feed No. 1 Feed Belt 806	PM	0.81	3.5
		PM <sub>10</sub>	0.81	3.5
DC-6A	Finish Cement Silos A 1-9	PM	1.43	6.3
		PM <sub>10</sub>	1.43	6.3
DC-6B	Rail Bulk Loadout - A Silos	PM	0.32	1.4
		PM <sub>10</sub>	0.32	1.4
DC-6C	Truck Bulk Loadout - A Silos	PM	0.32	1.4
		PM <sub>10</sub>	0.32	1.4
DC-6D	Masonry Cement Loading	PM	0.32	1.4
		PM <sub>10</sub>	0.32	1.4
DC-7B	Finish Mill No. 1 Feed Silos	PM	3.0	13.0
		PM <sub>10</sub>	3.0	13.0
DC-8	Cement Bag Packhouse No. 1	PM	1.84	8.1
		PM <sub>10</sub>	1.84	8.1
DC-10A	Finish Mill No. 2	PM	1.5	6.6
		PM <sub>10</sub>	1.5	6.6
DC-10B	Finish Mill No. 2	PM	5.3	23.0
		PM <sub>10</sub>	5.3	23.0
DC-10C-1	Finish Mill No. 2 Feed Belt 806B	PM	0.81	3.5
		PM <sub>10</sub>	0.81	3.5
DC-11A	Finish Cement Silos B 4-7	PM	1.43	6.3
		PM <sub>10</sub>	1.43	6.3
DC-11B	Finish Cement Silos B 1, 2, 3, and 8	PM	1.43	6.3
		PM <sub>10</sub>	1.43	6.3
DC-11C	Truck Bulk Loadout No. 1 B Silos	PM	0.32	1.4



Emission Sources - Maximum Allowable Emission Rates

		PM <sub>10</sub>	0.32	1.4
DC-11D	Truck Bulk Loadout No. 2 B Silos	PM	0.32	1.4
		PM <sub>10</sub>	0.32	1.4
DC-11E	Clinker Loadout Silos	PM	1.0	4.3
		PM <sub>10</sub>	1.0	4.3
DC-11F	Clinker Loadout	PM	0.73	3.2
		PM <sub>10</sub>	0.73	3.2
DC-13	Clinker Storage Building	PM	3.0	13.0
		PM <sub>10</sub>	3.0	13.0
DC-13A	Fringe Bin	PM	0.65	2.8
		PM <sub>10</sub>	0.65	2.8
DC-20	Clinker Fines Dust Bin	PM	0.22	0.95
		PM <sub>10</sub>	0.22	0.95
FUG-1	Coal Stockpile and Material Handling (10)	PM	-	1.82
		PM <sub>10</sub>	-	0.91
FUG-2	Iron Stockpile and Material Handling (10)	PM	-	0.84
		PM <sub>10</sub>	-	0.44
FUG-3	Sand Stockpile and Material Handling (10)	PM	-	1.39
		PM <sub>10</sub>	-	0.70
FUG-5	Street Sweeper Dump and Material Handling (10)	PM	-	0.40
		PM <sub>10</sub>	-	0.20
FUG-11	Belt 104/105 Fugitives from Raw Material Storage Building (10)	PM	0.04	0.05
		PM <sub>10</sub>	0.01	0.02
		PM <sub>2.5</sub>	<0.01	<0.01
MSSFUG	ILE Maintenance Fugitives (10)	NO <sub>x</sub>	0.13	<0.01
		CO	1.84	0.02
		VOC	0.36	<0.01
		PM	0.68	0.17
		PM <sub>10</sub>	0.31	0.09

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		PM <sub>2.5</sub>	0.06	0.03
		SO <sub>2</sub>	<0.01	<0.01

EPN Emission Rates for Kiln #2 Sources				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
DC-38	Kiln #2 Exhaust Stack	PM	30.86	124.66
		PM <sub>10</sub>	30.15	121.53
		PM <sub>2.5</sub>	28.41	113.91
		NO <sub>x</sub> (12)	275.55	1099.59
		SO <sub>2</sub> (12)	66.00	263.55
		VOC	84.15	183.96
		CO (12)	495.00	1971.90
		H <sub>2</sub> SO <sub>4</sub>	181.50	91.51
		HCl (12)	3.38	14.79
		NH <sub>3</sub> (12)	44.84	33.24
		Pb	0.01	0.05
		Hg (11)	<0.01	0.01
DC-33	Bucket Elevator Baghouse Stack	PM	0.07	0.31
		PM <sub>10</sub>	0.07	0.31
		PM <sub>2.5</sub>	0.01	0.05
DC-34	Blend Silo Baghouse Stack	PM	0.08	0.37
		PM <sub>10</sub>	0.08	0.37
		PM <sub>2.5</sub>	0.01	0.06
DC-35-1	Air Slide Baghouse 1 Stack	PM	0.03	0.14
		PM <sub>10</sub>	0.03	0.14
		PM <sub>2.5</sub>	<0.01	0.02
DC-35-2	Air Slide Baghouse 2 Stack	PM	0.11	0.49
		PM <sub>10</sub>	0.11	0.49

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		PM <sub>2.5</sub>	0.02	0.07
DC-36	Kiln Feed Baghouse Stack	PM	0.04	0.17
		PM <sub>10</sub>	0.04	0.17
		PM <sub>2.5</sub>	<0.01	0.03
DC-37	Lime Bin Baghouse Stack	PM	0.02	0.09
		PM <sub>10</sub>	0.02	0.09
		PM <sub>2.5</sub>	<0.01	0.01
DC-39	Kiln Dust Baghouse Stack	PM	0.03	0.15
		PM <sub>10</sub>	0.03	0.15
		PM <sub>2.5</sub>	<0.01	0.02
DC-40	Kiln Dust Conveyance Baghouse Stack	PM	0.03	0.11
		PM <sub>10</sub>	0.03	0.11
		PM <sub>2.5</sub>	<0.01	0.02
DC-41	Kiln By-Pass Dust Bin Baghouse Stack	PM	0.16	0.69
		PM <sub>10</sub>	0.16	0.69
		PM <sub>2.5</sub>	0.02	0.10
DC-42-2	Clinker Cooler Pan Conveyor Baghouse No. 2 Stack	PM	0.06	0.26
		PM <sub>10</sub>	0.06	0.26
		PM <sub>2.5</sub>	<0.01	0.04
DC-47	Kiln Dust Bin Baghouse Stack	PM	0.31	1.37
		PM <sub>10</sub>	0.31	1.37
		PM <sub>2.5</sub>	0.05	0.21
DC-52	Kiln Dust Load Out Baghouse Stack	PM	0.05	0.20
		PM <sub>10</sub>	0.05	0.20
		PM <sub>2.5</sub>	<0.01	0.03
DC-51-1	Cement Silos Baghouse 1 Stack	PM	0.54	2.35
		PM <sub>10</sub>	0.54	2.35
		PM <sub>2.5</sub>	0.08	0.36
DC-51-2	Cement Silos Baghouse 2 Stack	PM	0.54	2.35

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		PM <sub>10</sub>	0.54	2.35
		PM <sub>2.5</sub>	0.08	0.36
DC-53	By-Pass Dust Load Out Baghouse 1 Stack	PM	0.04	0.16
		PM <sub>10</sub>	0.04	0.16
		PM <sub>2.5</sub>	<0.01	0.02
DC-54-1	Load Out Baghouse 1 Stack	PM	<0.01	0.03
		PM <sub>10</sub>	<0.01	0.03
		PM <sub>2.5</sub>	<0.01	<0.01
DC-54-2	Load Out Baghouse 2 Stack	PM	<0.01	0.03
		PM <sub>10</sub>	<0.01	0.03
		PM <sub>2.5</sub>	<0.01	<0.01
DC-57-1	Solid Fuel Hopper Baghouse 1 Stack	PM	0.02	0.09
		PM <sub>10</sub>	0.02	0.09
		PM <sub>2.5</sub>	<0.01	0.01
DC-57-2	Solid Fuel Hopper Baghouse 2 Stack	PM	0.02	0.09
		PM <sub>10</sub>	0.02	0.09
		PM <sub>2.5</sub>	<0.01	0.01
DC-25	Crusher Baghouse Stack	PM	<0.01	0.01
		PM <sub>10</sub>	<0.01	0.01
		PM <sub>2.5</sub>	<0.01	<0.01
DC-26	Raw Material Transfer Tower Baghouse Stack	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
DC-28	Raw Material Additives Transfer Tower Baghouse Stack	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
DC-28-1	Raw Material Additives Transfer Baghouse Stack	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01

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DC-27	Raw Material Additives Baghouse Stack	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
DC-29-1	Raw Bin Baghouse No. 1 Stack	PM	<0.01	0.01
		PM <sub>10</sub>	<0.01	0.01
		PM <sub>2.5</sub>	<0.01	<0.01
DC-29-2	Raw Bin Baghouse No. 2 Stack	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
DC-30-1	Raw Mill Feed Belt Baghouse No. 1 Stack	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
DC-30-2	Raw Mill Feed Belt Baghouse No. 2 Stack	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
DC-30-3	Raw Mill Feed Belt Baghouse No. 3 Stack	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
DC-31	Raw Mill Baghouse Stack	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
DC-32	Raw Mill Recirculation Baghouse Stack	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
DC-42-1	Clinker Cooler Pan Conveyor Baghouse No. 1	PM	<0.01	0.01
		PM <sub>10</sub>	<0.01	0.01
		PM <sub>2.5</sub>	<0.01	<0.01
DC-43	Clinker Storage & Off- Spec Bin Baghouse Stack	PM	<0.01	0.02
		PM <sub>10</sub>	<0.01	0.02

Emission Sources - Maximum Allowable Emission Rates

		PM <sub>2.5</sub>	<0.01	<0.01
DC-44-1	Clinker Feed Baghouse No. 1 Stack	PM	0.01	0.05
		PM <sub>10</sub>	0.01	0.05
		PM <sub>2.5</sub>	<0.01	<0.01
DC-44-2	Clinker Feed Baghouse No. 2 Stack	PM	0.01	0.05
		PM <sub>10</sub>	0.01	0.05
		PM <sub>2.5</sub>	<0.01	<0.01
DC-55	Solid Fuel Bin Baghouse Stack	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
DC-56	Solid Fuel Feed Baghouse Stack	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
K2FUG-1	Drop to Additives Hopper (10)	PM	<0.01	0.03
		PM <sub>10</sub>	<0.01	0.01
		PM <sub>2.5</sub>	<0.01	<0.01
K2FUG-2	Off-Spec Belt Loading (10)	PM	0.13	0.58
		PM <sub>10</sub>	0.05	0.21
		PM <sub>2.5</sub>	<0.01	0.03
K2FUG-3	Off-Spec Truck Loading (10)	PM	0.13	0.58
		PM <sub>10</sub>	0.05	0.21
		PM <sub>2.5</sub>	<0.01	0.03
K2LIMESTN1	Limestone Stockpile 1 (10)	PM	-	0.13
		PM <sub>10</sub>	-	0.07
		PM <sub>2.5</sub>	-	0.01
K2LIMESTN2	Limestone Stockpile 2 (10)	PM	-	0.13
		PM <sub>10</sub>	-	0.07
		PM <sub>2.5</sub>	-	0.01
K2ALUMINA1	Alumina Source Stockpile 1 (10)	PM	-	0.12

Emission Sources - Maximum Allowable Emission Rates

		PM <sub>10</sub>	-	0.06
		PM <sub>2.5</sub>	-	<0.01
K2ALUMINA2	Alumina Source Stockpile 2 (10)	PM	-	0.11
		PM <sub>10</sub>	-	0.05
		PM <sub>2.5</sub>	-	<0.01
K2SILICA1	Silica Source Stockpile (10)	PM	-	0.12
		PM <sub>10</sub>	-	0.06
		PM <sub>2.5</sub>	-	<0.01
K2IRON1	Iron Source Stockpile (10)	PM	-	0.06
		PM <sub>10</sub>	-	0.03
		PM <sub>2.5</sub>	-	<0.01
K2ALTFUEL	Alternative Fuels Stockpile (10)	PM	-	0.02
		PM <sub>10</sub>	-	<0.01
		PM <sub>2.5</sub>	-	<0.01
DC-58	Kiln #2 Clinker Cooler Baghouse Stack	PM	1.22	5.36
		PM <sub>10</sub>	1.22	5.36
		PM <sub>2.5</sub>	0.08	0.34
K2FUG-7	Solid Fuel Receiving (10)	PM	0.01	0.05
		PM <sub>10</sub>	<0.01	0.02
		PM <sub>2.5</sub>	<0.01	<0.01
K2FUG-8	Alternative Fuels Receiving (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
K2FUG-9	Truck unload to Limestone Hopper (10)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
K2MARL1	Marl Stockpile 1 (10)	PM	-	0.07
		PM <sub>10</sub>	-	0.04
		PM <sub>2.5</sub>	-	<0.01

Emission Sources - Maximum Allowable Emission Rates

K2MARL2	Marl Stockpile 2 (10)	PM	-	0.07
		PM <sub>10</sub>	-	0.04
		PM <sub>2.5</sub>	-	<0.01
FMC DROP-1	Clinker Drop to Breaker/Feeder (10)	PM	0.07	0.33
		PM <sub>10</sub>	0.03	0.12
		PM <sub>2.5</sub>	0.01	0.02
FMD DROP-1	Syn Gyp Drop to Hopper (10)	PM	0.07	0.33
		PM <sub>10</sub>	0.03	0.12
		PM <sub>2.5</sub>	0.01	0.02
EP-002	Clinker Feed Baghouse Stack	PM	0.03	0.13
		PM <sub>10</sub>	0.03	0.13
		PM <sub>2.5</sub>	0.01	0.02
EP-010	FM Feed Transfer Baghouse Stack	PM	0.11	0.49
		PM <sub>10</sub>	0.11	0.49
		PM <sub>2.5</sub>	0.02	0.07
EP-014	Bin Feed Belt Baghouse Stack	PM	0.04	0.16
		PM <sub>10</sub>	0.04	0.16
		PM <sub>2.5</sub>	0.01	0.02
EP-017	Feed Bin Transfer Baghouse 1 Stack	PM	0.04	0.16
		PM <sub>10</sub>	0.04	0.16
		PM <sub>2.5</sub>	0.01	0.02
EP-005	Feed Bin Transfer Baghouse 2 Stack	PM	0.05	0.21
		PM <sub>10</sub>	0.05	0.21
		PM <sub>2.5</sub>	0.01	0.03
EP-011	Feed Bin Bin Vent	PM	0.03	0.11
		PM <sub>10</sub>	0.03	0.11
		PM <sub>2.5</sub>	0.01	0.02
EP-104	Finish Mill C Reject Bin Baghouse Stack	PM	0.11	0.47
		PM <sub>10</sub>	0.11	0.47



Emission Sources - Maximum Allowable Emission Rates

		PM <sub>2.5</sub>	0.02	0.07
EP-107	Finish Mill C Bucket Elevator Baghouse Stack	PM	0.06	0.26
		PM <sub>10</sub>	0.06	0.26
		PM <sub>2.5</sub>	0.01	0.04
EP-111	Finish Mill C Recirculation Baghouse Stack	PM	0.05	0.24
		PM <sub>10</sub>	0.05	0.24
		PM <sub>2.5</sub>	0.01	0.04
EP-201	Finish Mill C Baghouse Stack (Hot Gas Generator) (5.5 MMBtu/hr)	PM	1.05	4.60
		PM <sub>10</sub>	1.02	4.47
		PM <sub>2.5</sub>	0.15	0.68
		NO <sub>x</sub>	0.28	1.20
		SO <sub>2</sub>	0.01	0.01
		VOC	0.03	0.13
		CO	0.12	0.53
EP-304	Finish Mill C Discharge Baghouse Stack	PM	0.03	0.11
		PM <sub>10</sub>	0.03	0.11
		PM <sub>2.5</sub>	0.01	0.02
EP-403	Silo Bin Vent 3	PM	0.14	0.59
		PM <sub>10</sub>	0.14	0.59
		PM <sub>2.5</sub>	0.02	0.09
EP-405	Silo Bin Vent 5	PM	0.14	0.59
		PM <sub>10</sub>	0.14	0.59
		PM <sub>2.5</sub>	0.02	0.09
EP-020	Finish Mill D Feed Baghouse Stack	PM	0.04	0.16
		PM <sub>10</sub>	0.04	0.16
		PM <sub>2.5</sub>	0.01	0.02
EP-023	Finish Mill D Feed Baghouse Stack	PM	0.04	0.16
		PM <sub>10</sub>	0.04	0.16
		PM <sub>2.5</sub>	0.01	0.02

Emission Sources - Maximum Allowable Emission Rates

EP-118	Finish Mill D Reject Bin Baghouse Stack	PM	0.11	0.47
		PM <sub>10</sub>	0.11	0.47
		PM <sub>2.5</sub>	0.02	0.07
EP-121	Finish Mill D Bucket Elevator Baghouse Stack	PM	0.06	0.26
		PM <sub>10</sub>	0.06	0.26
		PM <sub>2.5</sub>	0.01	0.04
EP-125	Finish Mill D Recirculation Baghouse Stack	PM	0.05	0.24
		PM <sub>10</sub>	0.05	0.24
		PM <sub>2.5</sub>	0.01	0.04
EP-202	Finish Mill D Baghouse Stack (Hot Gas Generator) (5.5 MMBtu/hr)	PM	1.05	4.60
		PM <sub>10</sub>	1.02	4.47
		PM <sub>2.5</sub>	0.15	0.68
		NO <sub>x</sub>	0.28	1.20
		SO <sub>2</sub>	0.01	0.01
		VOC	0.03	0.13
		CO	0.12	0.53
EP-307	Finish Mill D Discharge Baghouse Stack	PM	0.03	0.11
		PM <sub>10</sub>	0.03	0.11
		PM <sub>2.5</sub>	0.01	0.02
FMC DROP-2	Syn Gyp Drop to Hopper (10)	PM	0.01	0.01
		PM <sub>10</sub>	0.01	0.01
		PM <sub>2.5</sub>	0.01	0.01
FMD DROP-2	Syn Gyp Drop to Hopper (10)	PM	0.01	0.01
		PM <sub>10</sub>	0.01	0.01
		PM <sub>2.5</sub>	0.01	0.01
K2ENG1	K2 Emergency Engine	PM	0.05	<0.01
		PM <sub>10</sub>	0.05	<0.01
		PM <sub>2.5</sub>	0.05	<0.01
		NO <sub>x</sub>	4.32	0.86

Emission Sources - Maximum Allowable Emission Rates

		SO <sub>2</sub>	0.04	<0.01
		VOC	0.53	0.11
		CO	4.32	0.86
K2MSSFUG1	All MSS Activities	PM	0.63	0.18
		PM <sub>10</sub>	0.32	0.09
		PM <sub>2.5</sub>	0.09	0.02
		NO <sub>x</sub>	0.89	0.45
		SO <sub>2</sub>	0.10	0.45
		VOC	0.15	0.45
		CO	0.56	0.45
K2NH3FUG2	Ammonia Piping Fugitives (10)	NH <sub>3</sub>	0.25	1.11
DIESELTK1	Engine Fuel Tank Vent	VOC	0.02	<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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1  
 NO<sub>x</sub> - total oxides of nitrogen  
 SO<sub>2</sub> - sulfur dioxide  
 PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented  
 PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented  
 PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter  
 CO - carbon monoxide  
 H<sub>2</sub>SO<sub>4</sub> - sulfuric acid  
 Pb - lead  
 HCl - hydrogen chloride  
 NH<sub>3</sub> - ammonia  
 Hg - mercury  
 HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Planned startup and shutdown emissions are included. Maintenance activities, except as specified in Special Condition Nos. 44 through 47 and Attachment A, are not authorized by this permit and will need separate authorization, unless the activity can meet the conditions of 30 TAC § 116.119.
- (6) Emissions from DC-4 must comply with New Source Performance Standard, Subpart F. Combined emissions from DC-2 and DC-9 must also comply with New Source Performance Standard, Subpart F.
- (7) The permit holder has committed to achieve a SO<sub>2</sub> limitation of 416 lbs/hr based on a 30-day rolling average as measured by CEMS no later than May 1, 2001.
- (8) PM allowables for prevention of significant deterioration permit, based on front-half PM emissions only as measured by the U.S. Environmental Protection Agency Method 5.
- (9) PM allowables for state permit, for PM emissions as defined in 30 TAC § 101.1.
- (10) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (11) 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

Emission Sources - Maximum Allowable Emission Rates

(representing only those hours during kiln operation which does not include hours of 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 day.

- (12) 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 all hours of kiln operation including 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 day.

Date: December 27, 2023

# Emission Sources - Maximum Allowable Emission Rates

Permit Number GHGPSDTX189

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)
DC-38	Kiln #2 Exhaust Stack	CO <sub>2</sub> (5)	1,276,824.33
		CH <sub>4</sub> (5)	63.85
		N <sub>2</sub> O (5)	9.28
		CO <sub>2</sub> e	1,281,187
EP-201	Finish Mill C Baghouse Stack (Hot Gas Generator)	CO <sub>2</sub> (5)	2,815.83
		CH <sub>4</sub> (5)	0.05
		N <sub>2</sub> O (5)	0.05
		CO <sub>2</sub> e	2,818.74
EP-202	Finish Mill D Baghouse Stack (Hot Gas Generator)	CO <sub>2</sub> (5)	2,815.83
		CH <sub>4</sub> (5)	0.05
		N <sub>2</sub> O (5)	0.05
		CO <sub>2</sub> e	2,818.74
K2ENG1	K2 Emergency Engine	CO <sub>2</sub> (5)	747
		CH <sub>4</sub> (5)	0.03
		N <sub>2</sub> O (5)	0.006
		CO <sub>2</sub> e	749.60
K2MSSFUG1	All MSS Activities	CO <sub>2</sub> (5)	0.47
		CH <sub>4</sub> (5)	1.09E-06
		N <sub>2</sub> O (5)	2.18E-07
		CO <sub>2</sub> e	0.47

- (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), and 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: December 27, 2023