## **Emission Sources - Maximum Allowable Emission Rates**

## Permit Numbers 3611D and PSDTX194M5

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**

<b>Emission Point</b>	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
No. (1)			lb/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
		СО	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
		HCI	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

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DC-4	Clinker Cooler (6)	PM	10.00	43.80
		PM <sub>10</sub>	10.00	43.80
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	РМ	3.0	13.0
		PM <sub>10</sub>	3.0	13.0
DC-8	Cement Bag Packhouse No. 1	РМ	1.84	8.1
		PM <sub>10</sub>	1.84	8.1
DC-10A	Finish Mill No. 2	РМ	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
		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

## Emission Sources - Maximum Allowable Emission Rates

PM <sub>10</sub>	DC-11E	Clinker Loadout Silos	PM	1.0	4.3
PM			PM <sub>10</sub>	1.0	4.3
DC-13	DC-11F	Clinker Loadout	PM	0.73	3.2
PM10   3.0   13.0   13.0   DC-13A   Fringe Bin   PM   0.65   2.8   PM10   0.22   0.95   PM10   0.91   PM1			PM <sub>10</sub>	0.73	3.2
DC-13A   Fringe Bin   PM   0.65   2.8	DC-13	Clinker Storage Building	PM	3.0	13.0
PM10   0.65   2.8     DC-20   Clinker Fines Dust Bin   PM   0.22   0.95     PM10   - 0.84     PM10   - 0.91     PM   - 0.84     PM10   - 0.84     PM10   - 0.44     PM10   - 0.70     PM   - 0.40     PM10   - 0.24     PM10   - 0.20     PM10   - 0.20     PM10   - 0.20     PM10   - 0.20     PM10   - 0.01     PM10   0.01   0.02     PM25   <0.01   <0.01     PM25   <0.01   <0.01     PM10   0.68   0.17     PM10   0.31   0.09     PM10   PM10   0.31   0.09     PM25   0.06   0.03     PM25   0.06   0.05     PM25   0.06			PM <sub>10</sub>	3.0	13.0
DC-20   Clinker Fines Dust Bin   PM   0.22   0.95     PM10   0.22   0.95     PM10   0.22   0.95     PM10   0.22   0.95     PM10   - 0.91     PM10   - 0.91     PM10   - 0.91     PM10   - 0.91     PM10   - 0.84     PM10   - 0.44     PM10   - 0.44     PM10   - 0.70     PM10   - 0.40     PM10   - 0.20     PM25   < 0.01   < 0.01     PM25   < 0.01   < 0.01     PM25   < 0.01   < 0.01     PM25   < 0.01     PM25   < 0.01   < 0.01     PM25   < 0.06   0.03     PM25   < 0.06   0.05     PM25   < 0.06   0.	DC-13A	Fringe Bin	РМ	0.65	2.8
FUG-1			PM <sub>10</sub>	0.65	2.8
FUG-1 Coal Stockpile and Material Handling (10) PM - 0.91  FUG-2 Iron Stockpile and Material Handling (10) PM - 0.84  FUG-3 Sand Stockpile and Material PM - 0.44  FUG-3 Road Emissions (10) PM - 1.39  FUG-4 Road Emissions (10) PM - 0.70  FUG-5 Street Sweeper Dump and Material Handling (10) PM - 0.40  FUG-11 Belt 104/105 Fugitives from Raw Material Storage Building (10) PM 0.04  MSSFUG ILE Maintenance Fugitives (10) NOx 0.13 < 0.01  CO 1.84 0.02  VOC 0.36 < 0.01  PM 0.68 0.17  PM 0.09  PM 0.068 0.17  PM 0.09	DC-20	Clinker Fines Dust Bin	РМ	0.22	0.95
Tron Stockpile and Material Handling (10)			PM <sub>10</sub>	0.22	0.95
FUG-2   Iron Stockpile and Material Handling (10)   PM   -	FUG-1	=	РМ	-	1.82
Cooling		(10)	PM <sub>10</sub>	-	0.91
FUG-3 Sand Stockpile and Material Handling (10)  FUG-4 Road Emissions (10)  FUG-5 Street Sweeper Dump and Material Handling (10)  FUG-11 Belt 104/105 Fugitives from Raw Material Storage Building (10)  MSSFUG  MSSFUG  FUG-5 ILE Maintenance Fugitives (10)  MSSFUG  FUG-11 Remainder Fugitives (10)  FUG-12 Remainder Fugitives (10)  FUG-13 Remainder Fugitives (10)  FUG-14 Remainder Fugitives (10)  FUG-15 Remainder Fugitives (10)  FUG-16 Remainder Fugitives (10)  FUG-17 Remainder Fugitives (10)  FUG-18 Remainder Fugitives (10)  F	FUG-2		РМ	-	0.84
Handling (10)  FUG-4  Road Emissions (10)  PM - 2.43  PM <sub>10</sub> - 2.43  FUG-5  Street Sweeper Dump and Material Handling (10)  FUG-11  Belt 104/105 Fugitives from Raw Material Storage Building (10)  MSSFUG  BLE Maintenance Fugitives (10)  MSSFUG  Handling (10)  PM - 0.40  PM - 0.20  PM - 0.20  PM - 0.04  0.05  PM - 0.01  0.01  0.02  PM <sub>2.5</sub> CO - 1.84  0.02  VOC - 0.36  CO - 0.31  PM - 0.68  0.17  PM - 0.09  PM - 0.09  PM - 0.09  PM - 0.01  CO - 0.31  CO - 0.31  CO - 0.31  CO - 0.01  PM - 0.06  CO - 0.31  CO - 0.01  CO - 0.00  CO - 0.00		(10)	PM <sub>10</sub>	-	0.44
FUG-4 Road Emissions (10)  FUG-5 Street Sweeper Dump and Material Handling (10)  FUG-11 Belt 104/105 Fugitives from Raw Material Storage Building (10)  MSSFUG  ILE Maintenance Fugitives (10)  MSSFUG  Road Emissions (10)  PM  PM  - 2.43  PM  - 0.40  PM  PM  0.04  0.05  PM  0.01  0.02  PM  0.01  CO  1.84  0.02  VOC  0.36  0.01  PM  0.68  0.17  PM  PM  0.09  PM  0.09  PM  0.00  OOD  OOD  OOD  OOD  OOD  OOD  OO	FUG-3		PM	-	1.39
FUG-5 Street Sweeper Dump and Material Handling (10) PM - 0.40 PM <sub>10</sub> - 0.20 PM <sub>10</sub> - 0.20 PM <sub>10</sub> - 0.20 PM <sub>10</sub> - 0.05 PM <sub>10</sub> 0.01 0.02 PM <sub>10</sub> 0.01 0.02 PM <sub>2.5</sub> <0.01 <0.01 VOC 0.36 <0.01 CO VOC 0.36 <0.01 PM <sub>10</sub> 0.01 0.02 PM <sub>2.5</sub> 0.06 0.03 PM <sub>2.5</sub> 0.06 0.03		Handling (10)	PM <sub>10</sub>	-	0.70
FUG-5 Street Sweeper Dump and Material Handling (10) PM <sub>10</sub> - 0.20  FUG-11 Belt 104/105 Fugitives from Raw Material Storage Building (10) 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 <sub>10</sub> 0.68 0.17  PM <sub>10</sub> 0.31 0.09  PM <sub>2.5</sub> 0.06 0.03	FUG-4	Road Emissions (10)	РМ	-	2.43
Handling (10)  PM <sub>10</sub> - 0.20  FUG-11  Belt 104/105 Fugitives from Raw Material Storage Building (10)  PM <sub>10</sub> - 0.04  PM <sub>10</sub> 0.01 0.02  PM <sub>2.5</sub> <-0.01  CO 1.84 0.02  VOC 0.36 - 0.01  PM 0.68 0.17  PM 0.09  PM 0.001			PM <sub>10</sub>	-	2.43
FUG-11 Belt 104/105 Fugitives from Raw Material Storage Building (10)	FUG-5		PM	-	0.40
Material Storage Building (10)  PM <sub>10</sub> 0.01 0.02  PM <sub>2.5</sub> <-0.01  NO <sub>x</sub> 0.13 -0.01  CO 1.84 0.02  VOC 0.36 -0.01  PM 0.68 0.17  PM 0.68 PM 0.09 PM 0.09 PM 0.00		Handling (10)	PM <sub>10</sub>	-	0.20
MSSFUG ILE Maintenance Fugitives (10)	FUG-11		РМ	0.04	0.05
MSSFUG ILE Maintenance Fugitives (10)		Material Storage Building (10)	PM <sub>10</sub>	0.01	0.02
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			PM <sub>2.5</sub>	<0.01	<0.01
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	MSSFUG	ILE Maintenance Fugitives (10)	NO <sub>x</sub>	0.13	<0.01
PM       0.68       0.17         PM <sub>10</sub> 0.31       0.09         PM <sub>2.5</sub> 0.06       0.03			СО	1.84	0.02
PM <sub>10</sub> 0.31       0.09         PM <sub>2.5</sub> 0.06       0.03			VOC	0.36	<0.01
PM <sub>2.5</sub> 0.06 0.03			PM	0.68	0.17
			PM <sub>10</sub>	0.31	0.09
50 5001 5001			PM <sub>2.5</sub>	0.06	0.03
SO <sub>2</sub>   <0.01   <0.01			SO <sub>2</sub>	<0.01	<0.01

<sup>(1)</sup> Emission point identification - either specific equipment designation or emission point number from plot plan.

<sup>(2)</sup> Specific point source name. For fugitive sources, use area name or fugitive source name.

<sup>(3)</sup> VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1 NO<sub>x</sub> - total oxides of nitrogen

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#### Emission Sources - Maximum Allowable Emission Rates

SO<sub>2</sub> - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including  $PM_{10}$  and  $PM_{2.5}$ , 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
HCl - hydrogen chloride
Pb - lead or lead compounds

H<sub>2</sub>SO<sub>4</sub> - sulfuric acid

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

- (5) Planned maintenance, startup, and shutdown emissions are included.
- (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  $SO_2$  limitation of 416 lbs/hr based on a 24-hour 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.

Data:	August 25, 2017
Date:	August 25, 2014