Emission Sources - Maximum Allowable Emission Rates

Permit Number 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

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_{10}	-	1.00
		$PM_{2.5}$	-	0.15
FUG-1B	Solid Fuel Stockpile (10)	PM	-	0.61
		PM_{10}	-	0.31
		$PM_{2.5}$	-	0.05
FUG-2A	Iron Stockpile (10)	PM	-	0.45
		PM_{10}	-	0.23
		$PM_{2.5}$	-	0.03
FUG-2B	Iron Stockpile (10)	PM	-	0.18
		PM_{10}	-	0.09
		$PM_{2.5}$	-	0.01
FUG-2C	Iron Stockpile (10)	PM	-	0.21
		PM_{10}	-	0.10
		$PM_{2.5}$	-	0.02
FUG-3A	Sand Stockpile (10)	PM	-	0.46
		PM_{10}	-	0.23
		$PM_{2.5}$	-	0.03
FUG-5	Street Sweeper Dump (10)	PM	-	<0.01
		PM_{10}	-	<0.01
		$PM_{2.5}$	-	<0.01
FUG-7A	Gypsum Stockpile (10)	PM	-	0.14
		PM_{10}	-	0.07
		$PM_{2.5}$	-	0.01
FUG-7B	Gypsum Stockpile (10)	PM	-	0.38
		PM_{10}	-	0.19
		$PM_{2.5}$	-	0.03
FUG-7C	Gypsum Stockpile (10)	PM	-	0.03
		PM_{10}	-	0.02

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	-	<0.01
FUG-11	Belt 104/105 Fugitives from Raw Material Storage Building (10)	PM	0.04	0.05
		PM_{10}	0.01	0.02
		$PM_{2.5}$	<0.01	<0.01
FUG-13	Clinker Stockpile (10)	PM	-	0.39
		PM_{10}	-	0.19
		$PM_{2.5}$	-	0.03
RAWBLDG	Limestone Material Handling (10)	PM	0.10	0.45
		PM_{10}	0.05	0.23
		$PM_{2.5}$	<0.01	0.03
SOLIDFUEL	Solid Fuel Storage Building (10)	PM	0.06	0.02
		PM_{10}	0.02	<0.01
		$PM_{2.5}$	<0.01	<0.01
RAWBLDG	Raw Material Storage Building (10)	PM	0.60	0.11
		PM_{10}	0.22	0.04
		$PM_{2.5}$	0.03	<0.01
RAWBINS	Raw Material Bins (10)	PM	<0.01	0.03
		PM_{10}	<0.01	0.01
		$PM_{2.5}$	<0.01	<0.01
RAWHANDLING	Raw Material Handling (10)	PM	1.78	0.42
		PM_{10}	0.65	0.14
		$PM_{2.5}$	0.10	0.03
RAWMILL1	Raw Mill 1 (10)	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
RAWMILL2	Raw Mill 2 (10)	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
DB-1	Dropout Box (10)	PM	0.02	0.10
		PM_{10}	<0.01	0.04
		$PM_{2.5}$	<0.01	<0.01
MSSFUG	ILE Maintenance Fugitives (10)	NO_x	0.13	<0.01
		CO	1.84	0.02
		VOC	0.36	<0.01
		PM	0.68	0.17
		PM_{10}	0.31	0.09

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.06	0.03
		SO_2	<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_{10}	0.81	3.54
		$PM_{2.5}$	0.12	0.54
DC-1C	Belt 202B/213 Dust Collector Stack	PM	0.04	0.18
		PM_{10}	0.04	0.18
		$PM_{2.5}$	<0.01	0.03
DC-2 and DC-9	Kiln #1 Exhaust Stacks	NO_x (30-day rolling average lb/hr)	600	2628
		SO_2 (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_{10}	63.37	225.80
		$PM_{2.5}$	58.69	205.33
		CO	5298.00	5528.00
		VOC	64.54	229.63
		H_2SO_4	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_{10}	0.61	2.65
		$PM_{2.5}$	0.09	0.40
DC-3B	Kiln Feed System Dust Collector Stack	PM	0.18	0.78
		PM_{10}	0.18	0.78
		$PM_{2.5}$	0.03	0.12
DC-3C	Blend Silo No. 3 Dust Collector Stack	PM	0.61	2.65
		PM_{10}	0.61	2.65
		$PM_{2.5}$	0.09	0.40
DC-3D1	Kiln Feed Pump Dust Collector Stack	PM	0.04	0.18
		PM_{10}	0.04	0.18

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	<0.01	0.03
DC-3D2	Kiln Feed Pump Dust Collector Stack	PM	0.04	0.18
		PM_{10}	0.04	0.18
		$PM_{2.5}$	<0.01	0.03
DC-3D3	Kiln Feed Pump Dust Collector Stack	PM	0.04	0.18
		PM_{10}	0.04	0.18
		$PM_{2.5}$	<0.01	0.03
DC-4	Clinker Cooler Dust Collector Stack (6)	PM	6.00	26.28
		PM_{10}	6.00	26.28
		$PM_{2.5}$	0.91	3.98
DC-4A-1	Conveyor 413/448 Dust Collector Stack	PM	0.13	0.58
		PM_{10}	0.13	0.58
		$PM_{2.5}$	0.02	0.09
DC-5	Finish Mill No. 1 Dust Collector Stack	PM	0.61	2.65
		PM_{10}	0.61	2.65
		$PM_{2.5}$	0.09	0.40
DC-5A-1	Finish Feed No. 1 Feed Belt 806 Dust Collector Stack	PM	0.24	1.06
		PM_{10}	0.24	1.06
		$PM_{2.5}$	0.04	0.16
DC-6A	Finish Cement Silos A 1-9 Dust Collector Stack	PM	0.36	1.56
		PM_{10}	0.36	1.56
		$PM_{2.5}$	0.05	0.24
DC-6B	Rail Bulk Loadout - A Silos Dust Collector Stack	PM	0.01	0.05
		PM_{10}	0.01	0.05
		$PM_{2.5}$	<0.01	<0.01
DC-6C	Truck Bulk Loadout - A Silos Dust Collector Stack	PM	0.01	0.05
		PM_{10}	0.01	0.05
		$PM_{2.5}$	<0.01	<0.01
DC-6D	Masonry Cement Loading Dust Collector Stack	PM	0.10	0.42
		PM_{10}	0.10	0.42
		$PM_{2.5}$	0.01	0.06
DC-7B	Finish Mill No. 1 Feed Silos Dust Collector Stack	PM	0.81	3.54
		PM_{10}	0.81	3.54
		$PM_{2.5}$	0.12	0.54
DC-8	Cement Bag Packhouse No. 1 Dust Collector Stack	PM	0.46	2.00
		PM_{10}	0.46	2.00

Emission Sources - Maximum Allowable Emission Rates

		$PM_{2.5}$	0.07	0.30
DC-10A	Finish Mill No. 2 Dust Collector Stack	PM	0.55	2.40
		PM_{10}	0.55	2.40
		$PM_{2.5}$	0.08	0.36
DC-10B	Finish Mill No. 2 Dust Collector Stack	PM	1.94	8.49
		PM_{10}	1.94	8.49
		$PM_{2.5}$	0.29	1.29
DC-10C-1	Finish Mill No. 2 Feed Belt 806B Dust Collector Stack	PM	0.24	1.06
		PM_{10}	0.24	1.06
		$PM_{2.5}$	0.04	0.16
DC-11A	Finish Cement Silos B 4-7 Dust Collector Stack	PM	0.36	1.56
		PM_{10}	0.36	1.56
		$PM_{2.5}$	0.05	0.24
DC-11B	Finish Cement Silos B 1, 2, 3, and 8 Dust Collector Stack	PM	0.36	1.56
		PM_{10}	0.36	1.56
		$PM_{2.5}$	0.05	0.24
DC-11C	Truck Bulk Loadout No. 1 - B Silos Dust Collector Stack	PM	0.01	0.05
		PM_{10}	0.01	0.05
		$PM_{2.5}$	<0.01	<0.01
DC-11D	Truck Bulk Loadout No. 2 - B Silos Dust Collector Stack	PM	0.01	0.05
		PM_{10}	0.01	0.05
		$PM_{2.5}$	<0.01	<0.01
DC-11E	Clinker Loadout Silos Dust Collector Stack	PM	0.24	1.06
		PM_{10}	0.24	1.06
		$PM_{2.5}$	0.04	0.16
DC-13	Clinker Storage Building Dust Collector Stack	PM	0.89	3.90
		PM_{10}	0.89	3.90
		$PM_{2.5}$	0.13	0.59
DC-13A	Fringe Bin Dust Collector Stack	PM	0.16	0.71
		PM_{10}	0.16	0.71
		$PM_{2.5}$	0.02	0.11
DC-20	Clinker Fines Dust Bin Dust Collector Stack	PM	0.11	0.47
		PM_{10}	0.11	0.47
		$PM_{2.5}$	0.02	0.07

EPN Emission Rates Prior to 2019 Amendment Application

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
DC-1A	Raw Crusher	PM	3.24	14.16
		PM_{10}	3.24	14.16
DC-1C	Belt 202B/213	PM	0.16	0.71
		PM_{10}	0.16	0.71
DC-2 and DC-9	Kiln Exhaust	NO_x (30-day rolling average lb/hr)	600	2628
		SO_2 (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_2SO_4	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_{10}	2.43	10.60
DC-3B	Kiln Feed System	PM	0.71	3.10
		PM_{10}	0.71	3.10
DC-3C	Blend Silo No. 3	PM	2.43	10.60
		PM_{10}	2.43	10.60
DC-3D1	Kiln Feed Pump	PM	0.16	0.71
		PM_{10}	0.16	0.71
DC-3D2	Kiln Feed Pump	PM	0.16	0.71
		PM_{10}	0.16	0.71
DC-3D3	Kiln Feed Pump	PM	0.16	0.71
		PM_{10}	0.16	0.71
DC-4	Clinker Cooler (6)	PM	10.00	43.80
		PM_{10}	10.00	43.80
DC-4A-1	Conveyor 413/448	PM	0.45	2.00
		PM_{10}	0.45	2.00
DC-5	Finish Mill No. 1	PM	7.8	34.2
		PM_{10}	7.8	34.2
DC-5A-1	Finish Feed No. 1 Feed Belt 806	PM	0.81	3.5
		PM_{10}	0.81	3.5

Emission Sources - Maximum Allowable Emission Rates

DC-6A	Finish Cement Silos A 1-9	PM	1.43	6.3
		PM_{10}	1.43	6.3
DC-6B	Rail Bulk Loadout - A Silos	PM	0.32	1.4
		PM_{10}	0.32	1.4
DC-6C	Truck Bulk Loadout - A Silos	PM	0.32	1.4
		PM_{10}	0.32	1.4
DC-6D	Masonry Cement Loading	PM	0.32	1.4
		PM_{10}	0.32	1.4
DC-7B	Finish Mill No. 1 Feed Silos	PM	3.0	13.0
		PM_{10}	3.0	13.0
DC-8	Cement Bag Packhouse No. 1	PM	1.84	8.1
		PM_{10}	1.84	8.1
DC-10A	Finish Mill No. 2	PM	1.5	6.6
		PM_{10}	1.5	6.6
DC-10B	Finish Mill No. 2	PM	5.3	23.0
		PM_{10}	5.3	23.0
DC-10C-1	Finish Mill No. 2 Feed Belt 806B	PM	0.81	3.5
		PM_{10}	0.81	3.5
DC-11A	Finish Cement Silos B 4-7	PM	1.43	6.3
		PM_{10}	1.43	6.3
DC-11B	Finish Cement Silos B 1, 2, 3, and 8	PM	1.43	6.3
		PM_{10}	1.43	6.3
DC-11C	Truck Bulk Loadout No. 1 B Silos	PM	0.32	1.4
		PM_{10}	0.32	1.4
DC-11D	Truck Bulk Loadout No. 2 B Silos	PM	0.32	1.4
		PM_{10}	0.32	1.4
DC-11E	Clinker Loadout Silos	PM	1.0	4.3
		PM_{10}	1.0	4.3
DC-11F	Clinker Loadout	PM	0.73	3.2
		PM_{10}	0.73	3.2
DC-13	Clinker Storage Building	PM	3.0	13.0
		PM_{10}	3.0	13.0
DC-13A	Fringe Bin	PM	0.65	2.8
		PM_{10}	0.65	2.8
DC-20	Clinker Fines Dust Bin	PM	0.22	0.95
		PM_{10}	0.22	0.95

Emission Sources - Maximum Allowable Emission Rates

FUG-1	Coal Stockpile and Material Handling (10)	PM	-	1.82
		PM_{10}	-	0.91
FUG-2	Iron Stockpile and Material Handling (10)	PM	-	0.84
		PM_{10}	-	0.44
FUG-3	Sand Stockpile and Material Handling (10)	PM	-	1.39
		PM_{10}	-	0.70
FUG-5	Street Sweeper Dump and Material Handling (10)	PM	-	0.40
		PM_{10}	-	0.20
FUG-11	Belt 104/105 Fugitives from Raw Material Storage Building (10)	PM	0.04	0.05
		PM_{10}	0.01	0.02
		$PM_{2.5}$	<0.01	<0.01
MSSFUG	ILE Maintenance Fugitives (10)	NO_x	0.13	<0.01
		CO	1.84	0.02
		VOC	0.36	<0.01
		PM	0.68	0.17
		PM_{10}	0.31	0.09
		$PM_{2.5}$	0.06	0.03
		SO_2	<0.01	<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_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
H_2SO_4 - sulfuric acid
Pb - lead
HCl - hydrogen chloride
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 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 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.

Emission Sources - Maximum Allowable Emission Rates

Date: August 28, 2019