Emission Sources - Maximum Allowable Emission Rates

Permit Number 41418

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 (7)	
			lbs/hour	TPY
1	Kiln 1 Stack (5)	PM	4.34	7.89
		PM_{10}	3.93	7.15
		NO_x	1.58	2.88
		SO_2	3.03	5.51
		CO	5.42	9.86
		VOC	0.11	0.20
		HCl	0.77	1.40
		HF	1.67	3.04
2	Kiln 2 Stack (5)	PM	4.34	7.89
		PM_{10}	3.93	7.15
		NO_x	1.58	2.88
		SO_2	3.03	5.51
		CO	5.42	9.86
		VOC	0.11	0.20
		HCl	0.77	1.40
		HF	1.67	3.04
3	Kiln 3 Stack (5)	PM	4.34	7.89
		PM_{10}	3.93	7.15
		NO_x	1.58	2.88
		SO_2	3.03	5.51
		CO	5.42	9.86
		VOC	0.11	0.20
		HCl	0.77	1.40
		HF	1.67	3.04

Emission Sources – Maximum Allowable Emission Rates

4	Kiln 4 Stack (5)	PM	4.34	7.89
		PM_{10}	3.93	7.15
		NO_x	1.58	2.88
		SO_2	3.03	5.51
		CO	5.42	9.86
		VOC	0.11	0.20
		HCl	0.77	1.40
		HF	1.67	3.04
5	Kiln 5 Stack (5)	PM	4.34	7.89
		PM_{10}	3.93	7.15
		NO_x	1.58	2.88
		SO_2	3.03	5.51
		CO	5.42	9.86
		VOC	0.11	0.20
		HCl	0.77	1.40
		HF	1.67	3.04
6	Kiln 6 Stack (5)	PM	4.34	7.89
		PM_{10}	3.93	7.15
		NO_x	1.58	2.88
		SO_2	3.03	5.51
		CO	5.42	9.86
		VOC	0.11	0.20
		HCl	0.77	1.40
		HF	1.67	3.04
7	Kiln 1 Vent (5)	PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
		NO_x	< 0.01	< 0.01
		SO_2	< 0.01	< 0.01
		CO	< 0.01	< 0.01
		VOC	< 0.01	< 0.01

Emission Sources – Maximum Allowable Emission Rates

		HCl	< 0.01	< 0.01
		HF	< 0.01	< 0.01
8	Kiln 2 Vent (5)	PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
		NO_x	< 0.01	< 0.01
		SO_2	< 0.01	< 0.01
		CO	< 0.01	< 0.01
		VOC	< 0.01	< 0.01
		HCl	< 0.01	< 0.01
		HF	< 0.01	< 0.01
9	Kiln 3 Vent (5)	PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
		NO_x	< 0.01	< 0.01
		SO_2	< 0.01	< 0.01
		CO	< 0.01	< 0.01
		VOC	< 0.01	< 0.01
		HCl	< 0.01	< 0.01
		HF	< 0.01	< 0.01
10	Kiln 4 Vent (5)	PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
		NO_x	< 0.01	< 0.01
		SO_2	< 0.01	< 0.01
		CO	< 0.01	< 0.01
		VOC	< 0.01	< 0.01
		HCl	< 0.01	< 0.01
		HF	< 0.01	< 0.01
11	Kiln 5 Vent (5)	PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
		NO_x	< 0.01	< 0.01
		SO_2	< 0.01	< 0.01

Emission Sources – Maximum Allowable Emission Rates

		CO	< 0.01	< 0.01
		VOC	< 0.01	< 0.01
		HCl	< 0.01	< 0.01
		HF	< 0.01	< 0.01
12	Kiln 6 Vent (5)	PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
		NO_x	< 0.01	< 0.01
		SO_2	< 0.01	< 0.01
		CO	< 0.01	< 0.01
		VOC	< 0.01	< 0.01
		HCl	< 0.01	< 0.01
		HF	< 0.01	< 0.01
13	Dryer 1 Stack (6)	PM	0.42	1.84
		PM_{10}	0.42	1.84
		NO_x	0.22	0.97
		SO_2	< 0.01	< 0.01
		CO	0.70	3.06
		VOC	0.07	0.30
		HCl	< 0.01	< 0.01
		HF	< 0.01	0.02
14	Dryer 2 Stack (6)	PM	0.42	1.84
		PM_{10}	0.42	1.84
		NO_x	0.22	0.97
		SO_2	< 0.01	< 0.01
		CO	0.70	3.06
		VOC	0.07	0.30
		HCl	< 0.01	< 0.01
		HF	< 0.01	0.02
15	Dryer 3 Stack (6)	PM	0.42	1.84
		PM_{10}	0.42	1.84

Emission Sources – Maximum Allowable Emission Rates

		NO_x	0.22	0.97
		SO_2	< 0.01	< 0.01
		CO	0.70	3.06
		VOC	0.07	0.30
		HCl	< 0.01	< 0.01
		HF	< 0.01	0.02
16	Dryer 4 Stack (6)	PM	0.42	1.84
		PM_{10}	0.42	1.84
		NO_x	0.22	0.97
		SO_2	< 0.01	< 0.01
		CO	0.70	3.06
		VOC	0.07	0.30
		HCl	< 0.01	< 0.01
		HF	< 0.01	0.02
17	Dryer 5 Stack (6)	PM	0.42	1.84
		PM_{10}	0.42	1.84
		NO_x	0.22	0.97
		SO_2	< 0.01	< 0.01
		CO	0.70	3.06
		VOC	0.07	0.30
		HCl	< 0.01	< 0.01
		HF	< 0.01	0.02
17B	Holding Room (6) Burner Stack No. 1	PM	0.02	0.08
		PM_{10}	0.02	0.08
		NO_x	0.25	1.10
		SO_2	< 0.01	< 0.01
		CO	0.21	0.92
		VOC	< 0.01	0.06
		HCl	< 0.01	< 0.01
		HF	< 0.01	0.02

Emission Sources – Maximum Allowable Emission Rates

17C	Holding Room (6) Burner Stack No. 2	PM	0.02	0.08
		PM_{10}	0.02	0.08
		NO_x	0.25	1.10
		SO_2	< 0.01	< 0.01
		CO	0.21	0.92
		VOC	< 0.01	0.06
		HCl	< 0.01	< 0.01
		HF	< 0.01	0.02
18	Primary Crusher (4)	PM	< 0.02	< 0.02
		PM_{10}	< 0.01	< 0.01
7a	Kiln 7 Stack (5)	PM	4.34	7.89
		PM_{10}	3.93	7.15
		NO_x	1.58	2.88
		SO_2	3.03	5.51
		CO	5.42	9.86
		VOC	0.11	0.20
		HCl	0.77	1.40
		HF	1.67	3.04
12a	Kiln 7 Vent (5)	PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
		NO_x	< 0.01	< 0.01
		SO_2	< 0.01	< 0.01
		CO	< 0.01	< 0.01
		VOC	< 0.01	< 0.01
		HCl	< 0.01	< 0.01
		HF	< 0.01	< 0.01
MHF	Material Handling (4)	PM	< 0.06	< 0.05
		PM_{10}	< 0.03	< 0.03
CSB1F	Clay Storage Building No. 1 (Grog Hammer Mill and Grog	PM	0.36	0.09
		PM_{10}	0.17	< 0.04

Emission Sources – Maximum Allowable Emission Rates

	Screens) (4)			
CSB2F	Clay Storage Building No. 2 (Gleeson Shredder) (4)	PM	0.02	< 0.01
		PM_{10}	0.01	< 0.01
MBF	Manufacturing Building (4 and 6)	PM	0.13	0.11
		PM_{10}	0.05	0.04
27	Gasoline Storage Tank (1000 Gallons)	VOC	< 0.01	< 0.01
28	Diesel Storage Tank (6000 Gallons)	VOC	< 0.01	< 0.01
29	Diesel Storage Tank (4000 Gallons)	VOC	< 0.01	< 0.01
30	Additive A Tank	VOC	< 0.01	< 0.01
31	Grog Jaw Crusher (4)	PM	< 0.10	< 0.01
		PM_{10}	< 0.01	< 0.01
GBF	Grinding Building (4)	PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
PKGBF	Packaging Building (4)	PM	< 0.01	< 0.01
		PM_{10}	< 0.01	< 0.01
99	Grinding Building Baghouse Stack (Handle Disintegrator, Handle Fine Roller and Screen Mixer)	PM_{10}	0.02	0.10
SPF	Material Stockpiles (4)	PM	--	0.36
		PM_{10}	--	0.18

(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 - carbon monoxide
HCl - hydrogen chloride
HF - hydrogen fluoride
NO_x - total oxides of nitrogen
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

Emission Sources – Maximum Allowable Emission Rates

represented
SO_2 - sulfur dioxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

(4) Fugitive emissions are an estimate only.
(5) No more than four kilns may simultaneously operate in the firing mode.
(6) Emissions from each individual stack may exceed the listed value for the stack, but the total emissions from Stacks 13, 14, 15, 16, 17, 17B, and l7 C shall not exceed the sum of the emission values for the cited emission point numbers.
(7) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit.

Date: February 7, 2013