

# 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. 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)	<u>Emission Rates</u>	
			lb/hr	TPY
1	Kiln 1 Stack (5)	PM	4.34	7.89
		PM <sub>10</sub>	3.93	7.15
		NO <sub>x</sub>	1.58	2.88
		SO <sub>2</sub>	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 <sub>10</sub>	3.93	7.15
		NO <sub>x</sub>	1.58	2.88
		SO <sub>2</sub>	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 <sub>10</sub>	3.93	7.15
		NO <sub>x</sub>	1.58	2.88
		SO <sub>2</sub>	3.03	5.51
		CO	5.42	9.86
		VOC	0.11	0.20
		HCl	0.77	1.40
		HF	1.67	3.04
4	Kiln 4 Stack (5)	PM	4.34	7.89

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
		PM <sub>10</sub>	3.93	7.15
		NO <sub>x</sub>	1.58	2.88
		SO <sub>2</sub>	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 <sub>10</sub>	3.93	7.15
		NO <sub>x</sub>	1.58	2.88
		SO <sub>2</sub>	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 <sub>10</sub>	3.93	7.15
		NO <sub>x</sub>	1.58	2.88
		SO <sub>2</sub>	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 <sub>10</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		SO <sub>2</sub>	<0.01	<0.01
		CO	<0.01	<0.01
		VOC	<0.01	<0.01
		HCl	<0.01	<0.01
		HF	<0.01	<0.01
8	Kiln 2 Vent (5)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
9	Kiln 3 Vent (5)	SO <sub>2</sub>	<0.01	<0.01
		CO	<0.01	<0.01
		VOC	<0.01	<0.01
		HCl	<0.01	<0.01
		HF	<0.01	<0.01
		PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		SO <sub>2</sub>	<0.01	<0.01
		CO	<0.01	<0.01
10	Kiln 4 Vent (5)	VOC	<0.01	<0.01
		HCl	<0.01	<0.01
		HF	<0.01	<0.01
		PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		SO <sub>2</sub>	<0.01	<0.01
		CO	<0.01	<0.01
		VOC	<0.01	<0.01
		HCl	<0.01	<0.01
11	Kiln 5 Vent (5)	HF	<0.01	<0.01
		PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		SO <sub>2</sub>	<0.01	<0.01
		CO	<0.01	<0.01
		VOC	<0.01	<0.01
		HCl	<0.01	<0.01
		HF	<0.01	<0.01
		PM	<0.01	<0.01
12	Kiln 6 Vent (5)	PM <sub>10</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		SO <sub>2</sub>	<0.01	<0.01
		CO	<0.01	<0.01
		PM	<0.01	<0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
		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 <sub>10</sub>	0.42	1.84
		NO <sub>x</sub>	0.22	0.97
		SO <sub>2</sub>	<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 <sub>10</sub>	0.42	1.84
		NO <sub>x</sub>	0.22	0.97
		SO <sub>2</sub>	<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 <sub>10</sub>	0.42	1.84
		NO <sub>x</sub>	0.22	0.97
		SO <sub>2</sub>	<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 <sub>10</sub>	0.42	1.84
		NO <sub>x</sub>	0.22	0.97
		SO <sub>2</sub>	<0.01	<0.01
		CO	0.70	3.06
		VOC	0.07	0.30
		HCl	<0.01	<0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
17	Dryer 5 Stack (6)	HF	<0.01	0.02
		PM	0.42	1.84
		PM <sub>10</sub>	0.42	1.84
		NO <sub>x</sub>	0.22	0.97
		SO <sub>2</sub>	<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 <sub>10</sub>	0.02	0.08
		NO <sub>x</sub>	0.25	1.10
		SO <sub>2</sub>	<0.01	<0.01
		CO	0.21	0.92
		VOC	<0.01	0.06
		HCl	<0.01	<0.01
		HF	<0.01	0.02
17C	Holding Room (6) Burner Stack No. 2	PM	0.02	0.08
		PM <sub>10</sub>	0.02	0.08
		NO <sub>x</sub>	0.25	1.10
		SO <sub>2</sub>	<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 <sub>10</sub>	<0.01	<0.01
7a	Kiln 7 Stack (5)	PM	4.34	7.89
		PM <sub>10</sub>	3.93	7.15
		NO <sub>x</sub>	1.58	2.88
		SO <sub>2</sub>	3.03	5.51
		CO	5.42	9.86
		VOC	0.11	0.20

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
		HCl	0.77	1.40
		HF	1.67	3.04
12a	Kiln 7 Vent (5)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		SO <sub>2</sub>	<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 and 6)	PM	<0.06	<0.05
		PM <sub>10</sub>	<0.03	<0.03
CSB1F	Clay Storage Building No. 1 (Grog Hammer Mill and Grog Screens) (4)	PM	0.36	0.09
		PM <sub>10</sub>	0.17	<0.04
CSB2F	Clay Storage Building No. 2 (Gleeson Shredder) (4)	PM	0.02	<0.01
		PM <sub>10</sub>	0.01	<0.01
MBF	Manufacturing Building (4)	PM	0.13	0.11
		PM <sub>10</sub>	0.05	0.04
27	Gasoline Storage Tank	VOC	<0.01 (1,000 gallons)	<0.01
28	Diesel Storage Tank (6,000 gallons)	VOC	<0.01	<0.01
29	Diesel Storage Tank	VOC	<0.01 (4,000 gallons)	<0.01
30	Additive A Tank	VOC	<0.01	<0.01

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31	Grog Jaw Crusher (4)	PM	<0.10	<0.01
		PM <sub>10</sub>	<0.01	<0.01
GBF	Grinding Building (4)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
PKGBF	Packaging Building (4)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
99	Grinding Building Baghouse Stack (Handle Disintegrator, Handle Fine Roller, and Screen Mixer)	PM <sub>10</sub>	0.02	0.10
SPF	Material Stockpiles (4)	PM	--	0.36
		PM <sub>10</sub>	--	0.18

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use area name or fugitive source name.
- (3) PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>  
PM<sub>10</sub> - particulate matter equals to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.  
PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter  
NO<sub>x</sub> - total oxides of nitrogen  
SO<sub>2</sub> - sulfur dioxide  
CO - carbon monoxide  
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code ' 101.1  
HCl - hydrogen chloride  
HF - hydrogen fluoride
- (4) Fugitive emissions are an estimate only.
- (5) No more than four kilns may simultaneously operate in the firing mode.

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- (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 I7 C shall not exceed the sum of the emission values for the cited emission point numbers.

Dated December 10, 2009