

# Emission Sources – Maximum Allowable Emission Rates

Permit Number 45073

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 (6)	
			lbs/hour	TPY (4)
1, 24 - E	Disintegrator Material Handling (5)	PM	0.07	0.04
		PM <sub>10</sub>	0.04	0.01
		PM <sub>2.5</sub>	0.04	0.01
2	Primary Disintegrator (5)	PM	0.12	0.06
		PM <sub>10</sub>	0.06	0.02
		PM <sub>2.5</sub>	0.06	0.02
4 and 4A	Various Drop Points (5)	PM	0.02	0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
21	Dryer B1 Stack	PM	0.06	0.27
		PM <sub>10</sub>	0.06	0.27
		PM <sub>2.5</sub>	0.06	0.27
22	Dryer B2 Stack	PM	0.06	0.27
		PM <sub>10</sub>	0.06	0.27
		PM <sub>2.5</sub>	0.06	0.27
23	Dryer B3 Stack	PM	0.06	0.27
		PM <sub>10</sub>	0.06	0.27
		PM <sub>2.5</sub>	0.06	0.27
24	Dryer B4 Stack	PM	0.06	0.27
		PM <sub>10</sub>	0.06	0.27
		PM <sub>2.5</sub>	0.06	0.27
25	B Kiln Scrubber Exhaust Stack	VOC	1.78	7.80
		NO <sub>x</sub>	1.35	5.91
		SO <sub>2</sub>	13.62	59.66
		PM	3.82	16.73
		PM <sub>10</sub>	3.82	16.73
		PM <sub>2.5</sub>	3.82	16.73
		CO	20.43	89.48
		HCl	3.47	15.18
		HF	1.49	6.51

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25A	B Kiln Scrubber Bypass Exhaust Stack	VOC	1.78	0.08
		NO <sub>x</sub>	1.80	0.08
		SO <sub>2</sub>	15.60	0.69
		PM	3.82	0.17
		PM <sub>10</sub>	3.82	0.17
		PM <sub>2.5</sub>	3.82	0.17
		CO	20.43	0.90
		HCl	4.58	0.20
		HF	10.52	0.46
26	B Kiln Undercar Exhaust (5)	VOC	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		SO <sub>2</sub>	<0.01	<0.01
		PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
		CO	<0.01	<0.01
		HCl	<0.01	<0.01
		HF	<0.01	<0.01
27	B-Plant Grinding Dust Collector	PM	3.09	4.02
		PM <sub>10</sub>	3.09	4.02
		PM <sub>2.5</sub>	3.09	4.02
32	Grog Crusher (5)	PM	0.06	<0.01
		PM <sub>10</sub>	0.03	<0.01
		PM <sub>2.5</sub>	0.03	<0.01
38C	Sand Room Dust Collector	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
41	C Dryer Stack	PM	0.08	0.34
		PM <sub>10</sub>	0.08	0.34
		PM <sub>2.5</sub>	0.08	0.34
43	A Dryer Stack	PM	0.08	0.36
		PM <sub>10</sub>	0.08	0.36
		PM <sub>2.5</sub>	0.08	0.36
43A	A-Plant B Dryer Stack	PM	0.08	0.36
		PM <sub>10</sub>	0.08	0.36
		PM <sub>2.5</sub>	0.08	0.36

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45	A and C Kiln (Common) Stack	VOC	2.04	8.95
		NO <sub>x</sub>	1.55	6.79
		SO <sub>2</sub>	22.96	100.58
		PM	6.89	30.18
		PM <sub>10</sub>	6.89	30.18
		PM <sub>2.5</sub>	6.89	30.18
		CO	23.46	102.75
		HCl	2.45	10.71
		HF	5.17	22.63
54 and 56	Material Handling Drop Points (5)	PM	0.04	0.01
		PM <sub>10</sub>	0.02	0.01
		PM <sub>2.5</sub>	0.02	0.01
57	Calciner Drop Point (5)	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
		PM <sub>2.5</sub>	<0.01	<0.01
55 and 55A	Calciner Screen (5)	PM	0.22	0.07
		PM <sub>10</sub>	0.08	0.02
		PM <sub>2.5</sub>	0.08	0.02
58	Calciner Wet Scrubber Stack	VOC	0.11	0.48
		NO <sub>x</sub>	2.91	12.73
		SO <sub>2</sub>	2.85	12.46
		PM	0.93	4.08
		PM <sub>10</sub>	0.93	4.08
		PM <sub>2.5</sub>	0.93	4.08
		CO	1.41	6.19
		HCl	0.24	1.05
		HF	0.05	0.22
FUG-1	B-Plant Manufacturing Building Fugitive (5)	PM	0.01	0.01
		PM <sub>10</sub>	0.01	<0.01
		PM <sub>2.5</sub>	0.01	<0.01
FUG-2	B-Plant Grind Building (5)	PM	0.08	0.03
		PM <sub>10</sub>	0.07	0.02
		PM <sub>2.5</sub>	0.07	0.02
FUG-3	A-Plant Building Fugitive (5)	PM	0.17	0.07
		PM <sub>10</sub>	0.06	0.02
		PM <sub>2.5</sub>	0.06	0.02

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FUG-4	Clay Stockpile (5)	PM	--	2.16
		PM <sub>10</sub>	--	1.08
		PM <sub>2.5</sub>	--	1.08

- (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  
HCl - hydrochloric acid  
HF - hydrogen fluoride
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit.

Date: December 21, 2018