

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 3505

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)	Emission Rates *	
			lb/hr	TPY**
1	Grinding Plant Baghouse Stack	PM <sub>10</sub>	3.23	14.15
2	Rotary Calciner Wet Scrubber Stack	PM <sub>10</sub>	1.30	3.80
		SO <sub>2</sub>	2.71	7.89
		NO <sub>x</sub>	3.49	10.20
		VOC	0.10	0.30
		CO	5.70	16.30
		HCl	<0.01	<0.01
		HF	0.04	0.13
4	Lingl Dryer Waste Heat Dump Stack	PM <sub>10</sub>	17.40	0.44
		SO <sub>2</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		VOC	<0.01	<0.01
		CO	<0.01	<0.01
		HCl	0.20	1.00
		HF	0.20	1.00
5	Lingl Dryer Stack	PM <sub>10</sub>	0.45	1.97
		SO <sub>2</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		VOC	<0.01	<0.01
		CO	<0.01	<0.01
		HCl	0.02	0.10
		HF	0.02	0.10

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6	Lingl Dryer Stack	PM <sub>10</sub>	0.45	1.97
		SO <sub>2</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		VOC	<0.01	<0.01
		CO	<0.01	<0.01
		HCl	0.02	0.10
		HF	0.02	0.10
7	Lingl Dryer Stack	PM <sub>10</sub>	0.45	1.97
		SO <sub>2</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		VOC	<0.01	<0.01
		CO	<0.01	<0.01
		HCl	0.02	0.10
		HF	0.02	0.10
8	Lingl Dryer Stack	PM <sub>10</sub>	0.45	1.97
		SO <sub>2</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		VOC	<0.01	<0.01
		CO	<0.01	<0.01
		HCl	0.02	0.10
		HF	0.02	0.10
9	Lingl Dryer Stack	PM <sub>10</sub>	0.45	1.97
		SO <sub>2</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		VOC	<0.01	<0.01
		CO	<0.01	<0.01
		HCl	0.02	0.10
		HF	0.02	0.10
11	Lingl Dryer Stack	PM <sub>10</sub>	0.45	1.97
		SO <sub>2</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		VOC	<0.01	<0.01
		CO	<0.01	<0.01
		HCl	0.02	0.10
		HF	0.02	0.10
12	Lingl Dryer Stack	PM <sub>10</sub>	0.45	1.97
		SO <sub>2</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		VOC	<0.01	<0.01
		CO	<0.01	<0.01

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13	Lingl Dryer Stack	HCl	0.02	0.10
		HF	0.02	0.10
		PM <sub>10</sub>	0.45	1.97
		SO <sub>2</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		VOC	<0.01	<0.01
		CO	<0.01	<0.01
		HCl	0.02	0.10
14	Lingl Dryer Stack	HF	0.02	0.10
		PM <sub>10</sub>	0.45	1.97
		SO <sub>2</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		VOC	<0.01	<0.01
		CO	<0.01	<0.01
		HCl	0.02	0.10
		HF	0.02	0.10
15	Lingl Dryer Stack	PM <sub>10</sub>	0.45	1.97
		SO <sub>2</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		VOC	<0.01	<0.01
		CO	<0.01	<0.01
		HCl	0.02	0.10
		HF	0.02	0.10
16	ENP Plant Kiln DIFF	PM <sub>10</sub>	3.18	13.93
		SO <sub>2</sub>	32.39	141.87
		NO <sub>x</sub>	3.15	13.81
		VOC	0.18	0.80
		CO	4.16	18.22
		HCl	3.04	13.32
		HF	0.68	2.98
16A	ENP Plant Kiln Bypass	PM <sub>10</sub>	8.80	1.54
		SO <sub>2</sub>	35.63	6.24
		NO <sub>x</sub>	3.15	0.55
		VOC	0.18	0.03
		CO	4.16	0.73
		HCl	7.60	1.33
		HF	7.57	1.33
17	Mold Plant Pre-Heat Burner	PM <sub>10</sub>	0.15	0.68
		SO <sub>2</sub>	0.32	1.41
		NO <sub>x</sub>	0.06	0.24

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18	Rotary Calciner Bypass	VOC	<0.01	0.01
		CO	0.07	0.32
		PM <sub>10</sub>	<0.01	<0.01
		SO <sub>2</sub>	1.96	0.02
		NO <sub>x</sub>	1.99	0.02
		VOC	<0.01	<0.01
		CO	0.70	0.01
		HCl	<0.01	<0.01
19	Swindell Holding Room Stack	HF	<0.01	<0.01
		PM <sub>10</sub>	1.87	8.19
		SO <sub>2</sub>	<0.01	<0.01
		NO <sub>x</sub>	<0.01	<0.01
		VOC	<0.01	<0.01
		CO	<0.01	<0.01
		HCl	<0.01	<0.01
		HF	<0.01	<0.01
23	Shapes Dryer Stack	PM <sub>10</sub>	0.02	0.09
		SO <sub>2</sub>	0.08	0.34
		NO <sub>x</sub>	0.01	0.05
		VOC	<0.01	<0.01
		CO	0.04	0.16
		HCl	<0.01	<0.01
		HF	<0.01	<0.01
24	Smog Hog	PM <sub>10</sub>	0.13	1.00
		VOC	0.01	0.01
25	Surge Bin Dust Collector	PM <sub>10</sub>	2.40	11.00
26	Extrusion Plant Transfer Point	PM	0.03	0.01
		PM <sub>10</sub>	0.01	0.01
27	Sand Hopper	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
28	Sand Screen No. 1	PM	0.13	0.07
		PM <sub>10</sub>	0.01	0.01
29	Sand Screen No. 2	PM	0.13	0.07
		PM <sub>10</sub>	0.01	0.01

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30	Calcine Drop Point	PM	0.18	0.70
		PM <sub>10</sub>	0.01	0.03
31	Conveyor Pile Drop Point No. 1	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
32	Conveyor Pile Drop Point No. 2	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
33	Screening Transfer Point No. 1	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
34	Screening Transfer Point No. 2	PM	<0.01	<0.01
		PM <sub>10</sub>	<0.01	<0.01
35	Grandslam Transfer Point No. 1	PM	0.05	0.02
		PM <sub>10</sub>	0.02	0.01
36	Grandslam Transfer Point No. 2	PM	0.05	0.02
		PM <sub>10</sub>	0.02	0.01
37	Diesel Tank - 10,000 gal	VOC	<0.01	<0.01
38	Gasoline Tank - 1,000 gal	VOC	<0.01	<0.01
39	Swindell Kiln	PM <sub>10</sub>	9.93	43.50
		SO <sub>2</sub>	7.65	33.50
		NO <sub>x</sub>	4.00	17.50
		VOC	0.27	1.20
		CO	3.54	15.50
		HCl	1.94	8.50
		HF	4.22	18.50
40	Extrusion Plant Transfer Point	PM	0.02	0.01
		PM <sub>10</sub>	0.01	<0.01
41	Soft Mud Plant Transfer Point No. 1	PM	0.02	0.01
		PM <sub>10</sub>	0.01	<0.01
42	Soft Mud Plant Transfer Point No. 2	PM	0.02	0.01
		PM <sub>10</sub>	0.01	<0.01
43	Diesel Tank - 500 gal	VOC	<0.01	<0.01
56	Farr Dust Collector -	PM <sub>10</sub>	0.86	1.29

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64A	source de-hacker/pkg HI-VAC Dust Collector	PM <sub>10</sub>	0.86	1.29
65A	ENP Plant Kiln Car Cleaner Dust Collector	PM <sub>10</sub>	0.43	0.50
92A	Farr Dust Collector - dry set	PM <sub>10</sub>	0.86	1.29
FUG1	Rotary Calciner Building (4)	PM PM <sub>10</sub>	0.01 0.01	0.01 0.01
FUG2	Grandslam Crusher Building (4)	PM PM <sub>10</sub>	0.06 0.02	0.02 0.01
FUG3	Calcine Clay Storage Building (4)	PM PM <sub>10</sub>	0.02 0.01	0.01 0.01
FUG4	Raw Material Clay Storage (4)	PM PM <sub>10</sub>	0.08 0.02	0.04 0.01
FUG5	Shapes Operation Building (4)	PM PM <sub>10</sub>	0.10 0.04	0.03 0.01
FUG6	ENP Manufacturing Building (4)	PM PM <sub>10</sub>	1.05 0.80	0.50 0.40
FUG7	Swindell Coatings Storage Building (4)	PM PM <sub>10</sub>	0.16 0.13	0.10 0.10
FUG8	Harrop Building (4)	PM PM <sub>10</sub>	<0.01 <0.01	<0.01 <0.01
FUG9	Mold Plant Building (4)	PM PM <sub>10</sub>	0.10 0.04	0.04 0.02
FUG10	Grinding Plant Building (4)	PM PM <sub>10</sub>	1.42 0.14	0.45 0.04
FUG11	Stockpile (4)	PM PM <sub>10</sub>	-- --	7.23 3.61
FUG13	Raw Clay Hopper (4)	PM PM <sub>10</sub>	<0.01 <0.01	<0.01 <0.01

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- (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 an area name or fugitive source name.
- (3) Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.

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 - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>

PM<sub>10</sub> - particulate matter equal to or less than 10 microns in diameter

CO - carbon monoxide

HCl - hydrogen chloride

HF - hydrogen fluoride

HAP - any air contaminant (pollutant) listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C

- (4) Fugitive emissions are an estimate.

\* Emission rates are based on and the facilities are limited by the following maximum operating schedules:

5,840 Hrs/year for the Rotary Calciner,

5,000 Hrs/year for the Grinding and Screening, and

8,760 Hrs/year for all other permitted facilities. **(2/08)**

Maximum Allowable Production Rates: **(2/07)**

Rotary Calciner (EPN 2)		<u>40,000</u>	TPY
Grinding Plant (EPN 1)	<u>300</u>	TPH	<u>546,000</u> TPY
ENP Plant Kiln (EPN 16)	<u>26.5</u>	TPH	<u>232,000</u> TPY

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Swindell Kiln (EPN 39)	<u>87,599</u> TPY
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\*\* Compliance with annual emission limits is based on a rolling 12-month period.

Date April 8, 2008