

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 23344

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**
4-06	Furnace No. 1 ESP Unit	PM <sub>10</sub> (4)	0.29	1.28
		PM(5)	0.15	0.66
		NO <sub>x</sub>	9.10	39.90
		SO <sub>2</sub>	0.06	0.26
		CO	0.81	3.55
		VOC	0.07	0.31
4-06A	Furnace No. 1 Dust Pickup Baghouse	PM <sub>10</sub>	0.10	0.50
4-2324	Furnace No. 2 ESP Unit	PM <sub>10</sub> (4)	1.43	6.27
		PM(5)	0.15	0.66
		NO <sub>x</sub>	9.10	39.90
		SO <sub>2</sub>	0.06	0.26
		CO	0.81	3.55
		VOC	0.07	0.31
4-07	Wet Fritting Baghouse (2 Cyclones, Agglomerator, and Sand Mill)	PM <sub>10</sub> (4)	0.42	1.84
		PM(5)	0.19	0.84
		NO <sub>x</sub>	1.29	5.67
		SO <sub>2</sub>	0.04	0.18
		CO	0.48	2.10
		VOC	0.04	0.18
4-08	CCE Mill Baghouses	PM <sub>10</sub> (4)	0.08	0.35

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4-17A	Former No. 13 2.4 MMBtu/hr Exhausted Through a Baghouse	PM <sub>10</sub> (4)	0.40	1.75
		PM(5)	0.10	0.44
		NO <sub>x</sub>	1.17	5.12
		SO <sub>2</sub>	<0.01	0.04
		CO	0.25	1.10
		VOC	0.02	0.09
4-17C	Former No. 14 2.4 MMBtu/hr Exhausted Through a Baghouse	PM <sub>10</sub> (4)	0.40	1.75
		PM(5)	0.10	0.44
		NO <sub>x</sub>	1.17	5.12
		SO <sub>2</sub>	<0.01	0.04
		CO	0.25	1.10
		VOC	0.02	0.09
4-17B	Former No. 16 ESP	PM <sub>10</sub> (4)	0.40	1.75
		PM(5)	0.10	0.44
		NO <sub>x</sub>	1.17	5.12
		SO <sub>2</sub>	<0.01	0.04
		CO	0.25	1.10
		VOC	0.02	0.09
4-18	Former No. 17 ESP	PM <sub>10</sub> (4)	0.45	1.97
		PM(5)	0.10	0.44
		NO <sub>x</sub>	1.17	5.12
		SO <sub>2</sub>	<0.01	0.04
		CO	1.10	4.82
		VOC	0.02	0.09
4-19	Former No. 18 Baghouse	PM <sub>10</sub> (4)	0.40	1.75
		PM(5)	0.10	0.44
		NO <sub>x</sub>	1.17	5.12
		SO <sub>2</sub>	<0.01	0.04
		CO	0.25	1.10
		VOC	0.02	0.09
4-19P	Former No. 18 Heat Treater	PM(5)	0.02	0.09
		NO <sub>x</sub>	0.24	1.05
		SO <sub>2</sub>	<0.01	0.04

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		CO	0.05	0.22
		VOC	<0.01	0.04
4-20A	Bead Wash Dryer Baghouse (6)	PM <sub>10</sub> (4)	0.01	0.44
		Isopropanol	0.70	3.03
		Acetone	0.13	0.55
		Chloroacetone	0.37	1.63
4-20B	Bead Wash Dryer (6)	PM(5)	0.14	0.60
		NO <sub>x</sub>	0.92	4.03
		SO <sub>2</sub>	0.03	0.12
		CO	0.34	1.48
		VOC	0.03	0.12
4-44	Former No. 11 Baghouse	PM <sub>10</sub> (4)	0.45	2.00
		PM(5)	0.10	0.44
		NO <sub>x</sub>	1.17	5.12
		SO <sub>2</sub>	0.02	0.09
		CO	0.25	1.10
		VOC	0.02	0.09
4-44P	Former No. 11 Heat Treater	PM(5)	0.02	0.09
		NO <sub>x</sub>	0.24	1.05
		SO <sub>2</sub>	0.02	0.09
		CO	0.05	0.22
		VOC	<0.01	0.02
4-34	Former No. 19 Baghouse	PM <sub>10</sub> (4)	0.40	1.75
		PM(5)	0.10	0.44
		NO <sub>x</sub>	1.17	5.12
		SO <sub>2</sub>	<0.01	0.04
		CO	0.25	1.10
		VOC	0.02	0.09
4-34P	Former No. 19 Heat Treater	PM(5)	0.02	0.09
		NO <sub>x</sub>	0.24	1.05
		SO <sub>2</sub>	<0.01	0.04
		CO	0.05	0.22
		VOC	<0.01	0.04
4-35	Former No. 20	PM <sub>10</sub> (4)	0.40	1.75

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	Baghouse	PM(5)	0.10	0.44
		NO <sub>x</sub>	1.17	5.12
		SO <sub>2</sub>	<0.01	0.04
		CO	0.25	1.10
		VOC	0.02	0.09
4-35P	Former No. 20 Heat Treater	PM(5)	0.02	0.09
		NO <sub>x</sub>	0.24	1.05
		SO <sub>2</sub>	<0.01	0.04
		CO	0.05	0.22
		VOC	<0.01	0.04
4-43	Former No. 21 Baghouse	PM <sub>10</sub> (4)	0.45	1.97
		PM(5)	0.10	0.44
		NO <sub>x</sub>	1.17	5.12
		SO <sub>2</sub>	<0.01	0.04
		CO	0.25	1.10
		VOC	0.02	0.09
4-43P	Former No. 21 Heat Treater	PM(5)	0.02	0.09
		NO <sub>x</sub>	0.24	1.05
		SO <sub>2</sub>	<0.01	0.04
		CO	0.05	0.22
		VOC	<0.01	0.04
4-0944	Former Nos. 15 and 22 ESP	PM <sub>10</sub> (4)	1.34	5.87
		PM(5)	0.30	1.31
		NO <sub>x</sub>	3.51	15.40
		SO <sub>2</sub>	0.30	0.13
		CO	1.10	4.82
		VOC	0.06	0.26
15-1	TCP Drier Baghouse	PM/PM <sub>10</sub> (4)	1.40	6.13
15-2	Dust Pickup Baghouse	PM/PM <sub>10</sub> (4)	0.16	0.70

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15-3	Filter Receiver	PM/PM <sub>10</sub> (4)	0.10	0.40
	Baghouse			
15-4	Bag Collector (6)	PM <sub>10</sub> (4)	0.33	1.45
15-5	Hopper Baghouse	PM <sub>10</sub> (4)	0.20	0.90
15-6	Hopper Baghouse	PM <sub>10</sub> (4)	0.20	0.90
15-7	Furnace No. 2 Dust Pickup	PM <sub>10</sub> (4)	0.10	0.44
15-12	Vacuum Receiver	PM <sub>10</sub> (4)	0.02	0.09
4SCEOVEN1 and 4SCEOVEN2 and 4SCEOVEN3	Electrically Heated Sand Core Element Belt Furnace	VOC	4.74	20.85
		Exempt Solvent	4.74	20.85
4SCEGExh1	Mixer/Feeder Baghouse	VOC	0.02	0.09
		Exempt Solvent	0.02	0.09
		PM/PM <sub>10</sub>	<0.001	<0.001
4SCEGExh1A	Blending Baghouse	PM/PM <sub>10</sub>	0.02	0.09
4SCEGExh2	Surface Treatment Baghouse	VOC	0.02	0.09
		Exempt Solvent	0.02	0.09
		PM/PM <sub>10</sub>	<0.001	<0.001
4SCEFUG	Sand Core Element Fugitives	VOC	0.31	1.36
		Exempt Solvent	0.31	1.36
		PM/PM <sub>10</sub>	<0.001	<0.001

- (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.

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|-------------------|---|
| 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> and PM <sub>2.5</sub> |
| PM <sub>10</sub>  | - particulate matter equal to or less than 10 microns in diameter                                   |
| PM <sub>2.5</sub> | - particulate matter equal to or less than 2.5 microns in diameter                                  |
| CO                | - carbon monoxide   |
- (4) Particulate matter emissions from the process.
- (5) Particulate matter emissions from combustion.
- (6) Particulate matter emissions from a standard exempted mixing operation are also routed through these emission points.

\*\* Compliance with annual emission limits is based on a rolling 12-month period.

Dated April 14, 2009