

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 23344

This table lists the maximum allowable emission rates for all sources of air contaminants covered by this permit.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lb/hr	TPY
(7)				
4-06	Furnace No. 1 ESP Unit	PM ₁₀ (4)	0.29	1.28
		PM (5)	0.15	0.66
		NO _x	9.10	39.90
		SO ₂	0.06	0.26
		CO	0.81	3.55
		VOC	0.07	0.31
4-06A	Furnace No. 1 Dust-Pickup Baghouse	PM ₁₀	0.10	0.50
4-2324	Furnace No. 2 ESP Unit	PM ₁₀ (4)	1.43	6.27
		PM (5)	0.15	0.66
		NO _x	9.10	39.90
		SO ₂	0.06	0.26
		CO	0.81	3.55
		VOC	0.07	0.31
4-07	Wet Fritting Baghouse (2 Cyclones, Agglomerator, and Small Mill)	PM ₁₀ (4)	0.42	1.84
		PM (5)	0.19	0.84
		NO _x	1.29	5.67
		SO ₂	0.04	0.18
		CO	0.48	2.10
		VOC	0.04	0.18
4-08	CCE Mill Baghouses	PM ₁₀ (4)	0.08	0.35
4-17A	Former No. 13 2.4 MMBtu/hr Exhausted Through a Baghouse	PM ₁₀ (4)	0.40	1.75
		PM (5)	0.10	0.44
		NO _x	1.17	5.12
		SO ₂	<0.01	0.04
		CO	0.25	1.10
		VOC	0.02	0.09

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY (7)
4-17C	Former No. 14 2.4 MMBtu/hr Exhausted Through a Baghouse	PM ₁₀ (4)	0.40	1.75
		PM (5)	0.10	0.44
		NO _x	1.17	5.12
		SO ₂	<0.01	0.04
		CO	0.25	1.10
		VOC	0.02	0.09
4-17B	Former No. 16 Baghouse	PM ₁₀ (4)	0.40	1.75
		PM (5)	0.10	0.44
		NO _x	1.17	5.12
		SO ₂	<0.01	0.04
		CO	0.25	1.10
		VOC	0.02	0.09
4-18	Former No. 17 ESP	PM ₁₀ (4)	0.45	1.97
		PM (5)	0.10	0.44
		NO _x	1.17	5.12
		SO ₂	<0.01	0.04
		CO	1.10	4.82
		VOC	0.02	0.09
4-19	Former No. 18 Baghouse	PM ₁₀ (4)	0.40	1.75
		PM (5)	0.10	0.44
		NO _x	1.17	5.12
		SO ₂	<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 _x	0.24	1.05
		SO ₂	<0.01	0.04
		CO	0.05	0.22
		VOC	<0.01	0.04

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates</u>	
			lb/hr	TPY (7)
4-20A	Bead Wash Dryer Baghouse (6)	PM ₁₀ (4)	0.10	0.44
		IPA	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 _x	0.92	4.03
		SO ₂	0.03	0.12
		CO	0.34	1.48
		VOC	0.03	0.12
4-44	Former No. 11 Baghouse	PM (4)	0.45	2.00
		PM (5)	0.10	0.44
		NO _x	1.17	5.12
		SO ₂	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 _x	0.24	1.05
		SO ₂	0.02	0.09
		CO	0.05	0.22
		VOC	<0.01	0.02
4-34	Former No. 19 Baghouse	PM ₁₀ (4)	0.40	1.75
		PM (5)	0.10	0.44
		NO _x	1.17	5.12
		SO ₂	<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 _x	0.24	1.05
		SO ₂	<0.01	0.04
		CO	0.05	0.22
		VOC	<0.01	0.04
4-35	Former No. 20 Baghouse	PM ₁₀ (4)	0.40	1.75

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)		<u>Emission Rates</u>	
		lb/hr	TPY (7)		
		PM (5)		0.10	0.44
		NO _x		1.17	5.12
		SO ₂		<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 _x		0.24	1.05
		SO ₂		<0.01	0.04
		CO		0.05	0.22
		VOC		<0.01	0.04
4-43	Former No. 21 Baghouse	PM ₁₀ (4)		0.45	1.97
		PM (5)		0.10	0.44
		NO _x		1.17	5.12
		SO ₂		<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 _x		0.24	1.05
		SO ₂		<0.01	0.04
		CO		0.05	0.22
		VOC		<0.01	0.04
4-0944	ESP Unit for Former Nos. 15 and 22	PM ₁₀ (4)		1.34	5.87
		PM (5)		0.30	1.31
		NO _x	3.51	15.40	
		SO ₂		0.30	0.13
		CO	1.10	4.82	
		VOC		0.06	0.26
15-1	TCP Drier Baghouse	PM/PM ₁₀ (4)		1.40	6.13
15-2	Dust Pickup Baghouse	PM/PM ₁₀ (4)		0.16	0.70
15-3	Filter Receiver Baghouse	PM/PM ₁₀ (4)		0.10	0.40

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15-4	Bag Collector (6)	PM ₁₀ (4)	0.33	1.45
15-5	Hopper Baghouse	PM ₁₀ (4)	0.20	0.90
15-6	Hopper Baghouse	PM ₁₀ (4)	0.20	0.90
15-7	Furnace No. 2 Dust Pickup	PM ₁₀ (4)	0.10	0.44
15-12	Vacuum Receiver	PM ₁₀ (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	<0.001	<0.001
4SCEGExh2	Surface Treatment Baghouse	VOC	0.02	0.09
		Exempt Solvent	0.02	0.09
		PM	<0.001	<0.001
4SCEFUG		VOC	0.31	1.36
		Exempt Solvent	0.31	1.36
		PM/PM10	<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.
- (3) PM - particulate matter, suspended in the atmosphere, including PM₁₀.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

PM₁₀ - particulate matter equal to or less than 10 microns. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

CO - carbon monoxide

IPA - isopropanol

Exempt Solvent - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.

- (4) Particulate matter emissions from the process.
- (5) Particulate matter emissions from combustion.
- (6) Particulate emissions from a standard exempted mixing operation are also routed through these emission points.
- (7) Annual rates are based on a rolling 12 consecutive months.

Dated January 25, 2007