

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 56211

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**
BOILER 1	Boiler No. 1	NO <sub>x</sub>	0.24	1.03
		CO	0.14	0.62
		VOC	0.01	0.04
		PM <sub>10</sub>	0.02	0.06
		SO <sub>2</sub>	0.01	0.01
BOILER 2	Boiler No. 2	NO <sub>x</sub>	0.94	4.10
		CO	0.57	2.46
		VOC	0.04	0.16
		PM <sub>10</sub>	0.05	0.23
		SO <sub>2</sub>	0.01	0.01
BOILER 3	Boiler No. 3	NO <sub>x</sub>	0.94	4.10
		CO	0.57	2.46
		VOC	0.04	0.16
		PM <sub>10</sub>	0.05	0.23
		SO <sub>2</sub>	0.01	0.01
DRYER	Dryer Multiclone	PM <sub>10</sub>	0.30	1.23
		NO <sub>x</sub>	0.94	4.10
		CO	0.57	2.46
		VOC	0.04	0.16
		SO <sub>2</sub>	0.01	0.02
		NH <sub>3</sub>	0.25	1.00
BH-1	Lime Silo Baghouse	PM <sub>10</sub>	0.01	0.01
BH-2	Product Silo Baghouse	PM <sub>10</sub>	0.01	0.01

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T-21	Product Tank	VOC	0.01	0.01
T-22	Product Tank	VOC	0.01	0.01
T-10	Raw Lignin Tank (4)	VOC	0.01	0.01
T-11	Raw Lignin Tank (4)	VOC	0.01	0.01
T-1000	Lignin Product Tank (4)	VOC	0.01	0.01
T-1001	Lignin Product Tank (4)	VOC	0.01	0.01
T-1002	Lignin Product Tank (4)	VOC	0.01	0.01
T-600A	NaOH Storage Tank (4)	NaOH	0.01	0.01
T-600B	NaOH Storage Tank (4)	NaOH	0.01	0.01
T-30	Acetic Acid Storage Tank (4)	VOC	0.01	0.01
T-20	NaOH Storage Tank (4)	NaOH	0.01	0.01
SCRUBBER	Scrubber	VOC	0.29	1.27
		NH <sub>3</sub>	0.29	1.27
T-12	Sulfuric Acid (93 percent) Storage Tank	H <sub>2</sub> SO <sub>4</sub>	0.01	0.01
T-16A	Low Insolubles Feed Tank (4)	VOC	0.01	0.01
T-16B	Low Insolubles Feed Tank (4)	VOC	0.01	0.01
T-16C	Low Insolubles Feed Tank (4)	VOC	0.01	0.01
T-16D	Low Insolubles Feed	VOC	0.01	0.01

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T-17	Tank (4)			
	Lime Slurry Tank (4)	VOC	0.01	0.01
S-500	Scrubber S-500	VOC	0.01	0.02
		NH <sub>3</sub>	0.01	0.02
		PM	0.01	0.02
S-600	Scrubber S-600	VOC	0.01	0.02
		NH <sub>3</sub>	0.01	0.02
		PM	0.01	0.02
FUGTIV	Fugitive (4)	VOC	0.06	0.25
		NH <sub>3</sub>	0.14	0.61
LOAD	Loading (4)	VOC	0.01	0.01
PARTCLNR	Parts Cleaner (4)	VOC	0.25	0.25
COOLTWR	Cooling Tower	VOC	0.01	0.01
		NH <sub>3</sub>	0.01	0.01
CT-200	Cooling Tower	VOC	0.01	0.01
		NH <sub>3</sub>	0.01	0.01
		PM	0.01	0.01
CT-300	Cooling Tower	VOC	0.01	0.01
		NH <sub>3</sub>	0.01	0.01
		PM	0.01	0.01
WW	Wastewater	VOC	0.01	0.01
		NH <sub>3</sub>	0.07	0.27

(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

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SO <sub>2</sub>	- sulfur dioxide
CO	- carbon monoxide
PM <sub>10</sub>	- particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
NaOH	- sodium hydroxide
NH <sub>3</sub>	- ammonia
H <sub>2</sub> SO <sub>4</sub>	- sulfuric acid

(4) Fugitive emissions are an estimate only.

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

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

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

Maximum throughputs:

Raw Lignin	325 million pounds per year (MMlb/yr)
Aqueous Ammonia (approx. 10 percent)	8 MMlb/yr
Lime	26 MMlb/yr
Caustic	
45 MMlb/yr	
Acetic Acid	7 MMlb/yr
Natural Gas	161 million standard cubic feet per year

Dated July 18, 2007

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