

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 9654A, PSD-TX-684M2, PSD-TX-833M2, and N-60M1

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicants 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.

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY
1A	No. 1 Recovery Furnace	PM/PM <sub>10</sub>	56.00	247.00
		VOC	50.00	217.00
		NO <sub>x</sub>	95.00	416.10
		SO <sub>2</sub>	915.70	1372.00
		CO	1375.00	6023.00
		TRS	24.00	41.00
1B	No. 2 Recovery Furnace	PM/PM <sub>10</sub>	56.00	247.00
		VOC	50.00	217.00
		NO <sub>x</sub>	95.00	416.10
		SO <sub>2</sub>	915.70	1372.00
		CO	1375.00	6023.00
		TRS	24.00	41.00
2	Bark Boiler	PM <sub>10</sub>	37.42	163.90
		VOC***	9.09	39.81
		NO <sub>x</sub> ***	88.54	387.80
		SO <sub>2</sub>	16.20	18.73
		CO***	213.86	936.70

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			lb/hr	TPY
		TRS	2.29	10.04
		NH <sub>3</sub>	16.16	70.86
2A	No. 1 PFI Boiler	PM <sub>10</sub>	3.00	13.00
		VOC	10.00	44.00
		NO <sub>x</sub>	49.83	218.26
		SO <sub>2</sub>	5.00	22.00
		CO	70.00	307.00
3	No. 1 Dissolving Tank	PM <sub>10</sub>	6.90	30.00
		VOC	17.93	50.12
		SO <sub>2</sub>	2.10	9.20
		TRS	0.60	2.50
4	No. 2 Dissolving Tank	PM <sub>10</sub>	6.90	30.00
		VOC	17.93	50.12
		SO <sub>2</sub>	2.10	9.20
		TRS	0.60	2.50
9	Lime Silo	PM <sub>10</sub>	3.40	2.00
10	No. 1 Slaker	PM <sub>10</sub>	2.00	8.60
		VOC	0.48	1.33
11	Lime Kiln	PM <sub>10</sub>	30.00	131.00
		VOC	4.78	21.03
		NO <sub>x</sub>	42.00	182.00
		SO <sub>2</sub>	57.95	84.33
		CO	337.00	1,474.00
		TRS	6.41	11.21
13	No. 2 Slaker	PM <sub>10</sub>	2.00	8.60
		VOC	0.48	1.33

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			lb/hr	TPY
16	Brown Stock Washer A	VOC	55.59	16.68
		TRS	0.47	0.14
17	Brown Stock Washer B	VOC	55.59	188.60
		TRS	0.47	1.59
19	Lime Silo	PM <sub>10</sub>	0.01	0.01
32	Turpentine Storage Tank	VOC	<0.01	0.02
36	No. 5 White Liquor Tank Vent	TRS	<0.01	0.02
37	No. 6 Fuel Oil Tank	VOC	<0.01	0.02
38	No. 6 Fuel Oil Tank	VOC	<0.01	0.02
39	South Mud Tank	VOC	0.02	0.06
40	North Mud Tank	VOC	0.02	0.06
41	Weak Wash Storage Tank	VOC	0.09	0.24
42	Hot Water Storage Tank	VOC	0.00	0.00
43	New White Liquor Storage Tank	VOC	0.57	1.59
44	Scrubber Water Clarifier	VOC	0.09	0.24
45	No. 1 White Liquor Storage Tank	VOC	0.57	1.59
46	No. 2 White Liquor Storage Tank	VOC	0.57	1.59

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY
47	No. 1 Green Liquor Clarifier	VOC	0.02	0.05
48	No. 1 Green Liquor Storage Tank	VOC	0.96	4.02
		TRS	0.01	0.03
49	No. 2 Green Liquor Storage Tank	VOC	1.84	8.04
		TRS	0.01	0.05
50	Green Liquor Equalization Tank	VOC	0.03	0.09
51	No. 2 Green Liquor Clarifier	VOC	0.02	0.05
63	No. 1 Weak Black Liquor Storage Tank	VOC	0.38	1.34
		TRS	1.30	5.60
64	No. 2 Weak Black Liquor Storage Tank	VOC	0.38	1.34
		TRS	1.30	5.60
65	Weak Black Liquor Swing Tank	VOC	0.11	0.40
		TRS	1.30	5.60
66	No. 1 Heavy Black Liquor Storage Tank	VOC	0.32	1.38
		TRS	0.13	0.58
67	No. 2 Heavy Black Liquor Storage Tank	VOC	0.31	1.38
		TRS	0.13	0.58
68	Boilout Tank	VOC	0.31	1.34
		TRS	0.50	2.20
72	Gasoline Tank	VOC	-	0.20
73	No. 2 Fuel Oil Tank	VOC	-	0.20
74	Black Liquor Pond	TRS	-	3.20

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			lb/hr	TPY
80	Wood Yard (4)	PM <sub>10</sub>	-	3.80
81	Truck Traffic Fugitives	PM <sub>10</sub>	-	130.00
99	No. 3 Power Boiler	PM <sub>10</sub>	3.13	13.71
		VOC	2.26	9.92
		NO <sub>x</sub>	21.0	91.98
		SO <sub>2</sub>	0.25	1.09
		CO	37.8	165.56
100	Chemi-Washer (4)	VOC	0.09	0.40
		TRS	<0.01	<0.01
101-130	No. 1 Linerboard Machine	VOC	91.32	399.98
		TRS 0.80	3.48	
132-158	No. 2 Linerboard Machine	VOC	53.21	233.06
		TRS 0.47	2.03	
159-166	Secondary Fiber System	VOC	0.44	1.92
168	Black Liquor Pond West	VOC	1.10	4.80
		TRS	-	3.20
192	Lime Kiln Precoat Filter	VOC	0.83	3.63
		TRS 0.02	0.07	
193	Precoat Filter Vacuum Pump West	VOC	0.33	1.46
		TRS 0.02	0.08	
194	Precoat Filter Vacuum Pump East	VOC	0.33	1.46
		TRS 0.02	0.08	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			lb/hr	TPY
200	Fish Ladder	VOC	9.20	32.22
205	No. 4 White Liquor Storage Tank	VOC	0.57	1.59
206	No. 1 Recovery Boiler Salt Cake Mix Tank	PM <sub>10</sub>	0.03	0.06
207	No. 2 Recovery Boiler Salt Cake Mix Tank	PM <sub>10</sub>	0.03	0.06
210	Black Liquor Storage East	VOC	0.38	1.34
211	Black Liquor Storage West	VOC	0.38	1.34
212	Black Liquor Storage Center	VOC	0.38	1.34
213	Ecofilter Pressure System	VOC	0.17	6.48
233**	Digester A Chip Bin Vent	VOC	3.85	13.05
		TRS 0.05	0.17	
234**	Digester B Chip Bin Vent	VOC	3.85	13.05
		TRS 0.05	0.17	
58**	Reject Tank	VOC	0.62	2.73
		TRS 0.01	0.53	
235	Liquor Loading	VOC	1.49	1.62
		TRS 0.13	0.21	
93	Primary Sludge Pond (4)	VOC	0.14	0.50
		TRS 0.08	0.27	
94	Primary Sludge Landfill (4)	VOC	0.14	0.50

TRS 0.08 0.27

95 Primary Clarifier (4) VOC 0.62 2.72  
 TRS 0.34 1.48

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			lb/hr	TPY
96	Strong Waste Pond (4)	VOC	32.76	5.98
		TRS 17.74	3.24	
97	Aeration Pond (4)	VOC	5.37	15.68
		TRS 2.91	8.49	
98	Holding Pond (4)	VOC	3.55	9.72
		TRS 1.92	5.26	
232	Green Liquor Dregs Filter and Vacuum Pump (4)	VOC	1.84	8.04
		TRS	0.01	0.05
NCG-FUG 1	Switching LVHC and HVLC NCG Venting for Bypass and Preventive Maintenance (4)(5)	VOC	145.00	0.25
		Acetone	2.40	0.02
		TRS	0.06	<0.01

- (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 area name or fugitive source name.
- (3) PM - particulate matter, suspended in the atmosphere, include PM<sub>10</sub>

- 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.
- 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
- CO - carbon monoxide
- TRS - total reduced sulfur
- NH<sub>3</sub> - ammonia
- (4) Fugitive emissions are an estimate only.
- (5) Emissions resulting from re-routing non-condensable gases between combustion sources (Lime Kiln and Bark Boiler).

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- \* 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 8,760 hrs/year

- \*\* Emissions based on the following:

See Special Condition Nos. 1 and 22.

All annual emissions are based on a rolling 12-month period and a maximum annual averaged throughput of 2,340 tons per day of air dry pulp.

- \*\*\* Emission limits for these pollutants from the Bark Boiler based on a 30-day rolling average.



Dated December 21, 2005