EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	Emission Ra	ates *
Point No. (1)	Name (2)	Name (3)	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 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.

Emission	Source	Air Contaminant		<u>Emissio</u>	n Rates *
Point No. (1)	Name (2)		Name (3)	lb/hr	TPY
1A	No. 1 Recovery Furnace		PM/PM ₁₀	56.00	247.00
			VOC	50.00	217.00
			NO_x	95.00	416.10
			SO_2	915.70	1372.00
			CO	1375.00	6023.00
			TRS	24.00	41.00
1B	No. 2 Recovery Furnace		PM/PM ₁₀	56.00	247.00
		VOC	50.00	217.00	
			NO_x	95.00	416.10
			SO ₂	915.70	1372.00
			CO	1375.00	6023.00
			TRS	24.00	41.00
2	Bark Boiler		PM_{10}	37.42	163.90
		VOC*		9.09	39.81
			NO _x ***	88.54	387.80
			SO_2	16.20	18.73
			CO***	213.86	936.70

Permit Numbers 9654A, PSD-TX-684M2, PSD-TX-833M2, and N-60M1 Page 2 $\,$

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission	Source	Ai	Air Contaminant <u>Emission Rates</u>		n Rates *
Point No. (1)	Name (2)		Name (3)	lb/hr	TPY
•		TRS NH₃	2.29 16.16	10.04 70.86	
2A	No. 1 PFI Boiler	VOC	PM ₁₀ 10.00 NO _x SO ₂ CO	3.00 44.00 49.83 5.00 70.00	13.00 218.26 22.00 307.00
3	No. 1 Dissolving Tank	VOC	PM ₁₀ 17.93 SO ₂ TRS	6.90 50.12 2.10 0.60	30.00 9.20 2.50
4	No. 2 Dissolving Tank	VOC	PM ₁₀ 17.93 SO ₂ TRS	6.90 50.12 2.10 0.60	30.00 9.20 2.50
9	Lime Silo		PM ₁₀	3.40	2.00
10	No. 1 Slaker		PM ₁₀ VOC	2.00 0.48	8.60 1.33
11	Lime Kiln	VOC	PM_{10} 4.78 NO_{x} SO_{2} CO TRS	30.00 21.03 42.00 57.95 337.00 6.41	131.00 182.00 84.33 1,474.00 11.21
13	No. 2 Slaker		PM ₁₀ VOC	2.00 0.48	8.60 1.33

Permit Numbers 9654A, PSD-TX-684M2, PSD-TX-833M2, and N-60M1 Page 3 $\,$

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission	Source	Air Contaminant	Emission	n Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
16	Brown Stock Washer A	VOC TRS	55.59 0.47	16.68 0.14
17	Brown Stock Washer B	VOC TRS	55.59 0.47	188.60 1.59
19	Lime Silo	PM ₁₀	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	0.22	0.96
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

Permit Numbers 9654A, PSD-TX-684M2, PSD-TX-833M2, and N-60M1 Page 4 $\,$

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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

Permit Numbers 9654A, PSD-TX-684M2, PSD-TX-833M2, and N-60M1 Page 5 $\,$

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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

Permit Numbers 9654A, PSD-TX-684M2, PSD-TX-833M2, and N-60M1 Page 6

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission	Source	A	ir Contaminant	Emission	Rates *
Point No. (1)	Name (2)		Name (3)	lb/hr	<u>TPY</u>
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 ₁₀	0.03	0.06
207	No. 2 Recovery Boiler Salt Cake Mix Tank		PM ₁₀	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	TRS	VOC 0.05	3.85 0.17	13.05
234**	Digester B Chip Bin Vent	TRS	VOC 0.05	3.85 0.17	13.05
58**	Reject Tank	TRS	VOC 0.01	0.62 0.53	2.73
235	Liquor Loading	TRS	VOC 0.13	1.49 0.21	1.62
93	Primary Sludge Pond (4)	TRS	VOC 0.08	0.14 0.27	0.50
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

Permit Numbers 9654A, PSD-TX-684M2, PSD-TX-833M2, and N-60M1
Page 7

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission	Source	Ai	r Contaminant	Emission Ra	ites *
Point No. (1)	Name (2)		Name (3)	lb/hr	TPY
96	Strong Waste Pond (4)	TRS	VOC 17.74	32.76 3.24	5.98
97	Aeration Pond (4)	TRS	VOC 2.91	5.37 8.49	15.68
98	Holding Pond (4)	TRS	VOC 1.92	3.55 5.26	9.72
232	Green Liquor Dregs Filter and Vacuum Pump (4)		VOC TRS	1.84 0.01	8.04 0.05
NCG-FUG 1	Switching LVHC and HVLC NCG Venting for Bypass ar Preventive Maintenance (4)		VOC Acetone TRS	145.00 2.40 0.06	0.25 0.02 <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 PM₁₀

 PM_{10} - 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_x - total oxides of nitrogen

SO₂ - sulfur dioxide

CO - carbon monoxide

TRS - total reduced sulfur

NH₃ - ammonia

- (4) Fugitive emissions are an estimate only.
- (5) Emissions resulting from re-routing non-condensible gases between combustion sources (Lime Kiln and Bark Boiler).

Permit Numbers 9654A, PSD-TX-684M2, PSD-TX-833M2, and N-60M1 Page 8

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

* 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 <u>2,340</u> tons per day of air dry pulp.

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