EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 2975 and PSD-TX-778M1

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 Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		AIR CONTAMINANTS DATA		
SMO1	No. 1 Smelt Tank Scrubber	TSP	10.9	47.7
		PM_{10}	10.9	47.7
		VOC (note b)	3.3	14.3
		SO_2	7.5	24.7
		SO_3	0.2	0.9
		TRS (note a)	1.8	7.9
		NO_x	1.8	7.9
		NH_3	2.1	8.9
SMO2**	No. 2 Smelt Tank Scrubber	TSP	18.9	82.6
		PM_{10}	18.9	82.6
		VOC	6.0	26.1
		SO_2	13.4	58.7
		SO_3	0.4	1.9
		TRS	3.1	13.9
		NO_x	3.3	14.3
		NH_3	3.8	16.5
CLTO1, WLTO1, and HLTO1	No. 1 Black Liquor 7.5 Storage Tank (5)	VOC		1.7
		TRS	1.1	5.0
CLTO2, WLTO2, and HLTO2	No. 2 Black Liquor 9.3 Storage Tanks (5)	VOC		2.1
		TRS	1.4	6.2
SCTO1 and SSO1	No. 1 Soap Tanks (5)	VOC	0.5	2.2
		TRS	0.3	1.5

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
SCT02, SST02, and SS02	No. 2 Soap Tanks (5)	VOC	1.7	7.2
		TRS	1.1	4.8
FOT02 and FORT01	Fuel Oil Tanks (5)	VOC	0.7	3.1
		TRS	0.5	2.1
BAT01	No. 1 Boiler Ash Tank (5)	VOC	1.2	5.3
		TRS	1.2	5.3
PAT01	No. 1 Precipitator Ash Tank (5)	VOC	1.2	5.3
		TRS	1.6	7.0
(note c)	Misc. Black Liquor Service Vessels (5)	VOC	2.8	12.4
		TRS	1.9	8.4
PB02 (note d)	Power Boiler No. 2	TSP	111.0	486.2
		PM_{10}	111.0	486.2
		VOC	76.4	334.6
		NO_x	332.0	1454.2
		SO_2	770.0	3372.6
		CO	1337.0	5856.0
LK02**	Lime Kiln No. 2	TSP	26.3	115.2
	PM_{10}		26.3	115.2
		NO_x	33.3	145.9
		SO_2	1.2	5.3
		SO_3	0.2	1.1
		CO	4.2	18.5
		TRS	2.5	11.1
		VOC	4.0	17.5

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
BG01	Lime System Baghouse No. 1	TSP	1.0	4.3
		PM_{10}	1.0	4.3
BG02	Lime System Baghouse No. 2	TSP	1.0	4.3
		PM_{10}	1.0	4.3
LS01**	No. 1 Lime Slaker	TSP	0.2	1.0
		PM_{10}	0.2	1.0
		NH_3	7.6	33.1
LS02**	No. 2 Lime Slaker	TSP	0.2	1.0
		PM_{10}	0.2	1.0
		NH_3	14.1	61.8
CP01	No. 1 Causticizier Tanks (5)	NH_3	2.1	9.1
CP02	No. 2 Causticizier Tanks (5)	NH_3	3.9	17.0
(note f)	A-Line Brown Stock Washer (5)	VOC	28.2	123.1
		TRS	28.3	124.5
(note g)	B-Line Brown Stock Washer (5)	VOC	80.6	352.9
		TRS	30.2	133.4
		CO	6.0	26.3
BP14	B-Line Bleach Plant Scrubber (North) (5)	Cl_2/ClO_2	4.3	18.9
		CO	19.2	84.3
		VOC	2.1	9.2
		TRS	0.1	0.2

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
BP15	B-Line Bleach Plant Scrubber (South) (5)	Cl_2/ClO_2	4.3	18.9
		CO	19.2	84.3
		VOC 2.1	9.2	
		TRS	0.1	0.2
BP16	A-Line Bleach Plant Scrubber (5)	Cl_2/ClO_2	12.1	52.9
		CO	26.3	115.0
		VOC 2.9	12.6	
		TRS	0.1	0.3
BP0351	Methanol Storage Tank	CH_3OH	0.3	1.4
BP0368	Hydrogen Peroxide Tank	H_2O_2	<0.1	0.2
WLOXT1	White Liquor (5)	NH_3	0.1	0.4
EX5 and EX7 (note j)	Extruder Vents and Fugitives (4)	VOC	6.4	28.0
		NO_x	1.2	5.3
		CO 3.2	13.9	
PM1 and PM3d (note k)	Paper Machines Nos. 1 and 3 (5)	VOC	29.0	127.0
		NO_x	0.1	0.4
		CO	1.0	4.4
RBO1A	No. 1 Recovery Boiler North Stack ***	TSP	30.9	135.3
		PM_{10}	30.9	135.3
		VOC	10.4	45.6
		NO_x	34.7	152.1
		SO_2	172.0	251.1
		SO_3	0.7	3.1
		CO	325.4	1425.1
		TRS	6.7	29.3

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
RBO1B	No. 1 Recovery Boiler South Stack ***	TSP	30.9	135.3
		PM_{10}	30.9	135.3
		VOC	10.4	45.6
		NO_x	34.7	152.1
		SO_2	172.0	251.1
		SO_3	0.7	3.1
		CO	325.4	1425.1
		TRS	6.7	29.3
RBO2A**	No. 2 Recovery Boiler West Stack ***	TSP	42.5	176.9
		PM_{10}	42.5	176.9
		VOC	23.9	99.5
		NO_x	112.4	467.7
		SO_2	377.0	522.8
		SO_3	14.1	19.6
		CO	218.5	908.9
		TRS	3.3	13.9
RBO2B**	No. 2 Recovery Boiler East Stack ***	TSP	42.5	176.9
		PM_{10}	42.5	176.9
		VOC	23.9	99.5
		NO_x	112.4	467.7
		SO_2	377.0	522.8
		SO_3	14.1	19.6
		CO	218.5	908.9
		TRS	3.3	13.9
NCG01**	NCG Oxidation Unit Scrubber	VOC	<0.1	0.3
		NO_x	3.1	13.6
		SO_2	16.0	70.1
		CO	6.6	29.0

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		SO_3	6.0	26.3
		TRS	0.9	4.0
NCG02**	Condensate Tank	TRS	<0.1	0.4
REJCYC1A and REJCYC1B	Reject Cyclones (note h) (5)	TSP	1.6	7.0
		PM_{10}	1.6	7.0
		VOC	1.1	5.0
		TRS	<0.1	0.1
(note e)	Material Handling and Misc. Vessels (4)	TSP	1.7	7.5
		PM_{10}	0.8	3.4
		NH_3	6.0	26.2
NCGF1**	NCG Fugitives (4)	TRS	0.4	1.6
CPS1 (note i)	Misc. Wood Handling Fugitives (4)	TSP	16.2	63.0
		PM_{10}	8.2	28.0
BP01	Bleach Plant Fugitives (4)	Cl_2	0.2	1.0
		ClO_2	0.2	1.0
DIG1	Batch Digestor Fugitives (4)	VOC	1.6	7.1
		TRS	0.6	2.5
WWTS1	Waste Water Treatment Fugitives (4)	VOC	8.1	35.2
		TRS	8.9	39.0

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources use area name or fugitive source name.
(3) TSP - total suspended particulate, including PM_{10}.

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AIR CONTAMINANTS DATA

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

PM_{10} - particulate matter less than 10 microns in diameter.
VOC - volatile organic compounds as defined in General Rule 101.1
SO_2 - sulfur dioxide
SO_3 - sulfur trioxide
TRS - total reduced sulfur
NO_x - nitrogen oxides
NH_3 - ammonia
Cl_2 - chlorine
ClO_2 - chlorine dioxide (chlorine peroxide)
CO - carbon monoxide
H_2S - hydrogen sulfide
CH_3OH - methanol
H_2O_2 - hydrogen peroxide

(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
(5) The VOC and TRS emission rates for this point are considered to be estimates only and are not intended to be enforceable limits.

* Unless otherwise specified, emission rates are based on operating 8,760 hours per year or 817,803 air dried unbleached tons per year (736,022 bone dry unbleached tons per year) of pulp.

** These facilities are also covered by PSD-TX-778M1.

*** Emissions from the Nos. 1 and 2 Recovery Boilers are split between the two stacks for accounting purposes. The emission rates from the boilers are limited to the sum of the emissions from the two stacks rather than each stack, since the individual stack emissions may vary.

Notes:

(a) All TRS emission rates are reported as H_2S unless otherwise specified.
(b) All VOCs are reported as carbon unless otherwise specified.
(c) Black Liquor Digestor Fill Tank (BLDF01), Spill Collection Tank

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(CT01), Swing Tank (ST01), Spare Liquor Storage (SLST01), Evaporator Boil-Out Tank (BOR01), Black Liquor Dump Tank (DT01), and Weak Liquor Soap Concentrator Tank (WLSC01).

(d) The SO_2 hourly rates for the power boiler are based on combustion of total reduced sulfur compounds during periods when the NCG oxidizer is inoperable.

(e) Green liquor clarifiers (2), green liquor storage tanks (3), weak wash storage tanks (2), white liquor clarifiers (2), white liquor storage tanks (4), white liquor/digestor fill tank, mud washers (2), conveyors, elevators, hot lime silos (2), and spare liquor storage tank (SLST01) when used to store white liquor.

(f) Consists of the washers, screen dilution tank, decker hood and seal pit, washed stock chest, low density chest, waste stock chest, and brown stock high density tanks (2).

(g) Consists of the washers, screen dilution tank, decker hood and seal pit, washed stock chest, low density chest, waste stock chest, and the oxygen blow tank (with its associated equipment: the roll press, press level tank, press filtrate tank, and the surge tank).

(h) Only one cyclone will be in operation at a time.

(i) These fugitives occur from the chip handling operations, the log processing, and from the rejects bin.

(j) Includes the pre-treater stacks (2), the laminator stacks (2), the post-treater stack, and fugitives.

(k) The Nos.1 and 3 Paper Machines consist of 18 exhaust vents and fugitive emissions.