EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 2975/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.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
SMO1	No. 1 Smelt Tank Scrubber (d)	TSP	10.9	47.7
		PM_{10}	10.9	47.7
		VOC (b)	3.3	14.3
		SO_2	7.5	24.7
		SO_3	0.2	0.9
		TRS (a)	1.8	7.9
		NO_x	1.8	7.9
		NH_3	2.1	8.9
SMO2**	No. 2 Smelt Tank Scrubber (c)	TSP	18.9	82.6
		PM_{10}	18.9	82.6
		VOC (b)	6.0	26.1
		SO_2	13.4	58.7
		SO_3	0.4	1.9
		TRS (a)	3.1	13.9
		NO_x	3.3	14.3
		NH_3	3.8	16.5
CLTO1, WLT01, HLT01	No. 1 Black Liquor Storage Tank	VOC (b)	1.7	7.5
		TRS (a)	1.1	5.0
CLTO2, WLT02, HLT02	No. 2 Black Liquor Storage Tanks	VOC (b)	2.1	9.3
		TRS (a)	1.4	6.2
SCT01, SS01	No. 1 Soap Tanks	VOC (b)	0.5	2.2
		TRS (a)	0.3	1.5
SCT02, SST02, SS02	No. 2 Soap Tanks	VOC (b)	1.7	7.2
		TRS (a)	1.1	4.8
FOT02, FORT01	Fuel Oil Tanks	VOC (b)	0.7	3.1
		TRS (a)	0.5	2.1
BATO1	No. 1 Boiler Ash Tank	VOC (b)	1.2	5.3

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		TRS (a)	1.2	5.3
PATO1	No. 1 Precipitator	VOC (b)	1.2	5.3
	Ash Tank	TRS (a)	1.6	7.0

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
(e)	Misc. Black Liquor Service Vessels	VOC (b)	2.8	12.4
		TRS (a)	1.9	8.4
PBO2	Power Boiler No. 2 (f)	TSP	111.0	486.2
		PM_{10}	111.0	486.2
		VOC (b)	76.4	334.6
		NO_x	332.0	1454.2
		SO_2	770.0	3372.6
		CO	1337.0	5856.0
LKO2**	Lime Kiln No. 2 (g)	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 (a)	2.5	11.1
		VOC (b)	4.0	17.5
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	NH_3	2.1	9.1
CP02	No. 2 Causticizier Tanks	NH_3	3.9	17.0
(i)	A-Line Brown Stock Washer	VOC (b)	25.4	111.2
		TRS (a)	26.0	114.1
(j)	B-Line Brown Stock Washer	VOC (b)	80.6	352.9
		TRS (a)	30.2	133.4
		CO	6.0	26.3

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
BP14	B-Line Bleach Plant Scrubber (North)	Cl_2/ClO_2	4.3	18.9
		CO	19.2	84.3
		VOC (b)	2.1	9.2
		TRS (a)	0.1	0.2
BP15	B-Line Bleach Plant Scrubber (South)	Cl_2/ClO_2	4.3	18.9
		CO	19.2	84.3
		VOC (b)	2.1	9.2
		TRS (a)	0.1	0.2
BP16	A-Line Bleach Plant Scrubber	Cl_2/ClO_2	12.1	52.9
		CO	23.6	103.5
		VOC (b)	2.6	11.3
		TRS (a)	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	NH_3	0.1	0.4
EX5 and EX7 (n)	Extruder Vents and Fugitives (4)	VOC (b)	6.4	28.0
		NO_x	1.2	5.3
		CO	3.2	13.9
PM1 and PM3d(p)	Paper Machines No. 1 and No. 3	VOC (b)	29.0	127.0
		NOx	0.1	0.4
		CO	1.0	4.4
RBO1A (d,r)	No. 1 Recovery Boiler North Stack	TSP	30.9	135.3
		PM_{10}	30.9	135.3
		VOC (b)	10.4	45.6
		NO_x	34.7	152.1
		SO_2 (r)	172.0	251.1
		SO_3	0.7	3.1
		CO	325.4	1425.1
		TRS (a)	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 (d,r)	No. 1 Recovery Boiler South Stack	TSP	30.9	135.3
		PM_{10}	30.9	135.3
		VOC (b)	10.4	45.6
		NO_x	34.7	152.1
		SO_2 (r)	172.0	251.1
		SO_3	0.7	3.1
		CO	325.4	1425.1
		TRS (a)	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
RBO2A** (c)	No. 2 Recovery Boiler West Stack	TSP	42.5	176.9
		PM_{10}	42.5	176.9
		VOC (b)	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 (a)	3.3	13.9
RBO2B** (c)	No. 2 Recovery Boiler East Stack	TSP	42.5	176.9
		PM_{10}	42.5	176.9
		VOC (b)	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 (a)	3.3	13.9
NCG01**	NCG Oxidation Unit Scrubber	VOC (b)	<0.1	0.3
		NO_x	3.1	13.6
		SO_2	16.0	70.1
		CO	6.6	29.0
		SO_3	6.0	26.3
		TRS (a)	0.9	4.0
NCG02**	Condensate Tank	TRS (a)	<0.1	0.4
REJCYC1A and REJCYC1B	Reject Cyclones (k)	TSP	1.6	7.0
		PM_{10}	1.6	7.0
		VOC (b)	1.1	4.8
		TRS (a)	<0.1	0.1
(h)	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 (a)	0.4	1.6
CPS1 (m)	Misc. Wood Handling	TSP	11.4	50.2

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
	Fugitives (4)	PM_{10}	3.4	15.2
		VOC (b)	40.3	176.8
		TRS (a)	<0.1	0.1
BP01	Bleach Plant	Cl_2	0.2	1.0
	Fugitives (4)	ClO_2	0.2	1.0
DIG1	Batch Digestor	VOC (b)	1.6	7.1
	Fugitives (4)	TRS (a)	0.6	2.5
WWTS1	Waste Water Treatment	VOC (b)	8.1	35.2
	Fugitives (4)	TRS (a)	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}.
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
(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

* Unless otherwise specified, emission rates are based on operating 8,760 hours per year or 817,803 Air Dried Unbleached Tons (ADUBT) per year (736,022 Bone Dry Unbleached Tons [BDUBT] per year) of pulp.
** These facilities are also covered by PSD-TX-778M1.

Notes:
(a) The TRS emission rates are reported as H_2S.

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(b) The VOCs are reported as carbon.
(c) The No. 2 Recovery Boiler is limited to 99.25 tons per hour of virgin black liquor solids.
(d) The No. 1 Recovery Boiler is limited to 54.50 tons per hour of virgin black liquor solids.
(e) Black Liquor Digestor Fill Tank (BLDF01), Spill Collection Tank (CT01), Swing Tank (ST01), Spare Liquor Storage (SLST01), Evaporator Boil-Out Tank (BOR01), Black Liquor Dump Tank (DT01), Weak Liquor Soap Concentrator Tank (WLSC01).
(f) 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.
(g) The No. 2 Lime Kiln is limited to 400 tons per day of lime.
(h) 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, and hot lime silos (2).
(i) 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).
(j) 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).
(k) Only one cyclone will be in operation at a time.
(m) These fugitives occur from the chip handling operations, the log processing, and from the rejects bin.
(n) Includes the pre-treater stacks (2), the laminator stacks (2), the post-treater stack, and fugitives.
(p) The No. 1 and No. 3 Paper Machines consist of 18 exhaust vents and fugitive emissions.
(r) The SO_2 emission rates have been determined from and are based on continuous emission monitoring data and Special Condition No. 15 which limits the maximum hourly in-stack average to 300 ppmv and the annual average in-stack SO_2 concentrations to 100 ppmv.