EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 9654A, PSDTX833M3, and N60M2

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, sources, and related activities. 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 (14)	
			lbs/hour	TPY (4)
1A*	No. 1 Recovery Furnace ESP Stack	VOC(6)	19.60	85.84
		NO_X	88.71	337.53
		SO_2	408.58	1566.62
		PM(7)	59.62	261.15
		PM_{10}(8)	43.03	188.46
		$PM_{2.5}$(8)	39.42	172.68
		CO	266.61	1167.76
		TRS(6)	16.78	73.49
		HAPS	19.23	82.88
		H_2SO_4	0.67	2.93
1B*	No. 2 Recovery Furnace ESP Stack	VOC(6)	19.60	85.84
		NO_X	88.71	337.53
		SO_2	408.58	1566.62
		PM(7)	59.62	261.15
		PM_{10}(8)	43.03	188.46
		$PM_{2.5}$(8)	39.42	172.68
		CO	266.61	1167.76
		TRS(6)	16.78	73.49
		HAPS	19.23	82.88
		H_2SO_4	0.67	2.93
2**	Bark Boiler Scrubber Stack	VOC(6)	11.15	41.70
		NO_X	108.62	406.12

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		SO_2	7.44	32.22
		PM(7)	55.76	208.49
		PM_{10}(9)	55.76	208.49
		$PM_{2.5}$(9)	55.76	208.49
		CO	262.40	981.12
		TRS(6)	0.06	0.23
		H_2SO_4	0.53	1.93
		NH_3	16.19	70.93
2A	No. 1 PFI Boiler Stack	VOC(6)	1.63	7.13
		NO_X	45.30	198.41
		SO_2	0.79	0.93
		PM	2.25	10.06
		PM_{10}	2.25	10.06
		$PM_{2.5}$	2.25	10.06
		CO	70.00	306.60
3#	No. 1 Dissolving Tank Scrubber Stack	VOC(6)	0.83	3.64
		NO_X	1.15	5.06
		SO_2	0.29	1.26
		PM(7)	11.54	50.55
		PM_{10}(9)	10.36	45.40
		$PM_{2.5}$(9)	10.36	45.40
		CO	0.46	2.02
		TRS(6)	0.35	1.52
		NH_3	0.82	3.59
4#	No. 2 Dissolving Tank Scrubber Stack	VOC(6)	0.83	3.64
		NO_X	1.15	5.06

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		SO_2	0.29	1.26
		PM(7)	11.54	50.55
		PM_{10}(9)	10.36	45.40
		$PM_{2.5}$(9)	10.36	45.40
		CO	0.46	2.02
		TRS(6)	0.35	1.52
		NH_3	0.82	3.59
9	Lime Silo Scrubber Stack	PM	0.53	0.68
		PM_{10}	0.53	0.68
		$PM_{2.5}$	0.53	0.68
11***	Lime Kiln Scrubber Stack	VOC(6)	1.01	3.36
		NO_X	43.09	147.77
		SO_2	7.00	24.24
		PM(7)	31.58	104.78
		PM_{10}(9)	27.28	90.53
		$PM_{2.5}$(9)	27.28	90.53
		CO	2.99	9.92
		TRS(6)	6.11	20.28
		H_2SO_4	0.46	1.53
16/17	Brown Stock Washers A and B[B1]	VOC(6)	19.66	7.86
		TRS(6)	0.39	0.16
27	Brine Storage Tank	VOC(6)	<0.01	<0.01
		TRS(6)	<0.01	<0.01
30	No. 1 Tall Oil Storage Tank[A2]	VOC(6)	0.21	0.05
		TRS(6)	0.02	0.01
31	No. 2 Tall Oil Storage	VOC(6)	0.21	0.05

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		TRS(6)	0.02	0.01
32	Turpentine Storage Tank[B2]	VOC(6)	0.03	0.12
36	No. 5 White Liquor Tank Vent[A3]	VOC(6)	0.25	1.10
		TRS(6)	0.59	2.60
39##	South Mud Tank	---	---	---
40##	North Mud Tank	---	---	---
41	Green Liquor Storage Tank (West)	VOC(6)	0.02	0.08
		TRS(6)	0.09	0.40
43##	Weak Wash Storage Tank	---	---	---
44##	Scrubber Water Clarifier	---	---	---
45	No. 1 White Liquor Storage Tank[A3]	VOC(6)	0.25	1.10
		TRS(6)	0.59	2.60
46	No. 2 White Liquor Storage Tank[A3]	VOC(6)	0.25	1.10
		TRS(6)	0.59	2.60
47	No. 1 Green Liquor Clarifier[A5]	VOC(6)	0.01	0.02
		TRS(6)	0.02	0.07
49	No. 2 Green Liquor Clarifier	VOC(6)	<0.01	0.01
		TRS(6)	0.02	0.06
50	Green Liquor Equalization Tank	VOC(6)	<0.01	<0.01
		TRS(6)	<0.01	<0.01
51	No. 3 Green Liquor Storage Tank[A5]	VOC(6)	0.02	0.08
		TRS(6)	0.09	0.40
56	“A” Blend Tank[A4,B3]	VOC(6)	0.08	0.33
		TRS(6)	0.01	0.04

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

57	"B" Blend Tank[A4,B3]	VOC(6)	0.03	0.14
		TRS(6)	<0.01	0.02
58	Reject Tank[B3]	VOC(6)	0.10	0.11
		TRS(6)	<0.01	<0.01
61	"A" High Density Storage Tank[A6]	VOC(6)	0.33	1.43
		TRS(6)	0.21	0.93
62	"B" High Density Storage Tank[A6]	VOC(6)	0.33	1.43
		TRS(6)	0.21	0.93
63	No. 1 Weak Black Liquor Storage Tank	VOC(6)	0.35	1.55
		TRS(6)	0.10	0.44
64	No. 2 Weak Black Liquor Storage Tank	VOC(6)	0.35	1.55
		TRS(6)	0.10	0.44
65	Black Liquor Swing Tank	VOC(6)	0.35	1.55
		TRS(6)	0.24	1.04
66	No. 1 Heavy Black Liquor Storage Tank	VOC(6)	0.04	0.16
		TRS(6)	0.17	0.74
67	No. 2 Heavy Black Liquor Storage Tank	VOC(6)	0.04	0.16
		TRS(6)	0.17	0.74
68	Boilout Tank	VOC(6)	0.35	1.55
		TRS(6)	0.24	1.03
72	Gasoline Tank	VOC	---	0.30
80	Wood Yard (5)	PM	7.17	16.33
		PM_{10}	2.89	6.69
		$PM_{2.5}$	<0.01	0.02
81	Truck Traffic Fugitives (5)	PM	---	123.69
		PM_{10}	---	34.37

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		$PM_{2.5}$	---	3.44
88	No. 1 Causticizer	TRS(6)	1.30	4.31
		NH_3	4.47	14.82
89	No. 2 Causticizer	TRS(6)	1.30	4.31
		NH_3	4.47	14.82
90	No. 3 Causticizer	TRS(6)	1.30	4.31
		NH_3	4.47	14.82
91	No. 4 Causticizer	TRS(6)	1.30	4.31
		NH_3	4.47	14.82
92	No. 5 Causticizer	TRS(6)	1.30	4.31
		NH_3	4.47	14.82
93 - 98	Wastewater Collection and Treatment (5)	VOC(6)	26.45	96.54
		TRS(6)	3.64	13.30
99**	Power Boiler No. 3 Stack	VOC(10)	2.54	9.95
		NO_X	21.00	91.98
		SO_2	1.59	1.44
		PM	3.13	13.71
		PM_{10}	3.13	13.71
		$PM_{2.5}$	3.13	13.71
		CO	37.80	165.56
100	Chemi-Washer (5)[B5]	VOC(6)	0.01	0.04
		TRS(6)	<0.01	0.02
101 – 130, 132 - 158 167 - 172, 174 – 175 (11)	Nos. 1 & 2 Linerboard Machines [B5]	VOC(6)	27.66	88.84
		TRS(6)	0.42	1.55
159 – 166, 173 (12)	Secondary Fiber System	VOC(6)	0.34	1.24
192##	Lime Kiln Precoat	---	---	---

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

	Filter			
193##	Precoat Mud Filter Vacuum Pump West	---	---	---
194##	Precoat Mud Filter Vacuum Pump East	---	---	---
205	No. 4 White Liquor Storage Tank[A3]	VOC(6)	0.25	1.10
		TRS(6)	0.59	2.60
210	West Black Liquor Storage Tank	VOC(6)	0.35	1.55
		TRS(6)	0.24	1.03
211	Center Black Liquor Storage Tank	VOC(6)	0.35	1.55
		TRS(6)	0.24	1.03
212	East Black Liquor Storage Tank	VOC(6)	0.35	1.55
		TRS(6)	0.24	1.03
213##	Eco-Filter White Liquor Feed tank	---	---	---
214##	White Liquor Eco-Filter	---	---	---
215##	Eco-Filter White Liquor Standpipe	---	---	---
216##	Eco-Filter Lime Mud Dilution Tank	---	---	---
217##	Eco-Filter Mud Washer	---	---	---
218##	Eco-Filter Weak Wash Standpipe	---	---	---
221	No. 2 Dry Bottom Mix Tank	VOC(6)	0.46	2.00
		SO_2	0.07	0.32
		TRS(6)	0.61	2.68
222	No. 1 Dry Bottom Mix Tank	VOC(6)	0.46	2.00
		SO_2	0.07	0.32
		TRS(6)	0.61	2.68
224	Lime Mud Reclaim System (5)	PM	0.02	0.05
		PM_{10}	0.01	0.03

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		$PM_{2.5}$	<0.01	<0.01
225	No. 2 Fuel Oil Tank	VOC	----	0.01
232##	Green Liquor Dregs Filter and Vacuum Pump	---	---	---
235	Liquor Loading (5)	VOC(6)	1.04	3.64
275	Clean Condensate Collection Tank	VOC(6)	0.01	<0.01
278	Turpentine Loading (5)	VOC(6)	0.27	0.10
279	Fuel Oil Day Tank	VOC	0.07	0.01
280	Fuel Oil Storage Tank	VOC	0.07	0.04
281	Pet Coke Silo Stack	PM	0.26	1.13
		PM_{10}	0.26	1.13
		$PM_{2.5}$	0.26	1.13
282	Bark Boiler Ash Bin	PM	0.26	1.13
		PM_{10}	0.26	1.13
		$PM_{2.5}$	0.26	1.13
283	Cooling Tower No. 1	VOC(6)	0.98	4.30
		PM	1.76	2.56
		PM_{10}	1.76	2.56
		$PM_{2.5}$	1.76	2.56
286	Caustic Solution Tank	NaSH/Na_2S###	0.04	0.04
NCG-FUG1	Switching LVHC and HVLC NCG Venting For Bypass and Preventative Maintenance (5)(13)	VOC	145.00	0.25
		TRS	0.06	<0.01
		Acetone	2.40	0.02
P-VBURNER	Propane Vaporizer Burner	VOC(6)	0.16	0.04
		NO_X	2.56	0.67
		SO_2	0.10	0.03

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		PM	0.14	0.04
		PM_{10}	0.14	0.04
		$PM_{2.5}$	0.14	0.04
		CO	1.47	0.38
P-SLAK	Slaker Wet Scrubber Stack	VOC (6)	0.01	0.02
		PM	0.68	2.97
		PM_{10} (9)	0.68	2.97
		$PM_{2.5}$ (9)	0.68	2.97
		TRS	0.01	0.02
		NH_3	7.35	24.38

(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) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
H_2SO_4 - sulfuric acid
TRS - total reduced sulfide
HAP - hazardous air pollutants as listed in § 112(b) of the Federal Clean Act or Title 40 Code of Federal regulations Part 63, Subpart C
NH_3 - ammonia
NaSH - sodium hydrosulfide
Na_2S - sodium sulfide
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) VOC and TRS are represented as carbon and H_2S, respectively, unless otherwise indicated.
(7) PM includes filterable and condensable PM, and compliance will be determined based on the sum of Method 5 and Method 202 (revised 12/1/2010).
(8) PM_{10} and $PM_{2.5}$ include filterable and condensable PM_{10} and $PM_{2.5}$, respectively, and compliance will be determined based on the sum of Method 201A (revised 12/1/2010) and Method 202 (revised 12/1/2010).
(9) PM_{10} and $PM_{2.5}$ include filterable and condensable PM_{10} and $PM_{2.5}$, respectively, and compliance will be determined based on the sum of Method 5 and Method 202 (Revised 12/1/2010) until such time that the EPA methods are revised to account for particle size distribution data for wet sources.
(10) VOC is represented as carbon
(11) Includes PM1 False Ceiling Exhaust Fan (EPN 167), PM1 Roof Exhaust (EPN 168), PM1 Cleaner Exhaust Southeast (EPN 174), PM1 Cleaner Exhaust Southwest (EPN 175), PM2 Roof Exhausts (EPNs 169, 171, and 175), PM2 5th Section Hood Exhaust Fan (EPN 172), PM Base Sheet Low Density Tank, No. 1 and No. 2 Paper Machine

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Base Sheet Secondary, PM TS Low Density Chest, Strained White Water Chest Strainers, White Top High Density Storage Chest, Excess White Water Storage Chest, and No. 2 Paper Machine Fourdrinier Low Vacuum Seal Tank.

(12) Includes SFS Exhaust Fan North (EPN 173), Secondary Fiber Surge Chest, Secondary Fiber Screen Stock Tank, Secondary Fiber Rejects Tank, Secondary Fiber Rejects Tank East, Secondary Fiber White Water Chest North, MD Storage Chest Secondary Fiber, Secondary Fiber Wax Tank, and Feed Tank for Combisorter.

(13) Emissions resulting from re-routing non-condensible gases between combustion sources [Lime Kiln (EPN 11) and Bark Boiler (EPN 2)].

(14) Planned startup and shutdown emissions are included, as well as planned maintenance activities identified as part of the permit alteration issued on April 25, 2013.

B1-B6 = Hourly emission rates based on 24-hour averaging time.

A2 = For determination of compliance, the annual emissions should be summed for the No. 1 Tall Oil Storage Tank (EPN 30) and the No. 2 Tall Oil Storage Tank (EPN 31).

A3 = For determination of compliance, the annual emissions should be summed for the Nos. 1, 2, 4, and 5 White Liquor Storage Tanks (EPNs 36, 45, 46, and 205).

A4 = For determination of compliance, the annual emissions should be summed for the “A” Blend Tank (EPN 56) and the “B” Blend Tank (EPN 57).

A5 = For determination of compliance, the annual emissions should be summed for the Green Liquor Storage Tank (West) (EPN 41) and the No. 3 Green Liquor Storage Tank (EPN 51).

A6 = For determination of compliance, the annual emissions should be summed for the “A” High Density Storage Tank (EPN 61) and the “B” High Density Storage Tank (EPN 62).

* Compliance with TRS and SO_2 short-term emission rates is based on a 12-hour block average. Short-term emission rates for all other pollutants are based on a 24-hour rolling average.

** Compliance with CO and NO_X short-term emission rates is based on a 30-day rolling average. Compliance with NH_3 short-term emission rate is based on a 3-hour average. Short-term emission rates for all other pollutants are based on a 24-hour rolling average.

*** Compliance with CO and NO_X short-term emission rate is based on a 30-day rolling average. Compliance with TRS short-term emission rate is based on a 12-hour block average. Short-term emission rates for all other pollutants are based on a 24-hour rolling average.

\# Compliance with PM, PM_{10}, and $PM_{2.5}$ short-term emission rate is based on a 3-hour average.

This piece of equipment is authorized by the permit and is no longer considered a source of emissions.

Emissions conservatively assumed to be 100 percent NaSH or 100 percent Na_2S.

Date: January 27, 2022