Emission Sources - Maximum Allowable Emission Rates

Permit Number 168517

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	
			lbs/hour	TPY (4)
Boiler	Boiler	VOC	5.52	24.19
		PM	8.65	37.88
		PM_{10}	7.24	31.71
		$PM_{2.5}$	6.75	29.58
		NO_x	41.42	182.09
		NO_x (MSS)	92.96	
		CO	41.42	184.51
		CO (MSS)	163.29	
		SO_2	13.81	60.59
		SO_2 (MSS)	25.81	
		Pb	0.03	0.12
		H_2SO_4	0.55	2.42
		HCl	2.41	10.55
		NH_3	10.57	46.29
		HAPs	16.32	70.00
PULP_DRYER	Pulp Dryer	VOC	0.15	0.65
		PM	0.73	3.22
		PM_{10}	0.67	2.94
		$PM_{2.5}$	0.47	2.05
		HAPs	0.62	2.74
PULP_FUG	Pulping Process Fugitives (5)	VOC	0.04	0.17
		HAPs	0.05	0.20
LTCRF	Pulp Process, Low Temperature Chemical Recovery Furnace (LTCRF)	VOC	6.88	30.12
		PM	2.88	12.60

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		PM_{10}	2.03	8.89
		$PM_{2.5}$	1.70	7.43
		NO_x	3.28	14.42
		NO_x (MSS)	8.26	
		CO	2.57	11.28
		SO_2	8.54	37.39
		Pb	<0.01	<0.01
		TRS	2.61	11.43
		H_2SO_4	0.22	0.97
		HCl	2.35	10.30
		HAPs	10.49	45.90
CT_Evap	Evaporator Cooling Tower	PM	0.28	1.21
		PM_{10}	0.06	0.25
		$PM_{2.5}$	<0.01	<0.01
CT_NaClO3	Sodium Chlorate Plant Cooling Tower	PM	0.18	0.81
		PM_{10}	0.04	0.17
		$PM_{2.5}$	<0.01	<0.01
CT_ClO2	Chlorine Dioxide Plant Cooling Tower	PM	0.11	0.48
		PM_{10}	0.02	0.10
		$PM_{2.5}$	<0.01	<0.01
CT_Boiler	Boiler Cooling Tower	PM	0.36	1.60
		PM_{10}	0.08	0.34
		$PM_{2.5}$	<0.01	<0.01
CT_ZLD	ZLD Cooling Tower	PM	0.11	0.48
		PM_{10}	0.02	0.10
		$PM_{2.5}$	<0.01	<0.01
CT_Zume	Zume Cooling Tower	PM	0.04	0.18
		PM_{10}	0.01	0.04
		$PM_{2.5}$	<0.01	<0.01

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Silo_FB	Fluidized Bed Material Silo	PM	0.05	0.23
		PM_{10}	0.05	0.23
		$PM_{2.5}$	0.05	0.23
Silo_LM	Limestone Silo	PM	0.05	0.23
		PM_{10}	0.05	0.23
		$PM_{2.5}$	0.05	0.23
Silo_HydLM	Hydrated Lime Silo	PM	0.05	0.23
		PM_{10}	0.05	0.23
		$PM_{2.5}$	0.05	0.23
Silo_BLR1	Boiler Fuel Silo 1	PM	0.06	0.26
		PM_{10}	0.06	0.26
		$PM_{2.5}$	0.06	0.26
Silo_BLR2	Boiler Fuel Silo 2	PM	0.06	0.26
		PM_{10}	0.06	0.26
		$PM_{2.5}$	0.06	0.26
Silo_BLR3	Boiler Fuel Silo 3	PM	0.06	0.26
		PM_{10}	0.06	0.26
		$PM_{2.5}$	0.06	0.26
Silo_PM1	Pulp Mill Feedstock Storage Silo 1	PM	0.06	0.26
		PM_{10}	0.06	0.26
		$PM_{2.5}$	0.06	0.26
Silo_PM2	Pulp Mill Feedstock Storage Silo 2	PM	0.06	0.26
		PM_{10}	0.06	0.26
		$PM_{2.5}$	0.06	0.26
Silo_PM3	Pulp Mill Feedstock Storage Silo 3	PM	0.06	0.26
		PM_{10}	0.06	0.26
		$PM_{2.5}$	0.06	0.26
Silo_CARB	Activated Carbon Silo	PM	0.05	0.23
		PM_{10}	0.05	0.23

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		$PM_{2.5}$	0.05	0.23
Silo_BTASH	Boiler Bottom Ash Silo	PM	0.15	0.68
		PM_{10}	0.15	0.68
		$PM_{2.5}$	0.15	0.68
Silo_FLASH	Boiler Fly Ash Silo	PM	0.08	0.34
		PM_{10}	0.08	0.34
		$PM_{2.5}$	0.08	0.34
Bunker	Boiler Fuel Bunker	PM	0.08	0.34
		PM_{10}	0.08	0.34
		$PM_{2.5}$	0.08	0.34
Zume	Zume Plant (5)	PM	0.04	0.18
		PM_{10}	0.04	0.16
		$PM_{2.5}$	0.03	0.12
		VOC	0.27	1.18
		HAPs	0.08	0.36
CONV-1 to CONV-25	Material Handling Activities: Conveyor Transfers and Vehicle Transfers (5)	PM	0.01	0.03
		PM_{10}	<0.01	0.01
		$PM_{2.5}$	<0.01	<0.01
ST_PILE	Biomass Feedstock Storage Pile (5)	PM	0.07	0.05
		PM_{10}	0.03	0.02
		$PM_{2.5}$	<0.01	<0.01
FIRE_PUMP	Emergency Fire Pump Engine	VOC	0.03	<0.01
		PM	0.03	<0.01
		PM_{10}	0.03	<0.01
		$PM_{2.5}$	0.03	<0.01
		NO_x	0.59	0.03
		CO	0.08	<0.01
		SO_2	<0.01	<0.01
SBL-01	Strong Black Liquor Tank #1	VOC	0.11	0.49

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		HAPs	0.16	0.70
SBL-02	Strong Black Liquor Tank #2	VOC	0.11	0.49
		HAPs	0.16	0.70
SBL-03	Strong Black Liquor Tank #3	VOC	0.11	0.49
		HAPs	0.16	0.70
SBL-04	Strong Black Liquor Tank #4	VOC	0.11	0.49
		HAPs	0.16	0.70
WBL-01	Weak Black Liquor Tank #1	VOC	1.04	4.56
		HAPs	0.13	0.56
WBL-02	Weak Black Liquor Tank #2	VOC	1.04	4.56
		HAPs	0.13	0.56
WBL-03	Weak Black Liquor Tank #3	VOC	1.04	4.56
		HAPs	0.13	0.56
WBL-04	Weak Black Liquor Tank #4	VOC	1.04	4.56
		HAPs	0.13	0.56
WBL-05	Weak Black Liquor Tank #5	VOC	1.04	4.56
		HAPs	0.13	0.56
WBL-06	Weak Black Liquor Tank #6	VOC	1.04	4.56
		HAPs	0.13	0.56
UBP-01	Unbleached Pulp Tank #1	VOC	0.86	3.77
		HAPs	0.30	1.33
UBP-02	Unbleached Pulp Tank #2	VOC	0.86	3.77
		HAPs	0.30	1.33
DTank	Diesel Storage Tank	VOC	0.06	<0.01
		HAPs	<0.01	<0.01

(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

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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
HAP	-	hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
Pb	-	lead
HCl	-	hydrochloric acid
TRS	-	total reduced sulfur. TRS emission rates are reported as H_2S unless otherwise specified
H_2SO_4	-	sulfuric acid
NH_3	-	ammonia

(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.

Date: October 12, 2022