EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 77679, PSDTX1061, and HAP55

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**
BUBBLING BED BOILER - NORMAL OPERATIONS EMISSIONS				
BFB-1	Bubbling Fluidized Bed Boiler	NO_x	137.0	602.0
	1,374 MMBtu/hr	CO	227.0	903.0
	(approximated 100 MW)	SO_2	474.0	277.0
		VOC	20.0	78.0
		PM/PM_{10}	44.0	193.0
		H_2SO_4	3.6	6.02
		NH_3	18.0	55.0
		HCl	97.5	120.4
		Pb	0.1	0.3
		Hg	0.004	0.018
BUBBLING BED BOILER - START-UP/SHUTDOWN EMISSIONS				
BFB-1	Bubbling Fluidized Bed Boiler	NO_x	250.0	--
	1,374 MMBtu/hr	CO	227.0	--
	(approximated 100 MW)	SO_2	283.0	--
		VOC	20.0	--
		PM/PM_{10}	43.0	--
		H_2SO_4	4.3	--
		NH_3	19.0	--
		HCl	97.0	--
		Pb	0.1	--
		Hg	0.004	
GAS TURBINE AND DUCT BURNER - NORMAL OPERATIONS EMISSIONS				
HRSG-1	SW501F Gas Turbine with	NO_x	256.0	94.5

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
	375 MMBtu/hr Duct Burner (approximately 330 MW)	CO	219.0	267.0
		SO_2	7.1	4.9
		VOC	28.0	27.9
		PM/PM_{10}	26.9	68.1
		H_2SO_4	1.3	0.89
		NH_3	34.0	46.2
GAS TURBINE AND DUCT BURNER - START-UP/SHUTDOWN EMISSIONS				
HRSG-1	SW501F Gas Turbine with 375 MMBtu/hr Duct Burner (approximately 330 MW)	NO_x	256.0	--
		CO	5349.0	--
		SO_2	7.1	--
		VOC	514.0	--
		PM/PM_{10}	26.9	--
		H_2SO_4	1.3	--
		NH_3	34.0	--
FWPUMP-1	Fire Water Pump Diesel Engine 300 hp (100 hrs/yr non emergency)	NO_x	9.30	0.47
		CO	2.00	0.10
		SO_2	0.62	0.03
		VOC	0.75	0.04
		PM/PM_{10}	0.66	0.03
LOGENG-1	Log Chipper Diesel Engine 860 hp (1440 hrs/yr)	NO_x	20.60	14.90
		CO	4.70	3.41
		SO_2	0.69	0.50
		VOC	0.60	0.44
		PM/PM_{10}	0.60	0.43
NG-FUG-1	Natural Gas Piping Fugitives	VOC	0.08	0.35
PROP-FUG-1	Propane Piping Fugitives	VOC	0.84	3.69
NH_3-FUG-1	Ammonia Fugitives - HRSG-1	NH_3	0.01	0.02
NH_3-FUG-2	Ammonia Fugitives -BFB	NH_3 0.01	0.05	
LVCTG-1	Gas Turbine Lube Vent	VOC 0.04	0.19	

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**
LVSTG-1	Steam Turbine 1 Lube Vent	VOC 0.03	0.11	
LVSTG-2	Steam Turbine 2 Lube Vent	VOC 0.03	0.11	
CT-1	Cooling Tower - HRSG	PM	1.01	4.43
		PM_{10}	0.58	2.53
CT-2	Cooling Tower - BFB	PM	0.78	3.40
		PM_{10}	0.44	1.94
TK-DSL-1	Firewater Pump Diesel Tank	VOC	0.01	<0.01
TK-DSL-2	Log Chipper Diesel Tank	VOC	0.02	<0.01
T-ACID	Acid Storage Tank	H_2SO_4	<0.01	<0.01
TRK	Truck Unloader/Receiving	PM	0.06	0.07
		PM_{10}	0.03	0.03
WDPROC-1	Fuel Processing Building	PM	0.17	0.24
		PM_{10}	0.07	0.09
LOG-1	Round Log Chipper	PM	0.10	0.06
		PM_{10}	0.04	0.03
TR-1	Transfer of Wood Chips to Conveyor C-1	PM	0.08	0.10
		PM_{10}	0.03	0.03
TR-2	Transfer of Wood Chips from C-1 to Fuel Process Bldg	PM	0.08	0.10
		PM_{10}	0.03	0.03
TR-3	Transfer of Fuel from Boiler Feed Conveyor to Silo Feed Chutes	PM	0.06	0.10
		PM_{10}	0.02	0.03
FUEL-FUG-1	Transfers of Fuel in/near Fuel Storage Area	PM	1.08	1.34
		PM_{10}	0.45	0.56

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**
SDREC-1	Sawdust Receiving	PM	0.90	3.15
		PM_{10}	0.32	1.14
SDPILE-1	Sawdust Storage Pile	PM	0.06	0.07
		PM_{10}	0.03	0.04
FSILO 1	Boiler Feed Silo 1	PM/PM_{10}	0.02	--
FSILO 2	Boiler Feed Silo 2	PM/PM_{10}	0.02	--
FSILO 1 and 2	Boiler Feed Silo Combined Annual	PM/PM_{10}	--	0.08
SAND-DC	Sand Silo Dust Collector	PM/PM_{10}	<0.01	<0.01
FA-DC	Fly Ash Silo Dust Collector	PM/PM_{10}	<0.01	<0.01
BA-DC	Bottom Ash Silo Dust Collector	PM/PM_{10}	<0.01	<0.01
FA-FUG	Fly Ash Silo Loading to Trucks Fugitives	PM	0.31	0.43
		PM_{10}	0.08	0.11
BA-FUG	Bottom Ash Silo Loading to Trucks Fugitives	PM	<0.01	<0.01
		PM_{10}	<0.01	<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 an area name or fugitive source name.

(3) NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
PM - particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$.
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter.
PM_{10} - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.
H_2SO_4 - sulfuric acid mist

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

HCl - hydrogen chloride
NH_3 - ammonia
Pb - lead
Hg - mercury

* Emission rates are based on and the gas turbine is limited by the following maximum operating schedule:

___Hrs/day __Days/week__Weeks/year or 6,500 Hrs/year

* Emission rates are based on and the facilities are limited by the following maximum operating schedule, unless operating hours are specifically limited elsewhere in the permit:

___Hrs/day __Days/week__Weeks/year or 8,760 Hrs/year

** Compliance with annual emission limits is based on a rolling 12-month period.

Dated October 13, 2009