Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 70861 and PSDTX1039

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)
S01	Pulverized Coal (PC) Boiler (8,185 MMBtu/hr)	NO_x (30-day)	573	1,793
		NO_x (1-hr)	1,637	--
		SO_2 (30-day)	982	3,585
		SO_2 (1-hr)	2,456	--
		PM/PM_{10} (filterable)	123	538
		PM/PM_{10} (total)	246	1,076
		CO (30-day)	1,228	5,378
		CO (1-hr)	2,456	--
		VOC	29	129
		Organic HAP	--	8.5
		Sulfuric acid mist	127	133
		Hydrogen fluoride	2.2	9.7
		Hydrogen chloride	2.2	9.7
		Total Halogenated Acids (5)	--	10.7
		Ammonia	41	55
		Lead	0.55	0.41
		Mercury	0.94	0.038

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S01	Startup Emissions - PC Boiler	NO_x	964	--
		SO_2	2,892	--
		PM/PM_{10} (filterable)	123	--
		PM/PM_{10} (total)	327	--
		CO	1,228	--
		VOC	43	--
		Sulfuric acid mist	111	--
		Hydrogen fluoride	6	--
		Hydrogen chloride	3	--
		Ammonia	41	
		Lead	0.55	--
		Mercury	0.90	--
The following source is incorporated by reference. It remains authorized by the Air Quality Standard Permit for Boilers, effective November 3, 2006. The authorization was reviewed under Registration No. 95851, issued June 9, 2011.				
S02	Natural Gas-fired Auxiliary Boiler (278 MMBtu/hr) Before Commercial Operation of Main Boiler (unlimited annual hours of operation)	NO_x	2.78	12.2
		SO_2	0.17	0.7
		CO	10.3	45.2
		$PM/PM_{10}/PM_{2.5}$	1.61	7.1
		VOC	1.8	7.9
S02	Natural Gas-fired Auxiliary Boiler (278 MMBtu/hr) After Commercial Operation of Main Boiler (operation limited to 500 hours per year)	NO_x	2.78	0.70
		SO_2	0.17	0.04
		CO	10.3	2.58
		$PM/PM_{10}/PM_{2.5}$	1.61	0.40
		VOC	1.8	0.45
S03a	Railcar Coal Unloading - Baghouse Vent	PM	0.28	0.15
		PM_{10}	0.13	0.072
S03b	Railcar Coal Unloading -	PM	0.28	0.15

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		PM_{10}	0.13	0.072
S05	Stackout Conveyor #1 - Coal Dust Fugitives (6)	PM	0.25	0.15
		PM_{10}	0.12	0.070
S06	Stackout Conveyor #2 - Coal Dust Fugitives (6)	PM	0.13	0.074
		PM_{10}	0.059	0.035
S07	Active Coal Pile #1 - Coal Dust Fugitives (6)	PM	0.14	0.59
		PM_{10}	0.068	0.30
S08	Active Coal Pile #2 - Coal Dust Fugitives (6)	PM	0.14	0.59
		PM_{10}	0.068	0.30
S09	Active Coal Pile Reclaim - Baghouse Vent	PM	0.002	0.005
		PM_{10}	<0.001	0.002
S10	Reclaim Conveyor #1 - Coal Dust Fugitives (6)	PM	0.053	0.104
		PM_{10}	0.025	0.049
The following two sources are incorporated by reference. They remain authorized by Permit by Rule, 30 TAC § 106.262, effective November 1, 2003. The authorization was reviewed under Registration No. 97212, issued September 26, 2011.				
S10EC	Emergency Reclaim Conveyor Coal Dust Fugitives (6)	PM	0.063	0.12
		PM_{10}	0.030	0.059
S10EC	Emergency Reclaim Hopper Coal Dust Fugitives (6)	PM	0.038	0.074
		PM_{10}	0.018	0.035
S11	Coal Transfer Tower - Baghouse Vent	PM	0.083	0.049
		PM_{10}	0.039	0.023
The following source is incorporated by reference. It remains authorized by Permit by Rule, 30 TAC § 106.262, effective November 1, 2003. The authorization was reviewed under Registration No. 97212, issued September 26, 2011.				
S12	Reclaim Conveyor #2 - Coal Dust Fugitives (6)	PM	0.35	0.35
		PM_{10}	0.17	0.16

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S13	Tripper Deck Silo Bay - Enclosed Conveyor - Baghouse Vent	PM	0.0015	0.0015
		PM_{10}	<0.001	<0.001
S14	Inactive Coal Pile - Coal Dust Fugitives (6)	PM	0.26	1.14
		PM_{10}	0.13	0.57
S15	Bottom Ash Conveyor & Drop to Bunker - Dust Fugitives (6)	PM	0.0014	0.0014
		PM_{10}	0.00064	0.00068
S16	Bottom Ash Bunker - Truck Loadout - Dust Fugitives (6)	PM	0.041	0.0057
		PM_{10}	0.019	0.0027
S18	Fly Ash Silo - Conveyor Loading - Baghouse Vent	PM	0.31	0.39
		PM_{10}	0.11	0.14
S24	Fly Ash Transfer Point #2 - Dust Fugitives (6)	PM	0.044	0.027
		PM_{10}	0.021	0.013
S26	Fly Ash Landfill - Dust Fugitives (6)	PM	0.31	1.36
		PM_{10}	0.16	0.68
S29	Pebble Lime Silo 1- Pneumatic Loading - Baghouse Vent	PM	0.090	0.0015
		PM_{10}	0.043	0.0007
The following two sources are incorporated by reference. They remain authorized by Permit by Rule, 30 TAC § 106.144, effective September 4, 2000. The authorization was reviewed under Registration No. 97212, issued September 26, 2011.				
S31	Pebble Lime Silo 2 Loading - Baghouse Vent	PM	0.002	<0.001
		PM_{10}	<0.001	<0.001
S35	Hydrated Lime Silo 3 Loading - Baghouse Vent	PM	<0.001	<0.001
		PM_{10}	<0.001	<0.001
S32	Cooling Tower	PM_{10}	11	50
S33	Diesel-fired Engine - Emergency Generator (1,500 kW)	NO_x	25.7	1.29
		SO_2	0.53	0.027

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		CO	2.53	0.13
		$PM/PM_{10}/PM_{2.5}$	0.22	0.011
		VOC	0.53	0.027
S34	Diesel-fired Emergency Fire Water Pump (403 hp)	NO_x	3.41	0.17
		SO_2	0.11	0.0053
		CO	0.66	0.033
		$PM/PM_{10}/PM_{2.5}$	0.081	0.0040
		VOC	0.14	0.0071
S37	Diesel Fuel Storage Tank (800 gallons)	VOC	0.023	<0.001
S38	Diesel Fuel Storage Tank (580 gallons)	VOC	0.056	<0.001
S39	Aqueous Ammonia Fugitives (6)	Ammonia	0.16	0.70
The following sources are incorporated by reference. They remain authorized by Permit by Rule, as indicated after each source name. The authorizations were reviewed under Registration No. 97212, issued September 26, 2011.				
S40	Fire Water Booster Pump Engine (109 hp) [30 TAC § 106.511]	NO_x	1.36	0.068
		CO	0.32	0.016
		VOC	0.038	0.0019
		SO_2	0.029	0.0014
		$PM/PM_{10}/PM_{2.5}$	0.072	0.0036
S41	Diesel Fuel Storage Tank (290 gallons) [30 TAC § 106.473]	VOC	0.039	<0.001
S42	Activated Carbon Silo - Baghouse Vent [30 TAC § 106.144]	$PM/PM_{10}/PM_{2.5}$	<0.001	<0.001
S44	Soda Ash Silo - Baghouse Vent [30 TAC § 106.144]	$PM/PM_{10}/PM_{2.5}$	<0.001	<0.001
S58	Recycled Ash Silo - Baghouse Vent [30 TAC §§ 106.261-106.262]	PM	0.26	1.11
		PM_{10}	0.09	0.39
S59	Lube Oil Mist Eliminator Vent	VOC	0.091	0.40

Emission Sources - Maximum Allowable Emission Rates

	[30 TAC § 106.261]			
S60	Lube Oil Tank [30 TAC § 106.472]	VOC	0.010	<0.001
S61	Sulfuric Acid Tank - Condensate Polishing [30 TAC § 106.472]	Sulfuric acid	<0.001	<0.001
S62	Sodium Hypochlorite Tank - Cooling Water Treatment [30 TAC § 106.472]	Sodium Hypochlorite	1.24	0.078
S63	Sodium Bromide Tank - Cooling Water Treatment [30 TAC § 106.472]	Sodium Bromide	0.007	<0.001
S64	Caustic Tank - Condensate Polishing [30 TAC § 106.472]	Caustic	<0.001	<0.001
S65	Sulfuric Acid Tank - Cooling Water Treatment [30 TAC § 106.472]	Sulfuric Acid	<0.001	<0.001
S66	Sulfuric Acid Tank - Process Water Treatment [30 TAC § 106.472]	Sulfuric Acid	<0.001	<0.001
S67	Sodium Hypochlorite Tank - Process Water Treatment [30 TAC § 106.472]	Sodium Hypochlorite	1.24	0.078
S68	Ferric Chloride Tank - Process Water Treatment [30 TAC § 106.472]	Ferric Chloride	0.25	0.010
S69	Caustic Tank - Process Water Treatment [30 TAC § 106.472]	Caustic	0.088	0.005
S71	Hydraulic Fluid Tank [30 TAC § 106.472]	VOC	<0.001	<0.001
S72	Diesel Fuel Storage Tank (5,000 gallons) [30 TAC § 106.472]	VOC	0.08	0.0032
S73	Diesel Fuel Storage Tank (5,000 gallons) [30 TAC § 106.472]	VOC	0.08	0.0032
S74AB	Recycled Ash Wetting/Mixing Drop from silo to mix tank (6) [30 TAC §§ 106.261-106.262]	PM	0.006	0.024
		PM_{10}	0.003	0.011

Emission Sources - Maximum Allowable Emission Rates

(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) NO_X - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
HAP - hazardous air pollutants
(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. Annual limits include emissions from normal and planned maintenance, startup, and shutdown emissions.
(5) Total halogenated acids equals the sum of hydrogen chloride and hydrogen fluoride emissions. Although separate annual emission limits are established for HCl and HF, total annual emissions of these air pollutants shall not exceed the single annual emission limit for total halogenated acids.
(6) Fugitive emission rate is an estimate and is enforceable through compliance with the applicable special conditions and permit application representations.

Date: June 22, 2012