EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 92350 and PSDTX1218

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**
CT1	Combustion Turbine and Duct Burner (Fired with Syngas/Offgas)	NO_x	161.28	165.79
		SO_2	17.83	78.10
		CO	141.19	310.97
		VOC	6.70	20.42
		PM	27.12	118.80
		PM_{10}	27.12	118.80
		$PM_{2.5}$	27.12	118.80
		H_2SO_4	2.73	11.96
		NH_3	31.27	136.98
		Hg	0.001	0.006
		HCl	0.32	1.39
		HF	0.19	0.83
		Pb	0.004	0.02
		H_2CO	0.67	2.96
CT1	Combustion Turbine (Fired with natural gas)	NO_x	120.10	-
		NO_x (startup)	240.21	-
		SO_2	11.14	-
		CO	121.84	-
		CO (startup)	1705.81	-
		VOC	5.57	-
		VOC (startup)	194.95	-
		PM	18.30	-
		PM_{10}	18.30	-
		$PM_{2.5}$	18.30	-
		H_2SO_4	1.70	-
		NH_3	29.59	-
		H_2CO	0.48	-
CT1-LOV	CT Lube Oil Vent	PM	0.05	0.22
		PM_{10}	0.05	0.22
		$PM_{2.5}$	0.05	0.22

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ST1-LOV	Steam Turbine Lube Oil Vent	PM	0.05	0.22
		PM_{10}	0.05	0.22
		$PM_{2.5}$	0.05	0.22
EP-DSS-01	Rail Car Unloading	PM	0.18	0.05
		PM_{10}	0.09	0.02
		$PM_{2.5}$	0.01	0.003
C-1	Coal Unloading Conveyor	PM	0.16	0.04
		PM_{10}	0.08	0.02
		$PM_{2.5}$	0.01	0.003
EP-DSS-02	Active/Live Coal Storage Pile	PM	0.24	1.05
		PM_{10}	0.12	0.52
		$PM_{2.5}$	0.02	0.08
EP-DSS-03	Inactive Coal Storage Pile	PM	0.57	2.49
		PM_{10}	0.28	1.24
		$PM_{2.5}$	0.04	0.18
C-2	Crusher Feed Conveyor	PM	0.02	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.002	0.001
C-3	Crusher Feed Conveyor	PM	0.02	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.002	0.001
EP-CDC-01	Coal Crusher Building	PM	0.40	0.21
		PM_{10}	0.12	0.06
		$PM_{2.5}$	0.12	0.06
C-4	Plant Feed Conveyor	PM	0.31	0.16
		PM_{10}	0.15	0.08
		$PM_{2.5}$	0.02	0.01
C-5	Plant Feed Conveyor	PM	0.31	0.16
		PM_{10}	0.15	0.08

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		$PM_{2.5}$	0.02	0.01
EP-CDC-02	Coal Transfer Tower	PM	0.26	1.13
		PM_{10}	0.26	1.13
		$PM_{2.5}$	0.26	1.13
C-6	Tripper Feed Conveyor	PM	0.02	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.002	0.001
C-7	Tripper Coal Conveyor	PM	0.02	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.002	0.001
C-8	Silo Fill Tripper Conveyor	PM	0.06	0.03
		PM_{10}	0.03	0.01
		$PM_{2.5}$	0.004	0.002
C-9	Silo Fill Tripper Conveyor	PM	0.06	0.03
		PM_{10}	0.03	0.01
		$PM_{2.5}$	0.004	0.002
EP-CDC-03	Gasifier Feed Silo	PM	0.03	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.002	0.001
EP-CDC-04	Gasifier Feed Silo	PM	0.03	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.002	0.001
EP-SDC-A	Slag Storage Pile	PM	0.06	0.26
		PM_{10}	0.03	0.13
		$PM_{2.5}$	0.001	0.02
EP-SDC-A	Slag Storage Pile	PM	0.06	0.26
		PM_{10}	0.03	0.13
		$PM_{2.5}$	0.001	0.02
S-1	Slag Reclaim Conveyor	PM	0.004	0.0005
		PM_{10}	0.002	0.0002

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		$PM_{2.5}$	0.00026	0.00003
S-2	Slag Reclaim Conveyor	PM	0.004	0.0005
		PM_{10}	0.002	0.0002
		$PM_{2.5}$	0.00026	0.00003
EP-SDC-01	Slag Transfer Tower SIT-1	PM	0.002	0.01
		PM_{10}	0.001	0.005
		$PM_{2.5}$	0.0002	0.001
EP-SDC-02	Slag Transfer Tower SIT-2	PM	0.002	0.01
		PM_{10}	0.001	0.005
		$PM_{2.5}$	0.0002	0.001
S-3	Slag Transfer Conveyor	PM	0.04	0.005
		PM_{10}	0.02	0.002
		$PM_{2.5}$	0.003	0.0003
S-4	Slag Loadout Conveyor	PM	0.04	0.01
		PM_{10}	0.02	0.004
		$PM_{2.5}$	0.003	0.001
EP-SDC-03	Slag Railloading Station	PM	0.002	0.01
		PM_{10}	0.001	0.005
		$PM_{2.5}$	0.0002	0.0007
U-1	Urea Storage Conveyor	PM	1.15	3.06
		PM_{10}	0.54	1.45
		$PM_{2.5}$	0.08	0.22
EP-UDC-01	Urea Transfer Tower UTT-1	PM	0.13	0.56
		PM_{10}	0.13	0.56
		$PM_{2.5}$	0.13	0.56
U-2	Urea Tripper Conveyor	PM	0.80	2.14
		PM_{10}	0.38	1.01
		$PM_{2.5}$	0.06	0.15
EP-UDC-02	Urea Storage Building	PM	0.41	1.10
		PM_{10}	0.20	0.52

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		$PM_{2.5}$	0.03	0.08
U-3	Urea Reclaim Conveyor	PM	4.90	4.90
		PM_{10}	2.32	2.32
		$PM_{2.5}$	0.35	0.35
EP-UDC-03	Urea Transfer Tower UTT-2	PM	0.13	0.56
		PM_{10}	0.13	0.56
		$PM_{2.5}$	0.13	0.56
U-4	Urea Loadout Conveyor	PM	0.92	0.92
		PM_{10}	0.43	0.43
		$PM_{2.5}$	0.07	0.07
EP-UDC-04	Urea Railloading Station	PM	0.13	0.56
		PM_{10}	0.13	0.56
		$PM_{2.5}$	0.13	0.56
SAP-VENT	Sulfuric Acid Plant Vent	NO_x	2.50	10.96
		SO_2	2.32	10.17
		CO (Startup)	2.06	0.051
		VOC (Startup)	0.02	0.004
		PM	0.61	2.68
		PM_{10}	0.61	2.68
		$PM_{2.5}$	0.61	2.68
		H_2SO_4	0.61	2.68
UP-ABSORB	Urea Plant Absorber	NH_3	8.69	38.08
UP-VENT	Urea Plant Vent Stack	NH_3	6.49	28.44
UP-GRAN	Urea Granulation Stack	PM	45.47	199.2
		PM_{10}	45.47	199.2
		$PM_{2.5}$	45.47	199.2
		NH_3	36.38	159.3
COALDRY1	Coal Mill Dryer Vent Train 1	NO_x	3.83	16.75
		SO_2	0.36	1.59
		CO	7.01	30.71
		VOC	0.69	3.01
		PM	4.76	20.84

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		PM_{10}	4.76	20.84
		$PM_{2.5}$	4.76	20.84
		Hg	0.001	0.003
COALDRY1	Coal Mill Dryer Vent Train 1	NO_x	3.83	16.75
		SO_2	0.36	1.59
		CO	7.01	30.71
		VOC	0.69	3.01
		PM	4.76	20.84
		PM_{10}	4.76	20.84
		$PM_{2.5}$	4.76	20.84
		Hg	0.001	0.003
COALDRY2	Coal Mill Dryer Vent Train 2	NO_x	3.83	16.75
		SO_2	0.36	1.59
		CO	7.01	30.71
		VOC	0.69	3.01
		PM	4.76	20.84
		PM_{10}	4.76	20.84
		$PM_{2.5}$	4.76	20.84
		Hg	0.001	0.003
COOLTWR1	Cooling Tower	VOC	0.79	3.45
		PM	5.63	24.67
		PM_{10}	1.33	5.82
		$PM_{2.5}$	0.01	0.04
FLARE1	Gasifier Flare 1 Routine Emissions	NO_x	0.03	0.12
		SO_2	0.00002	0.0001
		CO	0.14	0.61
		VOC	0.18	0.04
FLARE2	Gasifier Flare 2 Routine Emissions	NO_x	0.03	0.12
		SO_2	0.00002	0.0001
		CO	0.14	0.61
		VOC	0.18	0.04
FLARE1/ FLARE2	Gasifier Flare 1/2 Start-Up Emissions	NO_x	133.26	11.99
		SO_2	1771.78	159.46
		CO	6058.17	545.24

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

		VOC	17.35	1.56
DIESELTNK	Diesel Tank for Emergency Engines	VOC	0.49	0.002
FUG-RSYN	Fugitives: Raw Fugitives	CO	1.67	7.31
		VOC	0.028	0.12
		H_2S	0.0040	0.017
FUG-C3REF	Fugitives: Propane Refrigeration	VOC	1.48	6.47
FUG-CYSN	Fugitives: Clean Syngas	CO	0.03	0.14
		H_2S	0.000002	0.00001
FUG-AG	Fugitives: Acid Gas	CO	0.002	0.01
		H_2S	0.03	0.14
FUG-NH	Fugitives: Ammonia and SCR Piping	NH_3	0.03	0.14
COMP-VENT	CO_2 Compressor Bypass Vent	CO	1109.99	243.09
		VOC	317.42	69.52
		H_2S	6.75	1.48
		COS	11.90	2.61
AUX-BOILER	Natural Gas Auxiliary Boiler	NO_x	4.25	1.06
		SO_2	0.71	0.18
		CO	9.25	2.31
		VOC	1.35	0.34
		PM	1.86	0.47
		PM_{10}	1.86	0.47
		$PM_{2.5}$	1.86	0.47
EMGEN1	Diesel-Fired Emergency Generator 1	NO_x	19.75	0.51
		SO_2	0.02	0.001
		CO	11.57	0.30
		VOC	1.42	0.04
		PM	0.66	0.02
		PM_{10}	0.66	0.02
		$PM_{2.5}$	0.66	0.02

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

EMGEN 2	Diesel-Fired Emergency Generator 2	NO_x	19.75	0.51
		SO_2	0.02	0.001
		CO	11.57	0.30
		VOC	1.42	0.04
		PM	0.66	0.02
		PM_{10}	0.66	0.02
		$PM_{2.5}$	0.66	0.02
FWPENG	Diesel Fire Water Pump Engine	NO_x	1.26	0.03
		SO_2	0.004	0.0001
		CO	2.01	0.05
		VOC	1.05	0.027
		PM	0.12	0.003
		PM_{10}	0.12	0.003
		$PM_{2.5}$	0.12	0.003
MSS-1	Miscellaneous Equipment Opening	VOC	0.011	0.001
		H_2S	0.001	0.0001
MSS-2	Vacuum Trucks	NH_3	2.80	0.07

(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) 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 - particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - particulate matter equal to or less than 10 microns in diameter
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
HCl - hydrogen chloride
HF - hydrogen fluoride
Hg - mercury
H_2CO - formaldehyde
Pb - lead
H_2SO_4 - sulfuric acid
NH_3 - ammonia
COS - carbonyl sulfide
H_2S - hydrogen sulfide
(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

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