

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 70492 and PSD-TX-1037

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*
U-6	Spruce Power Generating Unit No. 2 (8,000 MMBtu/Hr)	NO _x	1,600	1,752
		SO ₂	2,880	2,102
		CO	4,480	5,256
		VOC	29	88
		H ₂ SO ₄	44	129
		NH ₃	50	66
		HF	60	26
		HCl	480	66
		Pb	0.2	0.3
		Hg	0.43	0.07
		PM/PM ₁₀ (6)	264	771
		PM/PM ₁₀ (7)	---	525.6
U-6, U-5, E-3, E-1, and E-2	Emissions Cap for Spruce Unit 1 and 2, Deely Units 1 and 2, and Sommers 1 and 2 (5)	10,454	NO _x	---
U-6 and U-5	Emissions Cap for Spruce Unit 1 and 2 (5)	SO ₂	---	4,319
EMGEN-1	Emergency Generator 1	NO _x	38.6	1.2
		SO ₂	1.3	0.04
		PM/PM ₁₀	1.1	0.03
		CO	8.9	0.3
		VOC	1.1	0.03
EMGEN-2	Emergency Generator 2	NO _x	38.6	1.2
		SO ₂	1.3	0.04
		PM/PM ₁₀	1.1	0.03
		CO	8.9	0.3

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T-ACID	Sulfuric Acid Storage Tank	VOC	1.1	0.03
		H ₂ SO ₄	<0.01	<0.01
T-BASE	Base Storage Tank	Bases	<0.01	<0.01
F-NH ₃	Aqueous Ammonia Fugitives	NH ₃	0.47	2.1
FAS3	Fly Ash Silos for Spruce Unit 1	PM	0.527	0.247
		PM ₁₀	0.178	0.083
		Pb	1.1E-04	3.5E-05
		Hg	4.5E-06	5.9E-07
FAS4	Fly Ash Silos for Spruce Unit 2	PM	0.689	0.322
		PM ₁₀	0.235	0.110
		Pb	1.4E-04	4.5E-05
		Hg	5.9E-06	7.7E-07
EAS4	Economizer Ash Silos for Spruce Unit 2	PM	0.160	0.103
		PM ₁₀	0.100	0.156
		Pb	2.1E-05	2.3E-05
		Hg	8.8E-07	3.8E-07
FAD3	Spruce Unit 1 Fly Ash Loadout to Trucks	PM	0.31	0.21
		PM ₁₀	0.075	0.05
		Pb	2.6E-06	3.0E-05
		Hg	2.6E-06	5.0E-07
FAD4	Spruce Unit 2 Fly Ash Loadout to Trucks	PM	0.31	0.29
		PM ₁₀	0.08	0.10
		Pb	6.2E-05	4.0E-05
		Hg	2.6E-06	6.8E-07
EAD4	Spruce Unit 2 Economizer Ash Loadout to Trucks	PM	0.0004	0.01
		PM ₁₀	0.01	0.0004

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F-FILL	Sludge and Ash Landfill Fugitives	Pb	1.1E-06	5.7E-08
		Hg	4.5E-08	9.7E-10
		PM	1.53	6.8
		PM ₁₀	0.76	3.38
		Pb	1.2E-05	5.4E-05
		Hg	2.1E-07	9.2E-07
F-LS	Limestone Receiving and Handling Fugitives	PM	0.004	0.0006
		PM ₁₀	0.002	0.0003
A-L55	Limestone Storage Pile	PM	0.08	0.35
		PM ₁₀	0.04	0.18
LDC-12	Limestone Receiving Baghouse	PM	1.2E-02	1.7E-03
		PM ₁₀	5.6E-03	8.2E-04
LDC-10	Limestone Silos	PM	1.2E-02	1.7E-03
		PM ₁₀	5.6E-03	8.1E-04
F-CCS	Coal Storage Fugitives	PM	9.08	39.7
		PM ₁₀	1.88	8.2
PX-CO1A/B	Railcar No. 1 Unloading and Transfer Baghouse	PM	0.01	0.02
		PM ₁₀	0.01	0.02
PX-CO2	Railcar No. 1 Unloading Fugitives	PM	0.25	0.53
		PM ₁₀	0.05	0.11
DC-15	Railcar No. 2 Unloading and Transfer Baghouse	PM	0.01	0.02
		PM ₁₀	0.01	0.02
PX-CO3	Railcar No. 2 Unloading Fugitives	PM	0.25	0.53
		PM ₁₀	0.05	0.11
PX-CO4	Rotary Plow Reclaim	PM	0.24	0.05
		PM ₁₀	0.05	0.01

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PX-C16	Stacker/Reclaim - Stackout	PM PM ₁₀ 0.10	0.47 0.021	0.10
PX-C17	Stacker/Reclaim - Reclaim	PM PM ₁₀ 0.17	0.807 0.06	0.303
F-Area1	Coal Conveyor Fugitives - Coal Yard Area	PM PM ₁₀	0.96 0.20	1.23 0.25
F-Area2	Coal Conveyor Fugitives - Transfer Area	PM PM ₁₀	0.11 0.02	0.11 0.02
F-Area3	Coal Conveyor Fugitives - J. K. Spruce Power Island	PM PM ₁₀	0.19 0.04	0.17 0.04
DC-1	Transfer Building 1	PM PM ₁₀ 0.003	0.016 0.007	0.034
DC-2	South Reclaim Hopper to Convey or 4 0.134	PM PM ₁₀ 0.019	PM 0.028	0.090
DC-3	Transfer Building 1a	PM PM ₁₀ 0.004	0.02 0.008	0.04
DC-CCG016	Crusher Building 1	PM PM ₁₀ 0.041	0.20 0.155	0.75
DC-4A	Silo Group A Headhouse	PM PM ₁₀	0.024 0.005	0.04 0.008
DC-4B	Silo Group A Unloading	PM PM ₁₀	0.008 0.002	0.013 0.003
DC-5	Crusher Building 2	PM	0.30	0.75

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DC-6	North Reclaim Hopper to Conveyor 23B	PM ₁₀	0.062	0.155
		PM	0.09	0.134
		PM ₁₀	0.019	0.028
DC-7	Transfer Building 4	PM	0.007	0.017
		PM ₁₀ 0.001	0.003	
DC-9	Transfer Building 6	PM	0.007	0.005
		PM ₁₀ 0.001	0.001	
DC-10	Transfer Building 7	PM	0.007	0.002
		PM ₁₀ 0.001	0.001	
DC-11	Silo Group B Headhouse	PM	0.016	0.027
		PM ₁₀	0.003	0.006
DC-12	Silo Group B Loadout	PM	0.008	0.013
		PM ₁₀	0.002	0.003
DC-13	Transfer Building 9	PM	0.008	0.013
		PM ₁₀	0.002	0.003
DC-14	Transfer Building 1B	PM	0.008	0.013
		PM ₁₀	0.002	0.003
DC-101	Unit 1 Transfer Building 5 and Tripper Deck	PM	0.013	0.006
		PM ₁₀	0.003	0.001
DC-201	Unit 2 Transfer Building 8 and Tripper Deck	PM	0.013	0.005
		PM ₁₀	0.003	0.001
T3	Emergency Generator No. 1 Fuel Tanks	VOC	2.3	5.82
T4	Emergency Generator No. 2 Fuel Tanks	VOC	2.3	5.82

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- (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.
PM - particulate matter, suspended in the atmosphere, including PM₁₀.
PM₁₀ - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide
NH₃ - ammonia
CO - carbon monoxide
H₂SO₄ - sulfuric acid mist
Pb - lead
HCl - hydrogen chloride
HF - hydrogen fluoride
Hg - mercury
- (4) Fugitive emissions are an estimate only.
- (5) The cap becomes effective upon start-up of Spruce 2 Utility Boiler.
- (6) The PM emission rate is for front and back-half condensibles, for the concentration of PM₁₀.
- (7) The PM emission rate is for front-half only, excluding back-half condensibles.

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

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

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

Dated December 28, 2005