

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 70492 and PSDTX1037

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	1600.0	1752.0
		SO ₂	2880.0	2102.0
		CO	4480.0	5256.0
		VOC	29.0	88.0
		H ₂ SO ₄	44.0	129.0
		NH ₃	50.0	66.0
		HF	60.0	26.0
		HCl	480.0	66.0
		Pb	0.2	0.3
		Hg	0.43	0.07
		PM/PM ₁₀ (6)	264.0	771.0
		PM/PM ₁₀ (7)	---	525.6
U-6, U-5, E-3, E-1, and E-2	Emissions Cap for Spruce Units 1 and 2, Deely Units 1 and 2, and Sommers 1 and 2 (5)	NO _x	---	10454.0
U-6 and U-5	Emissions Cap for Spruce Units 1 and 2 (5)	SO ₂	---	4319.0
EMGEN-1	Emergency Generator 1	NO _x	14.1	0.4
		SO ₂	1.1	0.03
		PM/PM ₁₀	0.04	0.01
		CO	7.7	0.2
		VOC	0.9	0.03
EMGEN-2	Emergency Generator 2	NO _x	17.6	0.5
		SO ₂	1.4	0.04
		PM/PM ₁₀	0.6	0.02
		CO	9.6	0.3
		VOC	1.2	0.04
T-ACID	Sulfuric Acid Storage Tank	H ₂ SO ₄	0.01	0.01

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T-BASE	Base Storage Tank	Bases	0.01	0.01
F-NH ₃	Aqueous Ammonia Fugitives (4)	NH ₃	0.70	3.09
FAS3	Fly Ash Silos for Spruce Unit 1	PM	0.56	0.26
		PM ₁₀	0.19	0.09
		Pb	0.01	0.01
		Hg	0.01	0.01
FAS4	Fly Ash Silos for Spruce Unit 2	PM	0.72	0.35
		PM ₁₀	0.24	0.12
		Pb	0.01	0.01
		Hg	0.01	0.01
EAS4	Economizer Ash Silos for Spruce Unit 2	PM	0.11	0.16
		PM ₁₀	0.10	0.16
		Pb	0.01	0.01
		Hg	0.01	0.01
FAD3	Spruce Unit 1 Fly Ash Loadout to Trucks	PM	0.46	0.21
		PM ₁₀	0.11	0.05
		Pb	0.01	0.01
		Hg	0.01	0.01
FAD4	Spruce Unit 2 Fly Ash Loadout to Trucks	PM	0.46	0.29
		PM ₁₀	0.11	0.10
		Pb	0.01	0.01
		Hg	0.01	0.01
EAD4	Spruce Unit 2 Economizer Ash Loadout to Trucks	PM	0.01	0.01
		PM ₁₀	0.01	0.01
		Pb	0.01	0.01
		Hg	0.01	0.01

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F-FILL	Sludge and Ash Landfill Fugitives (4)	PM	1.51	6.66
		PM ₁₀	0.72	3.15
		Pb	0.01	0.01
		Hg	0.01	0.01
F-BA-PILE	Bottom Ash Storage Pile Fugitives (4)	PM	0.15	0.65
		PM ₁₀	0.07	0.31
F-GYP	Gypsum Storage Pile Fugitives (4)	PM	0.07	0.30
		PM ₁₀	0.03	0.17
F-LS	Limestone Receiving and Handling Fugitives (4)	PM	0.01	0.01
		PM ₁₀	0.01	0.01
A-L55	Limestone Storage Pile (4)	PM	0.08	0.35
		PM ₁₀	0.04	0.18
LDC-12	Limestone Receiving Baghouse	PM	0.01	0.01
		PM ₁₀	0.01	0.01
LDC-13	Limestone Silo	PM	0.01	0.01
		PM ₁₀	0.01	0.01
LDC-10	Limestone Silos	PM	0.01	0.01
		PM ₁₀	0.01	0.01
F-CCS	Coal Storage Fugitives (4)	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 (4)	PM	0.26	0.53
		PM ₁₀	0.05	0.11

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PX-CO4	Rotary Plow Reclaim	PM	0.35	0.43
		PM ₁₀	0.07	0.09
PX-C16	Stacker/Reclaim - Stackout	PM	0.86	0.72
		PM ₁₀	0.18	0.15
PX-C17	Stacker/Reclaim - Reclaim	PM	1.39	---
		PM ₁₀	0.29	---
PX-C17	Stacker/Reclaim - Bypass	PM	0.70	---
		PM ₁₀	0.14	---
PX-C17	Stacker/Reclaim	PM	---	1.20
		PM ₁₀	---	0.25
F-Area1	Coal Conveyor Fugitives - Coal Yard Area (4)	PM	1.44	1.41
		PM ₁₀	0.30	0.29
F-Area2	Coal Conveyor Fugitives - Transfer Area (4)	PM	0.43	0.47
		PM ₁₀	0.09	0.10
F-Area3	Coal Conveyor Fugitives - J. K. Spruce Power Island (4)	PM	0.25	0.17
		PM ₁₀	0.05	0.03
DC-1	Transfer Building 1	PM	0.03	0.04
		PM ₁₀	0.01	0.01
DC-2	South Reclaim Hopper to Convey or 4	PM	0.15	0.12
		PM ₁₀	0.03	0.02
DC-3	Transfer Building 1a	PM	0.05	0.06
		PM ₁₀	0.01	0.01
DC-CCG016	Crusher Building 1	PM	0.30	0.60
		PM ₁₀	0.06	0.12

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DC-4A	Silo Group A Headhouse	PM	0.03	0.03
		PM ₁₀	0.01	0.01
DC-4B	Silo Group A Unloading	PM	0.01	0.01
		PM ₁₀	0.01	0.01
DC-5	Crusher Building 2	PM	0.30	0.60
		PM ₁₀	0.06	0.12
DC-6	North Reclaim Hopper to Conveyor 23B	PM	0.15	0.12
		PM ₁₀	0.03	0.02
DC-7	Transfer Building 4	PM	0.01	0.01
		PM ₁₀	0.01	0.01
DC-14	Transfer Building 1B	PM	0.01	0.01
		PM ₁₀	0.01	0.01
DC-101	Unit 1 Transfer Building 5 and and Tripper Deck	PM	0.02	0.01
		PM ₁₀	0.01	0.01
DC-201	Unit 2 Transfer Building 6 and Tripper Deck	PM	0.02	0.01
		PM ₁₀	0.01	0.01
DC-8	Transfer Building 3	PM	0.01	0.01
		PM ₁₀	0.01	0.01
T3	Emergency Generator No. 1 Fuel Tanks	VOC	0.14	0.01
T4	Emergency Generator No. 2 Fuel Tanks	VOC	0.14	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.

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- (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 (PM) 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.
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 condensable, for the concentration of PM₁₀.

(7) The PM emission rate is for front-half only, excluding back-half condensables.

* 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

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

Dated August 24, 2009