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, 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 (4)(5)	TPY (4)(6)
U-6	Spruce Power Generating Unit No. 2 8,000 MMBtu/hr	NO_x	1,600	1,752
		CO	4,480	5,256
		VOC	29	88
		PM/PM_{10} (9)	264	771
		PM/PM_{10} (10)	-	525.60
		SO_2	2,880	2,102
		H_2SO_4	44	129
		NH_3	50	66
		HF	60	26
		HCl	480	66
		Pb	0.20	0.30
		Hg	0.43	0.07
U-6 and U-5 E-1, 2, 3	NO_x Annual Emission Cap for: Spruce Units 1 and 2 Deely Units 1 and 2 Sommers 1 and 2 (8)	NO_x	-	10,454
U-6 and U-5	SO_2 Annual Emission Cap for Spruce Unit 1 and 2 (8)	SO_2	-	4,319
EMGEN-1	Emergency Generator 1	NO_x	14.10	0.40
		CO	7.70	0.20
		VOC	0.90	0.03
		PM/PM_{10}	0.40	0.01

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		SO_2	1.10	0.03
EMGEN-2	Emergency Generator 2	NO_x	17.60	0.50
		CO	9.60	0.30
		VOC	1.20	0.04
		PM/PM_{10}	0.60	0.02
		SO_2	1.40	0.04
T-ACID	Sulfuric Acid Storage Tank	H_2SO_4	0.01	0.01
T-BASE	Base Storage Tank	Bases	0.01	0.01
F-NH_3	Aqueous Ammonia Fugitives (7)	NH_3	0.70	3.09
FAS3	Fly Ash Silo 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 Silo 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
FAD3	Spruce Unit 1 Fly Ash Loadout to Trucks	Hg	0.01	0.01

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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
F-FILL	Sludge and Ash Landfill Fugitives (7)	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 (7)	PM	0.15	0.65
		PM_{10}	0.07	0.31
F-GYP	Gypsum Storage Pile Fugitives (7)	PM	0.07	0.30
		PM_{10}	0.03	0.17
F-LS	Limestone Receiving and Handling Fugitives (7)	PM	0.01	0.01
		PM_{10}	0.01	0.01
A-L55	Limestone Storage Pile (7)	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

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		PM_{10}	0.01	0.01
F-CCS	Coal Storage Fugitives (7)	PM	9.08	39.7
		PM_{10}	1.88	8.23
PX-COA1A/B	Railcar Number 1 Unloading and Transfer Baghouse	PM	0.01	0.02
		PM_{10}	0.01	0.02
PX-CO2	Railcar No. 1 Unload Fugitives (7)	PM	0.26	0.53
		PM_{10}	0.05	0.11
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	Annual Emissions -Stacker/Reclaim (Reclaim/Bypass)	PM	-	1.20
		PM_{10}	-	0.25
F-Area1	Coal Conveyor Fugitives - Coal Yard Area (7)	PM	1.44	1.41
		PM_{10}	0.30	0.29
F-Area2	Coal Conveyor Fugitives - Transfer Area (7)	PM	0.43	0.47
		PM_{10}	0.09	0.10
F-Area3	Coal Conveyor Fugitives - J.K. Spruce Power Island (7)	PM	0.25	0.17
		PM_{10}	0.05	0.03
DC-1	Transfer Building 1	PM	0.03	0.04

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		PM_{10}	0.01	0.01
DC-2	South Reclaim Hopper to Conveyor 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
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 for Building 5 and Tripper Deck	PM	0.02	0.01
		PM_{10}	0.01	0.01
DC-201	Unit 2 Transfer for 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

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		PM_{10}	0.01	0.01
DC-ACI2	Activated Carbon Silo Bin	PM	0.18	<0.01
		PM_{10}	0.18	<0.01
		$PM_{2.5}$	0.18	<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
MSS-Fug	Miscellaneous Site-wide Maintenance Actvities (7)	NO_x	0.01	0.01
		CO	0.18	0.05
		VOC	2.89	0.69
		PM	22.0	3.29
		PM_{10}	12.8	2.37
		$PM_{2.5}$	5.8	1.67
		SO_2	0.01	0.01
		NH_3	7.67	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.
(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 - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
NH_3 - ammonia
H_2SO_4 - sulfuric acid
HCl - hydrogen chloride
HF - hydrogen fluoride

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Hg - mercury
Pb - lead

(4) The pound per hour and ton per year emission limits specified in the MAERT for this facility includes emissions from the facility during both normal operations and planned MSS activities, unless otherwise noted.
(5) For each pollutant whose emissions during planned MSS activities are measured using a CEMS, the MSS lb/hr limits apply only during each clock hour that includes one or more minutes of MSS activities. During all other clock hours, the normal lb/hr limits apply.
(6) Compliance with the annual emission limits is based on a rolling 12-month period.
(7) Emission rate is an estimate and is enforceable through compliance with the applicable condition(s) and permit application representations.
(8) The cap becomes effective upon startup of Spruce 2 Utility Boiler.
(9) The PM emission rate is for front and back-half condensable, for concentration of PM_{10}.
(10) The PM emission rate is for front-half only, excluding back-half condensable.

Date: _____