

Emission Sources - Maximum Allowable Emission Rates

Permit Number 19394 and PSDTX1612

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)
55	C Activator Vent Filter	VOC	0.83	1.04
		CO	2.34	2.95
		PM	0.04	0.16
		PM ₁₀	0.04	0.16
		PM _{2.5}	0.04	0.16
56	Catalyst Activation Heater	VOC	0.04	0.07
		NOx	0.64	1.28
		SO ₂	<0.01	<0.01
		PM	0.05	0.10
		PM ₁₀	0.05	0.10
		PM _{2.5}	0.05	0.10
		CO	0.54	1.08
57	Catalyst Storage Filter	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
58	Flare	VOC	245.09	137.81
		NOx	64.07	47.46
		SO ₂	2.81	1.35
		CO	255.36	189.16
		H ₂ S	0.03	0.01
59	Fugitives (5)	VOC	12.80	29.58

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60	Cooling Tower (5)	VOC	0.50	2.21
		PM	1.17	3.21
		PM ₁₀	0.09	0.40
		PM _{2.5}	<0.01	<0.01
61 and 62	1A Filter	VOC	(6)	(6)
		PM	0.20	0.85
		PM ₁₀	0.20	0.85
		PM _{2.5}	0.20	0.85
63, 64, and 65	Fluff Filter	VOC	(6)	(6)
		PM	0.27	1.20
		PM ₁₀	0.27	1.20
		PM _{2.5}	0.27	1.20
66, 67, and 68	Fluff Filter	VOC	(6)	(6)
		PM	0.03	0.11
		PM ₁₀	0.03	0.11
		PM _{2.5}	0.03	0.11
69A	Pellet Classifier	VOC	(6)	(6)
69F817	Vacuum System Filter	VOC	(6)	(6)
		PM	0.05	0.22
		PM ₁₀	0.05	0.22
		PM _{2.5}	0.05	0.22

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69F826	Pellet Transfer Filter	VOC	(6)	(6)
		PM	< 0.01	0.02
		PM ₁₀	< 0.01	0.02
		PM _{2.5}	< 0.01	0.02
69F847	Blender Vent Filter	VOC	(6)	(6)
		PM	< 0.01	0.02
		PM ₁₀	< 0.01	0.02
		PM _{2.5}	< 0.01	0.02
69F848	Blender Vent Filter	VOC	(6)	(6)
		PM	0.05	0.21
		PM ₁₀	0.05	0.21
		PM _{2.5}	0.05	0.21
70	Fines Separator	VOC	(6)	(6)
		PM	<0.01	0.02
		PM ₁₀	<0.01	0.02
		PM _{2.5}	<0.01	0.02
70A	Blender Silo Vent Filter	VOC	(6)	(6)
		PM	<0.01	0.02
		PM ₁₀	<0.01	0.02
		PM _{2.5}	<0.01	0.02

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80	B Activator Vent Filter	VOC	0.42	0.93
		CO	1.20	2.63
		PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04
		NH ₃	0.96	2.11
		SO ₂	0.22	0.48
273	Pellet Dryer H	VOC	(6)	(6)
61, 62, 63, 64, 65, 66, 67, 68, 69A, 69F817, 69F826, 69F847, 69F848, 70, 70A, 273, and QCAP	VOC Emission Cap - Purge Column to Product Loadout	VOC	6.58	24.53
AV-001	CPF Analyzers	VOC	0.30	1.32
EDERFUG	Ethylene Derivative Unit Fugitives (5)	VOC	0.50	2.19
V-700	Tank No. V-726	VOC	0.04	0.10
V-710	Tank No. V-710	VOC	0.95	2.09
V-711	Tank No. V-711	VOC	0.95	2.09
V-720	Tank No. V-720	VOC	0.95	0.54
V-730	Tank No. V-730	VOC	0.03	0.11
V-740	Tank No. V-740	VOC	0.01	0.01
V-202	First Stage Reactor Activator Pot	PM	0.01	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01

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EDERRLLD	Railcar Uncollected Loading	VOC	11.07	(7)
EDERTRLD	Tank Truck Uncollected Loading	VOC	11.07	(7)
EDERLOADCAP	Railcar and Tank Truck Uncollected Loading Annual Emissions Cap	VOC	(7)	8.43
Q-817	Q-817 Loading Arm/Chute	VOC	(6)	(6)
		PM	0.04	(8)
		PM ₁₀	0.04	(8)
		PM _{2.5}	0.04	(8)
Q-818	Q-818 Loading Arm/Chute	VOC	(6)	(6)
		PM	0.04	(8)
		PM ₁₀	0.04	(8)
		PM _{2.5}	0.04	(8)
Q-819	Q-819 Loading Arm/Chute	VOC	(6)	(6)
		PM	0.04	(8)
		PM ₁₀	0.04	(8)
		PM _{2.5}	0.04	(8)
Q-820	Q-820 Loading Arm/Chute	VOC	(6)	(6)
		PM	0.04	(8)
		PM ₁₀	0.04	(8)
		PM _{2.5}	0.04	(8)
Q-821	Q-821 Loading Arm/Chute	VOC	(6)	(6)
		PM	0.04	(8)
		PM ₁₀	0.04	(8)
		PM _{2.5}	0.04	(8)

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Q-822	Q-822 Loading Arm/Chute	VOC	(6)	(6)
		PM	0.04	(8)
		PM ₁₀	0.04	(8)
		PM _{2.5}	0.04	(8)
Q-823	Q-823 Loading Arm/Chute	VOC	(6)	(6)
		PM	0.04	(8)
		PM ₁₀	0.04	(8)
		PM _{2.5}	0.04	(8)
Q-824	Q-824 Loading Arm/Chute	VOC	(6)	(6)
		PM	0.04	(8)
		PM ₁₀	0.04	(8)
		PM _{2.5}	0.04	(8)
Q-CAP	Q-817 through Q-824 Annual Cap	VOC	(6)	(6)
		PM	(8)	0.13
		PM ₁₀	(8)	0.13
		PM _{2.5}	(8)	0.13
MSS-CONT	Controlled Ethylene Derivative Unit MSS	VOC	2.28	0.11
		PM	0.16	0.02
		PM ₁₀	0.16	0.02
		PM _{2.5}	0.16	0.02
		SO ₂	0.45	0.06
		NO _x	1.15	0.09
		CO	1.93	0.21

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MSS-ATM	Uncontrolled Ethylene Derivative Unit MSS	VOC	40.60	2.31
		PM	0.10	0.01
		PM ₁₀	0.05	0.01
		PM _{2.5}	0.01	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
SO₂ - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
PM₁₀ - 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
NH₃ - ammonia
H₂S - hydrogen sulfide
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) EPNs 61, 62, 63, 64, 65, 66, 67, 68, 69A, 69F817, 69F826, 69F847, 69F848, 70, 70A, 273, and Q-817 through Q-824 will be subject to a group emission cap for VOC emissions instead of having emission limits for each emission point. The emission rates of 6.58 pounds per hour and 24.53 tons per year represent the combined VOC emissions from all emission points from the purge column to product loadout.
- (7) EPNs EDERRLLD and EDERTRLD will be subject to an annual group emission cap for VOC emissions instead of having emission limits for each emission point. The emission rate of 8.43 tons per year represent the combined VOC emissions from uncollected truck and railcar loading. Hourly emissions are represented for each EPN.
- (8) EPNs Q-817, Q-818, Q-819, Q-820, Q-821, Q-822, Q-823, and Q-824, will be subject to an annual group emission cap for PM, PM₁₀, and PM_{2.5} emissions instead of having emission limits for each emission point. The emission rate 0.13 tons per year each of PM, PM₁₀, and PM_{2.5} represent the combined PM from all emission points from the rail loading arm chutes. Hourly emissions are represented for each EPN and represent the maximum loading rate from each rail loading arm chute.

Date: December 29, 2023