Emission Sources - Maximum Allowable Emission Rates

Permit Number 19886

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)
8-1-003	W-900A Recovery Vaporizer	CO	1.16	5.10
		NO_x	1.39	6.07
		PM	0.11	0.46
		PM_{10}	0.11	0.46
		$PM_{2.5}$	0.11	0.46
		SO_2	0.01	0.04
		VOC	0.08	0.33
8-1-004, 8-1-005	South and North Strand Room Vents - Cap	VOC	1.65	7.11
8-1-007	W-40S Backup Vaporizer	CO	0.43	1.90
		NO_x	0.52	2.26
		PM	0.04	0.17
		PM_{10}	0.04	0.17
		$PM_{2.5}$	0.04	0.17
		SO_2	0.01	0.01
		VOC	0.03	0.12
8-1-009	B-23 Storage Tank	VOC	0.24	0.01
8-1-010	Propionic Acid Process Fugitives (5)	VOC	0.46	2.01
8-1-012	Bulk Storage Silos – Baghouse	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
8-1-014	B-195 Process Vessel	VOC	0.01	0.01
8-1-015	B-63A Process Vessel	VOC	0.01	0.01
8-1-017	D-900 Process Vessel	VOC	0.01	0.01
8-1-018	D-920 Process Vessel	VOC	0.02	0.01
8-1-019	D-940 Process Vessel	VOC	0.02	0.01
8-1-020	D-950 Process Vessel	VOC	0.01	0.01
8-1-021	D-984 Vent Pot	VOC	0.01	0.01
8-1-024	B-136A Seal Pot	VOC	0.02	0.01
8-1-025	B-146 Vent Pot	VOC	0.01	0.01
8-1-026	A-27A Storage Tank	VOC	0.01	0.01
8-1-027	A-27B Storage Tank	VOC	0.01	0.01
8-1-028	B-200 Process Vessel	VOC	0.01	0.01

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8-1-030	Packaging Silos – Baghouse	PM	0.01	0.05
		PM_{10}	0.01	0.03
		$PM_{2.5}$	0.01	0.01
8-1-031	Cooling Tower (5)	VOC	0.07	0.30
		PM	0.34	1.48
		PM_{10}	0.20	0.86
		$PM_{2.5}$	0.01	0.01
8-1-035	T-907 Catalyst Scrubber	PM	0.01	0.05
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
8-1-036	B-27 Reactor Refeed Hoppers	PM	0.06	0.05
		PM_{10}	0.02	0.02
		$PM_{2.5}$	0.02	0.02
8-1-037	Recovered Caprolactam Loading	VOC	0.07	0.01
8-1-038	Spent Heating Fluid Loading	VOC	0.01	0.01
8-1-040	F-155 Solid Additive Hopper – Baghouse	PM	0.68	2.94
		PM_{10}	0.46	1.97
		$PM_{2.5}$	0.46	1.97
8-1-041	Seal Pots	VOC	0.01	0.02
8-1-042	Slurry Drums	VOC	0.03	0.12
8-1-043	B-2 TAD Storage Tank	VOC	0.24	0.03
8-1-044	TAD Process Fugitives (5)	VOC	0.01	0.06
8-1-045	D-990 Process Vessel	VOC	0.04	0.01
8-1-101	W-50C Vaporizer (Reactor Train No. 3)	CO	0.72	3.16
		NO_x	0.86	3.77
		PM	0.07	0.29
		PM_{10}	0.07	0.29
		$PM_{2.5}$	0.07	0.29
		SO_2	0.01	0.02
		VOC	0.05	0.21
8-1-201	W-50D Vaporizer (Reactor Train No. 4)	CO	0.72	3.16
		NO_x	0.86	3.77
		PM	0.07	0.29
		PM_{10}	0.07	0.29
		$PM_{2.5}$	0.07	0.29
		SO_2	0.01	0.02
		VOC	0.05	0.21

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8-1-300	W-40A Vaporizer (Reactor Train No. 1)	CO	0.43	1.90
		NO_x	0.52	2.26
		PM	0.04	0.17
		PM_{10}	0.04	0.17
		$PM_{2.5}$	0.04	0.17
		SO_2	0.01	0.01
		VOC	0.03	0.12
8-1-400	W-40B Vaporizer (Reactor Train No. 2)	CO	0.43	1.90
		NO_x	0.52	2.26
		PM	0.04	0.17
		PM_{10}	0.04	0.17
		$PM_{2.5}$	0.04	0.17
		SO_2	0.01	0.01
		VOC	0.03	0.12
8-1-500	W-40E Vaporizer (Reactor Train No. 5)	CO	0.43	1.90
		NO_x	0.52	2.26
		PM	0.04	0.17
		PM_{10}	0.04	0.17
		$PM_{2.5}$	0.04	0.17
		SO_2	0.01	0.01
		VOC	0.03	0.12
8-1-600	W-50F Vaporizer (Reactor Train No. 6)	CO	0.72	3.16
		NO_x	0.86	3.77
		PM	0.07	0.29
		PM_{10}	0.07	0.29
		$PM_{2.5}$	0.07	0.29
		SO_2	0.01	0.02
		VOC	0.05	0.21
8-1-607	CY-94F1 Train 6 Separator Cyclone	PM	0.31	1.32
		PM_{10}	0.11	0.46
		$PM_{2.5}$	0.11	0.46
8-1-608	CY-94F2 Train 6 Separator Cyclone	PM	0.31	1.32
		PM_{10}	0.11	0.46
		$PM_{2.5}$	0.11	0.46
8-1-700	W-50G Vaporizer (Reactor Train No. 7)	CO	0.72	3.16
		NO_x	0.86	3.77
		PM	0.07	0.29
		PM_{10}	0.07	0.29
		$PM_{2.5}$	0.07	0.29
		SO_2	0.01	0.02
		VOC	0.05	0.21

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8-1-701	CY-94G1 Train 7 Separator Cyclone	PM	0.09	0.36
		PM_{10}	0.02	0.09
		$PM_{2.5}$	0.01	0.02
8-1-702	CY-94G2 Train 7 Separator Cyclone	PM	0.09	0.36
		PM_{10}	0.02	0.09
		$PM_{2.5}$	0.01	0.02
8-1-800	W-500H Heater (Reactor Train No. 8)	CO	0.95	4.16
		NO_x	1.13	4.96
		PM	0.09	0.38
		PM_{10}	0.09	0.38
		$PM_{2.5}$	0.09	0.38
		SO_2	0.01	0.03
		VOC	0.06	0.27
POLMSS	Planned Maintenance, Startup, and Shutdown	H_2SO_4	0.10	0.01
		PM	0.27	0.03
		PM_{10}	0.27	0.03
		$PM_{2.5}$	0.27	0.03
		VOC	61.00	1.03
8-1-050	Train 8 Reactor Feed Tank Seal Pot	VOC	0.01	0.01
8-1-051	Train 8 Reactor Condenser Vent	VOC	0.01	0.01
8-1-052	Train 8 Pellet Dryer Vent	VOC	0.01	0.02
		PM	0.13	0.58
		PM_{10}	0.13	0.58
		$PM_{2.5}$	0.13	0.58
8-1-801	CY-94H 1&2 Train 8 Separator Cyclones	PM	0.39	1.55
		PM_{10}	0.34	1.35
		$PM_{2.5}$	0.01	0.02
8-1-057	Train 8 Extractor and Dryer Seal Pot	VOC	0.01	0.01
8-1-058	Train 8 BKG and Dolly Station Vent	VOC	0.01	0.02

(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
CO - carbon monoxide
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
H_2SO_4 - sulfuric acid
(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.

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Date: December 14, 2023