Emission Sources - Maximum Allowable Emission Rates

Permit Number 2023 and PSDTX118M4

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)
246	Flare (11)	Acetone	0.03	0.02
		CO	25.65	16.74
		NOx	4.97	3.24
		Ethylene (12)	28.60	20.47
		Vinyl Acetate (12)	1.51	1.6
		Ethyl Acrylate (12)	1.20	0.04
		Propylene (12)	6.96	2.66
		Toluene (12)	0.01	0.01
		VOC	38.35	24.83
246	Flare Maintenance, Start-Up, and Shutdown Emissions (MSS) only (11)	Acetone	0.02	0.01
		CO	158.87	12.29
		NOx	31.18	2.41
		VOC	260.53	18.02
		Ethylene (13)		7.42
		Propylene (13)		0.50
		Vinyl Acetate (13)		0.01
		Ethyl Acrylate (13)		0.01
		Vinyltrimethoxysilane (13)		0.01
		Mineral Spirits (13)		0.01
251	Reactor No. 1 Process Fugitives (5)	Acetone	0.07	0.29
		CO	0.01	0.01
		VOC	9.36	41.00
252	No. 1 Cyclone Scrubber Vent	VOC	0.06	0.01

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253	No. 1 Extruder Drier	Vinyl Acetate	7.00	(6)
		Ethylene	4.00	(6)
		Propylene	0.20	(6)
		Ethyl Acrylate	0.01	(6)
		Acetone	0.07	(6)
		PM	1.30	5.69
254 - 260	No. 1 Primary Storage Bins	Vinyl Acetate	21.73	(6)
		Ethylene	32.00	(6)
		Propylene	1.54	(6)
		Ethyl Acrylate	0.01	(6)
		Acetone	0.58	(6)
		PM		(6)
261 - 268	No. 1 Bulk Storage Bins	Vinyl Acetate	21.73	19.50 (7)
		Ethylene	32.00	118.00 (7)
		Propylene	1.54	4.67
		Ethyl Acrylate	0.01	0.01
		Acetone	0.58	0.62
		PM	2.05	8.98
269	Reactor No. 2 Process Fugitives (5)	CO	0.60	2.64
		VOC	6.16	26.99
270	No. 2 Extruder Drier	Ethylene	4.00	(8)
		Propylene	0.20	(8)
		Acetone	0.07	(8)
		PM	1.30	5.69

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271 - 275	No. 2 Primary Storage Bins	Vinyl Acetate	21.73	(8)
		Ethylene	32.00	(8)
		Propylene	1.54	(8)
		Ethyl Acrylate	0.01	(8)
		Acetone	0.58	(8)
		PM	(8)	
276 - 282	No. 2 Bulk Storage Bins	Vinyl Acetate	21.73	19.50 (9)
		Ethylene	32.00	118.00 (9)
		Propylene	1.54	4.67
		Ethyl Acrylate	0.01	0.01
		Acetone	0.58	0.62
		PM	2.05	8.98
A-299	No. 1 Dryer Sampler Filter	PM	0.01	0.01
A-300	No. 2 Dryer Sampler Filter	PM	0.01	0.01
410	No. 1 Fines Streamer Filter	PM	0.01	0.01
411	No. 2 Fines Streamer Filter	PM	0.01	0.01
413	PND catalyst Feed Tank	VOC	1.00	0.01
546	Vulcanizables Fines Separator Dust Collector	PM	0.20	0.94
547	Vulcanizables Preheat Bin	PM	0.30	0.55
548	Vulcanizables Peroxide Tank	Acetophenone(12)	4.92	0.88
		Cumene (12)	1.23	0.3
		Phenol (12)	1.23	0.3
		Toluene (12)	0.01	0.01
		VOC	12.33	2.19

Emission Sources - Maximum Allowable Emission Rates

549	Vulcanizables Holding Bin	Acetophenone (12)	2.00	8.76
		Cumene (12)	0.50	2.19
		Phenol (12)	0.50	2.19
		Toluene (12)	0.01	0.01
		VOC	5.00	21.9
552 and 553	Vulcanizables Cooling Bin Nos. 1 and 2	PM	0.12	0.11
		VOC	(10)	(10)
562	Mineral Spirits Tank	VOC	0.25	0.02
563	Propylene Unloading Process Fugitives (5)	VOC	0.05	0.23
669	Anti-Oxidant Mix Tank	Acetone	11.43	0.16
		VOC	2.80	0.11
670	East A/O Run Tank	VOC	2.80	0.15
		Acetone	5.72	0.24
671	West Vinyl Acetate Run Tank	VOC	2.80	0.15
672	Old Run Tank	Acetone	2.57	0.03
		Vinyl Acetate	1.26	0.02
1004	Vulcanizables Fines SeparatorBaghouse	PM	0.20	0.94
1011	No. 1 Process Analyzer Vent	VOC	0.01	0.01
1012	No. 2 Process Analyzer Vent	VOC	0.01	0.01
1021	Vulcanizables Feeder Vent	PM	0.01	0.01
1039	Vulcanizables Blender Vent	VOC	(10)	(10)
1041	Cooling Tower	VOC	0.42	1.84
		PM	0.11	0.49
		PM_{10}	0.11	0.49
		$PM_{2.5}$	0.11	0.49
1051	Process Analyzer Combined Vent	CO	0.01	0.01
		VOC	0.01	0.01

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1058	Vulcanizables Product Area Baghouse	PM	0.20	0.94
1059	No. 1 Classifier Sampler Filter	PM	0.01	0.01
1060	No. 2 Classifier Sampler Filter	PM	0.01	0.01
1061	Vulcanizables Transfer Filter	PM	0.01	0.01
1177	Analyzer Vent	VOC	0.03	0.13

(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) CO - carbon monoxide
NO_x - total oxides of nitrogen
PM - particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - 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
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
(6) Annual emission limits for the VOC from EPNs 253 through 268 are reflected in the emission rates for EPNs 261 through 268. The hourly and annual PM emissions from EPNs 254 through 268 are reflected in the emission rates for EPNs 261 through 268.
(7) Total VOC emissions from EPNs 253 through 268 are not to exceed 124.1 tons per year (tpy).
(8) Annual emission limits for the VOC from EPNs 270 through 282 are reflected in the emission rates for EPNs 276 through 282. The hourly and annual PM emissions from EPNs 271 through 282 are reflected in the emission rates for EPNs 276 through 282.
(9) Total VOC emissions from EPNs 270 through 282 are not to exceed 118 tpy.
(10) The VOC emissions from this source are accounted for at EPN 549.
(11) Emissions from this flare are only from these permitted facilities.
(12) The allowable emission rates listed for individual VOC species from this EPN are included in the total VOC emission rates.
(13) Annual MSS emissions of individual VOC species for Fuel Gas Burn System including furnace gas header shutdowns/maintenance are limited as indicated. The allowable emission rates listed for individual MSS VOC species from this EPN are included in the Flare 246 total MSS VOC emission rates.

Date: May 7, 2019