Emission Sources - Maximum Allowable Emission Rates

Permit Number 6093

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 (10)	
			lbs/hour	TPY (4)
7	V-1 Mixed Batch Bin	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
58	V-1 Mixed Batch Transfer	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
3	V-1 Furnace and V-2 Riser/Dry Electrostatic Precipitator Stack	PM	2.52	11.04
		PM_{10}	2.52	11.04
		$PM_{2.5}$	2.15	9.40
		NO_x	15.94	69.81
		SO_2	1.51	6.60
		VOC	1.62	7.09
		CO	1.19	5.20
		Chlorides	0.26	1.14
6	V-1 Furnace Dry Electrostatic Precipitator Bypass Stack (8)	PM	31.92	0.80
		PM_{10}	31.92	0.80
		$PM_{2.5}$	27.13	0.68
		NO_x	15.50	0.39
		SO_2	1.49	0.04
		VOC	1.59	0.04
		CO	0.82	0.02
		CO (9)	2.04	0.07

Emission Sources - Maximum Allowable Emission Rates

		Chlorides	7.76	0.19
10	V-1 Mixing Chamber Stack	PM	40.00	166.44
		PM_{10}	40.00	166.44
		NO_x	22.60	98.99
		SO_2	7.25	31.76
		VOC	20.00	96.36
		CO	24.00	105.12
		Ammonia	40.00	175.20
13	V-1 Cooling Section Exhaust Stack	PM	3.00	13.14
		PM_{10}	3.00	13.14
		NO_x	0.13	0.57
		SO2	0.15	0.66
		VOC	4.00	8.76
		CO	1.59	6.96
		Ammonia	2.00	8.76
11	V-1 Facing Oven/Asphalt Applicator	PM	0.09	0.40
		PM_{10}	0.09	0.40
		$PM_{2.5}$	0.08	0.34
		NO_x	0.21	0.90
		SO_2	0.01	0.04
		VOC	0.31	1.36
		CO	0.17	0.75
V-1 FUG, 631	V-1 Line Fugitives (5)	PM	1.04	4.51
		PM_{10}	1.04	4.51
		NO_x	1.21	5.30

Emission Sources - Maximum Allowable Emission Rates

		SO_2	0.03	0.09
		VOC	5.76	25.27
		CO	1.02	4.45
		Chlorides	0.12	0.51
		Ammonia	0.42	1.82
26	V-2 Mixed Batch Bin	PM	0.22	0.30
		PM_{10}	0.22	0.30
444	V-2 Cullet Bin	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
50	V-2 Batch Charge Hopper	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
19, 20	V-2 Furnace Stacks (East and West Combined)	PM	3.13	13.69
		PM_{10}	3.13	13.69
		$PM_{2.5}$	1.72	7.53
		PM (11)	5.00	0.08
		PM_{10} (11)	5.00	0.08
		$PM_{2.5}$ (11)	2.75	0.04
		NO_x	25.00	109.50
		SO_2	0.79	3.47
		VOC	1.81	8.00
		CO	0.60	2.63
		Chlorides	0.12	0.54
21	V-2 Riser Bypass Stack (8)	PM	0.82	0.02
		PM_{10}	0.82	0.02
		$PM_{2.5}$	0.82	0.02

Emission Sources - Maximum Allowable Emission Rates

		NO_x	0.44	0.01
		SO_2	0.02	<0.01
		VOC	0.03	<0.01
		CO	0.37	0.01
		Chlorides	0.05	<0.01
22	V-2 Mixing Chamber Stack	PM	35.00	153.30
		PM_{10}	35.00	153.30
		NO_x	6.38	27.94
		SO_2	1.00	4.38
		VOC	10.50	45.99
		CO	19.00	83.22
		Ammonia	30.00	131.40
55, 23	V-2 Cooling Section Exhaust Stack (Smoke Stripper and HEAF)	PM	4.25	18.62
		PM_{10}	4.25	18.62
		NO_x	0.22	0.96
		SO_2	0.22	0.96
		VOC	2.40	10.51
		CO	2.93	12.83
		Ammonia	5.50	24.09
52	V-2 Asphalt Applicator	PM	0.18	0.79
		PM_{10}	0.18	0.79
		VOC	0.64	2.80
V-2 FUG	V-2 Line Fugitives (5)	PM	2.27	9.97
		PM_{10}	2.27	9.97
		NO_x	2.51	10.99

Emission Sources - Maximum Allowable Emission Rates

		SO_2	0.07	0.31
		VOC	0.55	2.41
		CO	2.11	9.24
		Chlorides	0.23	1.03
		Ammonia	0.64	2.82
36	V-3 Mixed Batch Bin	PM	0.22	0.30
		PM_{10}	0.22	0.30
37	V-3 Mixed Batch Bin	PM	0.22	0.30
		PM_{10}	0.22	0.30
445	V-3 Cullet Bin	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
51	V-3 Batch Charge Hopper	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
38, 39	V-3 Furnace Stacks (East and West Combined)	PM	3.13	13.69
		PM_{10}	3.13	13.69
		$PM_{2.5}$	1.72	7.53
		PM (11)	5.00	0.08
		PM_{10} (11)	5.00	0.08
		$PM_{2.5}$ (11)	2.75	0.04
		NO_x	25.00	109.50
		SO_2	0.99	4.33
		VOC	1.81	8.00
		CO	0.60	2.63
		Chlorides	0.18	0.81
40	V-3 Mixing Chamber Stack	PM	35.00	153.30

Emission Sources - Maximum Allowable Emission Rates

		PM_{10}	35.00	153.30
		NO_x	6.20	27.16
		SO_2	0.98	4.29
		VOC	10.50	45.99
		CO	20.70	90.67
		Ammonia	26.00	113.88
56, 41	V-3 Cooling Section Exhaust Stack (Smoke Stripper and HEAF)	PM	4.25	18.62
		PM_{10}	4.25	18.62
		NO_x	0.22	0.96
		SO_2	0.22	0.96
		VOC	2.40	10.51
		CO	2.93	12.83
		Ammonia	5.50	24.09
42	V-3 Asphalt Applicator	PM	0.18	0.79
		PM_{10}	0.18	0.79
		VOC	0.64	2.80
V-3 FUG	V-3 Line Fugitives (5)	PM	1.39	6.09
		PM_{10}	1.39	6.09
		$PM_{2.5}$	1.33	5.84
		NO_x	0.05	<0.01
		SO_2	0.08	0.31
		VOC	0.41	1.81
		CO	0.04	<0.01
		Ammonia	0.67	2.94
		Chlorides	0.28	1.25
10, 13, 22, 23, 40, 41,	V-1, V-2, V-3	VOC	--	157.34

Emission Sources - Maximum Allowable Emission Rates

55, 56	Manufacturing Line Total Including Starch-Based Binder Constituents (6)			
2	V-1 Unloading Fugitives (5)	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
1	V-1 Batch House	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
601	V-1 Batch Silos	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
602	V-1 Batch Silos	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
43	V-2/V-3 Unloading Fugitives (5)	PM	0.04	0.03
		PM_{10}	<0.01	<0.01
44	V-2/V-3 Batch House	PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
442	Cullet Piles (5)	PM	0.09	0.39
		PM_{10}	0.09	0.39
17	Binder Room (5)	VOC	0.15	0.05
		Ammonia	0.10	0.43
18	Binder Room Fugitives (5)	VOC	0.15	0.07
		Ammonia	0.17	0.73
620	Resin Storage Tank No. 1	VOC	1.83	0.17
621	Resin Storage Tank No. 2	VOC	1.83	0.17
622	Cross-Linker 1 Storage Tank	VOC	<0.01	<0.01
623	Cross-Linker 2 Storage Tank	VOC	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

32	Aqueous Ammonia Tank	Ammonia (aq)	0.08	0.34
Permit by rule (PBR) sources incorporated by reference. Sources remain authorized by the PBR(s) as listed below:				
PBR 106.472 (NSR Registration No. 78155, Effective Date: 3/24/2006)				
30	Triazone Resin Storage Tank	Formaldehyde	0.02	<0.01
PBR 106.371 (NSR Registration No. 84393, Effective Date: 4/10/2008)				
85	Cullet Water Cooling Tower	PM	0.12	0.51
		PM_{10}	0.12	0.51
PBR 106.472 (7)				
31	Asphalt Storage Tank	PM	2.04	0.03
		PM_{10}	2.04	0.03
		VOC	7.23	0.12
61	Adhesive Tank No. 1	VOC	<0.01	<0.01
62	Adhesive Tank No. 2	VOC	<0.01	<0.01
34	Urea Solution Tank	Ammonia	<0.01	<0.01
45	Urea Mix Tank	Ammonia	<0.01	<0.01
29	Resin Storage Tank	VOC	<0.01	<0.01
		Formaldehyde	<0.01	<0.01
		Phenol	<0.01	<0.01
		Methanol	<0.01	<0.01
35	Resin Storage Tank	VOC	<0.01	<0.01
		Formaldehyde	<0.01	<0.01
		Phenol	<0.01	<0.01
		Methanol	<0.01	<0.01
33	MT Oil Storage Tank	VOC	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

76	Equalization Basins	VOC	<0.01	<0.01
		Formaldehyde	<0.01	<0.01
		Phenol	<0.01	<0.01
		Methanol	<0.01	<0.01
28	Wash Water Surge Tank	VOC	<0.01	<0.01
		Formaldehyde	<0.01	<0.01
		Phenol	<0.01	<0.01
		Methanol	<0.01	<0.01
88	Wash Water Surge Tank	VOC	<0.01	<0.01
		Formaldehyde	<0.01	<0.01
		Phenol	<0.01	<0.01
		Methanol	<0.01	<0.01
Standard Exemption 7 (7)				
4	Gas-Fired Boiler (North)	PM	0.15	0.67
		PM_{10}	0.15	0.67
		NO_x	0.72	3.15
		SO_2	0.01	0.05
		VOC	0.11	0.48
		CO	1.68	7.36
5	Gas-Fired Boiler (South)	PM	0.15	0.67
		PM_{10}	0.15	0.67
		NO_x	0.72	3.15
		SO_2	0.01	0.05
		VOC	0.11	0.48
		CO	1.68	7.36

Emission Sources - Maximum Allowable Emission Rates

(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
aq - aqueous solution
(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) For the purposes of demonstrating compliance with the representation that this site does not trigger prevention of significant deterioration for VOCs, the holder of this permit must comply with this additional limitation.
(7) PBR 106.472 and Standard Exemption 7 do not require registration so a registration number and an effective date are unavailable.
(8) Emission rates for EPN 6 (V-1 Furnace Dry Electrostatic Precipitator Bypass Stack) and EPN 21 (V-2 Riser Bypass Stack) apply during bypass use when the V-1 Furnace Dry Electrostatic Precipitator is not operational.
(9) Emission rates apply during startup of the V-1 Furnace.
(10) Planned startup and shutdown emissions are included. Maintenance activities, except as specified in Special Condition Nos. 28 through 32, are not authorized by this permit and will need separate authorization, unless the activity can meet the conditions of 30 TAC § 116.119.
(11) Emission rates apply during batch charger maintenance overhead feeding activities.

Date: May 30, 2014