

EMISSION SOURCES – MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 898

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. 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 *	
			lb/hr	TPY
01, 02, 03, 04, 05, 06, 07, 08	Railcar Unloading Vents for Sand, Soda Ash, Limestone Salt Cake, and Dolomite. (4)	PM ₁₀	1	4.4
09, 10, 11, 12, 13, 14, 15, 16	Raw Material Silo Vents for Sand, Soda Ash, Limestone, Salt Cake, and Dolomite. (5)	PM ₁₀	0.08	0.37
17, 25, 33, 34, 35, 39, 40, 41, 42, 43, 44, 45, 50	Cullet Hood Vents (6)	PM ₁₀	1	4.4
18	Mix House Vent	PM ₁₀	0.39	1.7
20	Rouge/Coal Storage Vent	PM ₁₀	0.094	0.41
21	Batch Plant Vacuum System Vent	PM ₁₀	0.009	0.04
22	Tank No. 1 Stack (8)	PM ₁₀	71.0	310.0
		NO _x	739.0	3237.0
		CO	160.0	700.0
		SO ₂	80.0	351.0
		Cr (7)	0.22	1.0
		Se (7 and 18)	45.0	31.0
		Co (7)	0.014	0.06
		Si (7)	19.0	82.0
		Ni (7)	0.022	0.1
		Ce (7), (9)	9.0	40.0
		Ti (7), (9)	2.0	8.8

23	Tank No. 2 Stack (8)	PM ₁₀	71.0	310.0
		NO _x	739.0	3,237.0
		SO ₂	80.0	351.0
		CO	160.0	700.0
FUG-1	Furnace Fugitives (10)	NO _x	31	136.
		PM	6.4	28.
		CO	6.7	29.4
		SO ₂	3.4	15
		Trace Metals	<0.1	<0.5
28	Solarcool Scrubber Stack	PM ₁₀	4.37	9.57
		Co (7)	0.46	2
		SO ₂ (11)	See EPN 30 and 31	
		Cr (7)	0.08	0.35
		Fe (7)	0.5	2.2
29	Solarcool Mix Room Vent	PM ₁₀	0.15	0.66
30, 31	Line 2 West and East Stacks (11)	SO ₂	23	75
36, 36A, 37	Process W Line 1 and 2 Stacks (12)	PM ₁₀	1.22	5.3
38	Boilers 1, 2, 3 Furnace Stack (13)	NO _x	0.69	3.
		SO ₂	0.069	0.3
		CO	0.138	0.6
		PM ₁₀	0.069	0.3
		VOC	0.069	.3
46, 47, 48, 49 51, 52, 52A	Automatic Packing System Vents (14)	PM ₁₀	1.	4.4
53, 54, 54A	Tempering Vacuum Transfer Vents (15)	PM ₁₀	0.204	0.9
54B 55, 56, 57, 58,	Tempering W Process Vent Storage Tank Vents	PM ₁₀	0.46	2.0
		VOC	0.49	2.14

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
59, 60, 61, 63, and 68	for Petroleum-Derived Materials (16)			
FUG-2	Material Storage and Handling (17)	PM ₁₀ PM	5.6 11.7	15.5 32.7

- (1) Emission point identification - either specific equipment designation or emission point number (EPN) from plot plan.
- (2) Specific point source name. For fugitive sources use area name or fugitive source name.
- (3) PM - particulate matter suspended in the atmosphere, including PM₁₀
 PM₁₀ - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
 - NO_x - total oxides of nitrogen
 - CO - carbon monoxide
 - SO₂ - sulfur dioxide
 - VOC - volatile organic compounds as defined in 30 Texas Administrative Code 101.1
 - Cr - chromium
 - Se - selenium
 - Co - cobalt
 - Si - amorphous silica
 - Ni - nickel
 - Ce - cerium
 - Ti - titanium
 - Fe - iron
- (4) The emission rate limitation for PM₁₀ represents the total PM₁₀ from EPNs 01, 02, 03, 04, 05, 06, 07, and 08. The individual emissions from each of the listed EPNs can vary such that the sum of the emissions from the listed EPNs may not exceed the total amount shown.
- (5) The emission rate limitation for PM₁₀ represents the total PM₁₀ from EPNs 09, 10, 11, 12, 13, 14, 15, and 16. The individual emissions from each of the listed EPNs can vary such that the sum of the emissions from the listed EPNs may not exceed the total amount shown.
- (6) The emission rate limitation for PM₁₀ represents the total PM₁₀ from EPNs 17, 25, 33, 34, 35, 39, 40, 41, 42, 43, 44, 45, and 50. The individual emissions from each of the listed EPNs can vary such that the sum of the emissions from the listed EPNs may not exceed the total amount shown.
- (7) These emissions are also included as part of the total particulate PM₁₀.

- (8) The emission rates shown for Cr, Co, Ni, Si, Se, Ce, and Ti represent total combined emissions for both Tanks 1 and 2. The individual emissions rate from each stack can vary such that the sum of the emissions from Stacks 22 and 23 may not exceed the total amount shown.

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- (9) The Ti emission limit applies while PPG is producing Glass A and/or Glass B.
The Ce emission limit applies while PPG is producing Glass B.
As with other compounds, these compounds may appear in trace amounts during normal operations, when PPG is not producing Glass A or Glass B.
- (10) The emissions of the named air contaminants represent the net fugitive emissions from the two furnaces, except that the total suspended particulate number reflects some contribution from the raw batch conveying in the main building. These emissions are an estimate only and are not to be considered an enforceable maximum, per se. They are, however, fully enforceable if they otherwise contravene any federal or TNRCC requirements, e.g., the prohibition against causing a nuisance.
- (11) The emission rate limitation for SO₂ represents the total SO₂ from EPNs 28, 30, and 31. The individual emissions from each of the listed EPNs can vary such that the sum of the emissions from the listed EPNs may not exceed the total amount shown. The Line 1 exhaust is EPN 28. The Line 2 exhausts are EPNs 30 and 31.
- (12) The emission rate limitation for PM₁₀ represents the total PM₁₀ from EPNs 36, 36A, and 37. The individual emissions from each of the listed EPNs can vary such that the sum of the emissions from the listed EPNs may not exceed the total amount shown. The Line 1 exhaust is EPN 37. The Line 2 exhausts are EPNs 36 and 36A.
- (13) The emission rate limitation for EPN 38 represents the total combustion emissions from the three on-site boilers.
- (14) The emission rate limitation for PM₁₀ represents the total PM₁₀ from EPNs 46, 47, 48, 49, 51, 52, and 52A. The individual emissions from each of the listed EPNs can vary such that the sum of

the emissions from the listed EPNs may not exceed the total amount shown.

- (15) The emission rate limitation for PM₁₀ represents the total PM₁₀ from EPNs 53, 54, and 54A. The individual emissions from each of the listed EPNs can vary such that the sum of the emissions from the listed EPNs may not exceed the total amount shown.
- (16) The emission rate limitation for VOC represents the total VOC from EPNs 55, 56, 57, 58, 59, 60, 61, 63, and 68. The individual emissions from each of the listed EPNs can vary such that the sum of the emissions from the listed EPNs may not exceed the total amount shown.
- (17) The PM and PM₁₀ represent the net potential fugitive emissions from PPG's material storage and handling activities, except for that portion of such emissions that are included in EPN FUG-1. These emissions are an estimate only and are not to be considered an enforceable maximum, per se. They are, however, fully enforceable if they otherwise contravene any federal or TNRCC requirements, e.g., the prohibition against causing a nuisance.
- (18) Selenium emissions of 45 pounds per hour is limited to 200 hours per year. Hourly selenium emissions of 9.0 pounds per hour are authorized for a total of 3,360 hours per year. The selenium emission rate is limited to 7 pounds per hour for the remaining 5,200 hours per year.

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Emission rates are based on a maximum daily production of 700 tons of glass for each of the 2 furnaces (1,400 tons total) and a maximum annual production of 511,000 tons of glass for the facility and the facilities are limited by the following maximum operating schedule:

Hrs/day 24 Days/week 7 Weeks/year 52
or Hrs/year 8,760

Dated _____