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 4.4 Sand, Soda Ash, Limestone Salt Cake, and Dolomite. (4)	PM_{10}		1
09, 10, 11, 12, 13, 14, 15, 16	Raw Material Silo Vents for 0.37 Sand, Soda Ash, Limestone, Salt Cake, and Dolomite. (5)	PM_{10}		0.08
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	3,237.0
		CO	160.0	700.0
		SO_2	80.0	351.0
		Cr (7)	0.22	1.0
		Se (7)	7.0	31.0
		Co (7)	0.014	0.06
		Si (7)	19.0	82.0
		Ni (7)	0.022	0.1

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
		Ce (7), (9)	9.0	40.0
		Ti (7), (9)	2.0	8.8

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
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

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
53, 54, 54A	Tempering Vacuum Transfer Vents (15)	PM_{10}	0.204	0.9
54B	Tempering W Process Vent	PM_{10}	0.46	2.0
55, 56, 57, 58, 59, 60, 61, 63, and 68	Storage Tank Vents Materials (16)	VOC for Petroleum-Derived	0.49	2.14
FUG-2	Material Storage and Handling (17)	PM_{10}	5.6	15.5
		PM	11.7	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_{10} - particulate matter less than 10 microns
PM - particulate matter suspended in the atmosphere, including PM_{10}
NO_X - total oxides of nitrogen
CO - carbon monoxide
SO_2 - sulfur dioxide
VOC - volatile organic compounds as defined in General Rule 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 PM_{10} represents the total PM_{10} 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

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

(5) The emission rate limitation for PM_{10} represents the total PM_{10} 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 PM_{10} represents the total PM_{10} 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 PM_{10}.

(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.

(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, <u>per se</u>. 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 SO_2 represents the total SO_2 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

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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 PM_{10} represents the total PM_{10} 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 PM_{10} represents the total PM_{10} 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 PM_{10} represents the total PM_{10} 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 PM_{10} 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

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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.

* 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 _____