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.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	<u>TPY</u>
01, 02, 03, 04, 05, 06, 07, 08	Railcar Unloading Vents for Sand, Soda Ash, Limestone Salt Cake, and Dolomite. (4)		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		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} NO_X CO SO_2 Cr (7)	71.0 739.0 160.0 80.0 0.22	310.0 3237.0 700.0 351.0 1.0

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AIR CONTAMINANTS DATA

Emission	Source A	Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	<u>TPY</u>
		Se (7) Co (7) Si (7) Ni (7)	7.0 0.014 19.0 0.022	31.0 0.06 82.0 0.1
23	Tank No. 2 Stack (8)	PM_{10} NO_X SO_2 CO	71.0 739.0 80.0 160.0	310.0 3237.0 351.0 700.0
FUG-1	Furnace Fugitives (9)	NO _x TSP CO SO ₂ Trace Metals	31. 6.4 6.7 3.4 <0.1	136. 28. 29.4 15 <0.5
28	Solarcool Scrubber Stack	PM ₁₀ C0 (7) SO ₂ (10) Cr (7) Fe (7)	4.37 0.46 See EF 31 0.08 0.5	9.57 2. PN 30 and 0.35 2.2
29	Solarcool Mix Room Vent	PM_{10}	0.15	0.66
30, 31	Line 2 West and East Stacks (1	10) SO ₂	23	75
36, 36A, 37	Process W Line 1 and 2 Stacks (11)	$PM_{\mathtt{10}}$	1.22	5.3
38	Boilers 1, 2, 3 Furnace Stack (2	12) NO _X SO ₂ CO PM ₁₀ VOC	0.69 0.069 0.138 0.069 0.069	3. 0.3 0.6 0.3 .3

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AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	Emission Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
46, 47, 48, 49 51, 52, 52A	Automatic Packing System Vents (13)	PM ₁₀	1.	4.4
53, 54, 54A	Tempering Vacuum Transfer Vents (14)	PM_{10}	0.204	0.9
54B	Tempering W Process Vent	$PM_{\mathtt{10}}$	0.46	2.0
55, 56, 57, 58, 59, 60, 61, 63, and 68	Storage Tank Vents for Petroleum Derived Materials. (15)	VOC	0.49	2.14
FUG-2	Material Storage and Handling (16)	PM ₁₀ TSP	5.6 11.7	15.5 32.7

Footnotes

- (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) VOC volatile organic compounds as defined in General Rule 101.1

NO_x - total oxides of nitrogen

Cr - chromium SO_2 - sulfur dioxide Se - selenium

PM₁₀ - particulate matter less than 10 microns

Ni - nickel

TSP - total suspended particulate

Fe - iron

CO - carbon monoxide

Co - cobalt

Si - amorphous silica

(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 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 PM₁₀
- (8) The emission rates shown for Cr, Co, Ni, Si, and Se 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.

Permit No. 898 Page 4

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- (9) 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 orTNRCC requirements, e.g., the prohibition against causing a nuisance.
- (10) 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.
- (11) 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.

- (12) The emission rate limitation for EPN 38 represents the total combustion emissions from the three on-site boilers.
- (13) 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.
- (14) 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.
- (15) 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.
- (16) The TSP 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.
- * Emission rates are based on a maximum daily production of 700 tons of glass for each of the two 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 <u>24</u> Days/week <u>7</u> Weeks/year <u>52</u> or Hrs/year <u>8,760</u>

Dated			