

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 946A

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 Rates *	Source	Air Contaminant	Emission	
			lb/hr	TPY
Point No. (1)	Name (2)	Name (3)		
½	Line No. 92 Collector - Stacks	PM	14.00	61.32
		VOC	TR	0.06
		NO <sub>x</sub>	0.37	1.63
		SO <sub>2</sub>	TR	0.01
		CO	0.08	0.34
		NH <sub>3</sub>	7.50	32.84
		Formaldehyde	3.00	13.14
		Phenol	2.00	8.76
		Methyl Alcohol	1.80	7.88
		PHMP	19.90	87.16
3/6	Line No. 92/93 Oven High Energy Air Filtration (HEAF) Stack	PM <sub>10</sub>	5.50	24.09
		VOC	0.13	0.59
		NO <sub>x</sub>	6.72	29.43
		SO <sub>2</sub>	0.03	0.13
		CO	1.68	7.36
		NH <sub>3</sub>	4.67	20.45
		Formaldehyde	2.50	10.95
		Phenol	0.12	0.53
		Methyl Alcohol	0.09	0.39
		PHMP	1.03	4.51
4/5	Line No. 93 Collector - Stacks	PM	14.00	61.32
		VOC	TR	0.06
		NO <sub>x</sub>	0.37	1.63
		SO <sub>2</sub>	TR	0.01
		CO	0.08	0.34
		NH <sub>3</sub>	7.50	32.84
		Formaldehyde	3.00	13.14

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Emission Rates *	Source	Air Contaminant	Emission	
			lb/hr	TPY
Point No. (1)	Name (2)	Name (3)		
		Phenol	2.00	8.76
		Methyl Alcohol	1.80	7.88
		PHMP	19.90	87.16
15A	Glass Furnaces (1901 and 1902)		PM <sub>10</sub>	9.60
	42.05			
	ESP-Stack	VOC	0.24	1.07
		NO <sub>x</sub>	14.35	62.85
		SO <sub>2</sub>	6.85	30.00
		CO	2.00	8.76
FHFUG	1901 Forehearth (4)	PM <sub>10</sub>	0.25	1.10
		NO <sub>x</sub>	1.46	6.40
		SO <sub>2</sub>	TR	0.05
		CO	1.10	4.80
FMFUG	1901 Forming Area (4)	VOC	4.39	19.20
BFUG	1901 Batch Plant (4)	PM <sub>10</sub>	0.06	0.28
MXBIN1	1901 E-Glass Mixing Bin (North)		PM <sub>10</sub>	0.014
	0.06			
MXBIN2	1901 E-Glass Mixing Bin (South)		PM <sub>10</sub>	0.014
	0.06			
16	Line No. 91	PM <sub>10</sub>	3.75	16.43
	Collection Wet	VOC	TR	0.02
	Scrubber No. 1 -	NO <sub>x</sub>	0.12	0.53
	Stack	SO <sub>2</sub>	TR	<0.01
		CO	0.03	0.11
		NH <sub>3</sub>	3.50	15.33
		Formaldehyde	0.75	3.29
		Phenol	0.75	3.29

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			lb/hr	TPY
Point No. (1)	Name (2)	Name (3)		
17	Line No. 91 Collection Wet Scrubber No. 2 - Stack	PM <sub>10</sub>	3.75	16.43
		VOC	TR	0.02
		NO <sub>x</sub>	0.12	0.53
		SO <sub>2</sub>	TR	0.01
		CO	0.03	0.11
		NH <sub>3</sub>	3.50	15.33
		Formaldehyde	0.75	3.29
		Phenol	0.75	3.29
18	Line No. 91 Collection Wet Scrubber No. 3 - Stack	PM <sub>10</sub>	3.75	16.43
		VOC	TR	0.02
		NO <sub>x</sub>	0.12	0.53
		SO <sub>2</sub>	TR	<0.01
		CO	0.03	0.11
		NH <sub>3</sub>	3.50	15.33
		Formaldehyde	0.75	3.29
		Phenol	0.75	3.29
19	Line No. 91 Collection Wet Scrubber No. 4 - Stack	PM <sub>10</sub>	3.75	16.43
		VOC	TR	0.02
		NO <sub>x</sub>	0.12	0.53
		SO <sub>2</sub>	TR	<0.01
		CO	0.03	0.11
		NH <sub>3</sub>	3.50	15.33
		Formaldehyde	0.75	3.29
		Phenol	0.75	3.29
20	Line No. 91 Oven Wet Scrubber - Stack	PM <sub>10</sub>	3.75	16.43
		VOC	0.03	0.15
		NO <sub>x</sub>	0.90	3.94
		SO <sub>2</sub>	TR	0.02
		CO	0.19	0.83
		NH <sub>3</sub>	3.50	15.33
		Formaldehyde	1.75	7.67

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Emission Rates *	Source	Air Contaminant	Emission	
			lb/hr	TPY
Point No. (1)	Name (2)	Name (3)		
		Phenol	1.00	4.38
21	Baghouse No. 1 - Stack	PM <sub>10</sub>	0.34	1.49
		VOC	TR	0.06
		NO <sub>x</sub>	0.33	1.45
		SO <sub>2</sub>	TR	0.01
		CO	0.07	0.30
		Boron Oxide	0.40	1.75
22	Baghouse No. 2 - Stack	PM <sub>10</sub>	0.06	0.26
23	Baghouse No. 3 - Stack	PM <sub>10</sub>	0.03	0.13
24	Baghouse No. 4 - Stack	PM <sub>10</sub>	0.03	0.13
25	Baghouse No. 5 - Stack	PM <sub>10</sub>	0.03	0.13
26	Baghouse No. 6 - Stack	PM <sub>10</sub>	0.03	0.13
27	Baghouse No. 7 - Stack	PM <sub>10</sub>	0.03	0.13
28	Baghouse No. 8 - Stack	PM <sub>10</sub>	0.03	0.13
29	Baghouse No. 9 - Stack	PM <sub>10</sub>	0.03	0.13
30	Line No. 90 Infrared	PM	0.50	2.19

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AIR CONTAMINANTS DATA

Emission Rates *	Source	Air Contaminant	Emission	
			lb/hr	TPY
Point No. (1)	Name (2)	Name (3)		
	Zone Stack	VOC	TR	0.06
		NO <sub>x</sub>	0.69	3.03
		SO <sub>2</sub>	TR	0.01
		CO	0.17	0.76
		NH <sub>3</sub>	0.13	0.57
		Formaldehyde	0.13	0.57
		Phenol	TR	0.06
31	Line No. 90 Oven	PM	0.50	2.19
	Zone 1 Stack	VOC	TR	0.06
		NO <sub>x</sub>	0.69	3.03
		SO <sub>2</sub>	TR	0.01
		CO	0.17	0.76
		NH <sub>3</sub>	0.13	0.57
		Formaldehyde	0.13	0.57
		Phenol	TR	0.06
32	Line No. 90 Oven	PM	0.50	2.19
	Zone 2 Stack	VOC	TR	0.06
		NO <sub>x</sub>	0.69	3.03
		SO <sub>2</sub>	TR	0.01
		CO	0.17	0.76
		NH <sub>3</sub>	0.13	0.57
		Formaldehyde	0.13	0.57
		Phenol	TR	0.06
33	Line No. 90 Oven	PM	0.50	2.19
	Zone 3 Stack	VOC	TR	0.06
		NO <sub>x</sub>	0.69	3.03
		SO <sub>2</sub>	TR	0.01
		CO	0.17	0.76
		NH <sub>3</sub>	0.13	0.57
		Formaldehyde	0.13	0.57
		Phenol	TR	0.06
35	South Trim Waste	PM <sub>10</sub>	0.03	0.12
	Re-Feed Baghouse			

36	North Trim Waste Re-Feed Baghouse	PM <sub>10</sub>	0.03	0.12
37	Off-Line Trim Waste Re-Feed Baghouse	PM <sub>10</sub>	0.08	0.36

(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) PM - particulate matter  
PM<sub>10</sub> - particulate matter less than 10 microns in diameter  
VOC - volatile organic compounds as defined in General Rule 101.1  
NO<sub>x</sub> - total oxides of nitrogen  
SO<sub>2</sub> - sulfur dioxide  
CO - carbon monoxide  
NH<sub>3</sub> - ammonia  
PHMP - poly(hydroxymethyl)phenol  
TR - trace emissions, ≤0.01 lbs/hr

(4) Fugitive emissions are an estimate only.

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#### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- \* Emission rates are based on and the facilities are limited by the following maximum hourly production rates for each of the following lines:

Line 92	1,800 lbs/hr
Line 93	1,800 lbs/hr
Line 91	6,000 lbs/hr
E-Glass	(Confidential file)

\* Annual emission rates are based on the following continuous operation schedule:

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<u>Emission Rates *</u>	<u>Source</u>	<u>Air Contaminant</u>	<u>Emission</u>	
<u>Point No. (1)</u>	<u>Name (2)</u>	<u>Name (3)</u>	<u>lb/hr</u>	<u>TPY</u>
<u>Hrs/day</u>	<u>Days/week</u>	<u>Weeks/year</u>	<u>or Hrs/year</u>	
<u>8,760</u>				

Dated\_\_\_\_\_