Glass Furnace Emission Summary
Arglass Yamamura, LLC.
Valdosta Georgia

Hazardous Air Pollutants - Combustion	Emission Factor [1]	Units	PTE (TPY)	PTE (lb/yr)
Polycyclic Organic Matter	8.70E-05	lb/mmcuft	3.69E-05	0.07
Benzene	0.0021	lb/mmcuft	8.92E-04	1.78
Formaldehyde	0.075	lb/mmcuft	3.19E-02	63.70
Hexane	1.8	lb/mmcuft	7.64E-01	1,528.88
Naphthalene	0.00061	lb/mmcuft	2.59E-04	0.52
Toluene	0.0034	lb/mmcuft	1.44E-03	2.89
Beryllium	0.000012	lb/mmcuft	5.10E-06	0.01
Manganese	0.00038	lb/mmcuft	1.61E-04	0.32
Mercury	0.00026	lb/mmcuft	1.10E-04	0.22

Combustion HAP [2] Total			0.80	1598.40

[1] Emission factors from Table 1.4-3 and 1.4-4 of AP-42

[2] HAP emission totals do not include arsenic, cobalt, nickel, cadmium, selenium and chromium because they are accounted for in the process emissions above.

Greenhouse Gas - Natural Gas Fuel Combustion								
Fuel	Emission Factor (kg/MMBtu)[1]			Emissions (metric tons per year)[2]				CO_2e
(MMBtu/yr)	CO_2	CH_4	N_2O	CO_2	CH_4	N_2O	CO_2e	Tons/yr
866,364	53.02	1.0E-03	1.0E-04	45,934.6	0.87	0.087	45,982.1	50,686.5

1. Default emission factors from 40 CFR 98 Subpart C, Table C-1 and Table C-2 (natural gas).

2. Calculated based on emission factors and equations C-1b and C-8b of 40 CFR 98 Subpart C. CO_2e emissions calculated based on Global Warming Potentials from 40 CFR 98 Subpart A - Table A-1.

$$CO_2, CH_4, \text{ or } N_2O \text{ Emissions} = 1\times10^{-3} * [\text{Fuel} * \text{Emission Factor}]$$

$$CO_2e \text{ Emissions} = CO_2 \text{ Emissions} + 25 (CH_4 \text{ Emissions}) + 298 (N_2O \text{ Emissions})$$

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