

Emissions Summary
Arglass Yamamura, LLC
Valdosta, Georgia

<i>Maximum Heat Input:</i>	72.0	MMBtu/hr	<i>Annual Fuel Usage:</i>	618.35	MMCF/year
<i>Daily Glass Pull:</i>	435	Short Tons/day	<i>Annual Heat Input:</i>	630,720	MMBtu/year
<i>Fuel:</i>	Natural Gas		<i>Annual Glass Pull:</i>	150,745	short tons/year
<i>HHV:</i>	1,020	MMBtu/MMCF	<i>Hours of Operation:</i>	8760	Hrs/year

Criteria Pollutants	Emission Factor	Units	PTE (lb/hr)	PTE (TPY)	Basis
CO	15.5	lb/hr	15.48	67.8	Vendor Data
NOx	1.2	lb/ton	21.75	90.4	Vendor Data
SO2	1.25	lb/ton	22.66	94.2	Vendor Data
PM ₁₀	0.40	lb/ton	7.25	30.1	Vendor Data
PM _{2.5}	0.40	lb/ton	7.25	30.1	Vendor Data
PM	0.2	lb/ton	3.63	15.1	Vendor Data
VOC	3.9	lbs/hr	3.87	17.0	Vendor Data
Se	0.003	lb/ton	0.05	0.23	Derived from engineering design firm data.
HF	0.02	lb/ton	0.27	1.13	Vendor Data
HCl	0.03	lb/ton	0.54	2.26	Vendor Data
Lead	0.003	lb/ton	0.05	0.23	Industry factor for all metal HAP
Total HAPs	-	-	-	4.46	Combustion (AP-42) + Process (Vendor Data/Industry Factors)
CO _{2e}	-	-	-	64,251	40 CFR Part 98 Supart C and N

Hazardous Air Pollutants - Combustion	Emission Factor	Units	PTE (TPY)	PTE (lb/yr)
Acetaldehyde	1.20E-05	lbs/MMBTU	0.0038	7.57
Acrolein	1.70E-05	lbs/MMBTU	0.0054	10.72
Benzene	2.10E-06	lbs/MMBTU	0.0007	1.32
Ethylbenzene	1.60E-05	lbs/MMBTU	0.0050	10.09
Formaldehyde	7.40E-05	lbs/MMBTU	0.0233	46.67
Hexane	1.80E-03	lbs/MMBTU	0.5676	1135.30
Phenol	4.00E-06	lbs/MMBTU	0.0013	2.52
Toluene	3.30E-06	lbs/MMBTU	0.0010	2.08
Xylene (total)	2.50E-05	lbs/MMBTU	0.0079	15.77

Combustion HAP Total			0.62	
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Note: HAP emission factors taken from AP-42.

Greenhouse Gas - Natural Gas Fuel Combustion								
Fuel (MMBtu/yr)	Emission Factor (kg/MMBtu) ¹			Emissions (metric tons per year) ²				CO _{2e} Tons/yr
	CO ₂	CH ₄	N ₂ O	CO ₂	CH ₄	N ₂ O	CO _{2e}	
630,720	53.02	1.0E-03	1.0E-04	33,440.8	0.63	0.063	33,475.3	36,900.2

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 CO₂, CH₄, or N₂O Emissions = 1x10⁻³ * [Fuel * Emission Factor]