

Emission Unit ID	Description
SL28	Raw Material Silo 28
SL29	Raw Material Silo 29
SL30	Raw Material Silo 30
SL31	Raw Material Silo 31
SL32	Raw Material Silo 32
WG05	Batch Weighting System 5
WG06	Batch Weighting System 6
WG07	Batch Weighting System 7
WG08	Batch Weighting System 8
MX03	Batch Mixing System 3
MX04	Batch Mixing System 4
TR02	Batch Transport System
CR02	Cullet hopper/Crusher
SL33	Cullet Silo 33
SL34	Cullet Silo 34

Equipment associated with raw material unloading, storage and batch preparation will vent to individual filters. These filters are an integral part of the silo and are not air pollution control devices because they prevent product from being released from the silo during filling.

2.2.2 Regenerative Glass-Melting Furnace

Arglass proposes to construct a new 495 metric-ton per day (546 short-ton per day) glass melting furnace. The new furnace will have a maximum gross heat input of 98.9 million Btu per hour (MMBtu/hr). The furnace will burn natural gas. Additionally, the furnace will use a transformer to achieve an 8,000 kVA electric boost as a supplementary heating system to increase the melting capacity of the furnace and improve glass quality.

Electrical boosting will be utilized to help melt the glass, as glass is an electrical conductor at high temperatures. Electric boosting increases the production rate of the furnace by placement of electrodes that apply extra energy directly into the glass bath in areas of the furnace that are difficult to heat using gas. The method improves convection currents in the melt, enabling increased pull rates and improved glass quality. Electric boosting lowers nitrogen oxides (NOx) emissions by offsetting fuel energy consumption by electrical energy. Further, it reduces particulate matter (PM) emissions since the electrodes heat the glass from within rather than above the molten glass surface due to volatilization of materials in the melt that combine with the supernatant gases and form condensates.

Backup No.2 Fuel Oil will be used during interruption of natural gas service (a malfunction scenario) for maintaining furnace temperatures high enough to keep the molten glass from solidifying and allow the furnace to come back to operating temperature relatively expeditiously. Arglass estimates that the maximum No.2 Fuel usage is equivalent that consumed for 160 hours per year at design capacity. During this malfunction scenario, molten glass will continue to flow at a slower rate (at a maximum of 150 tons per day) and the maximum heat input capacity will be 29.7 MMBtu/hr.