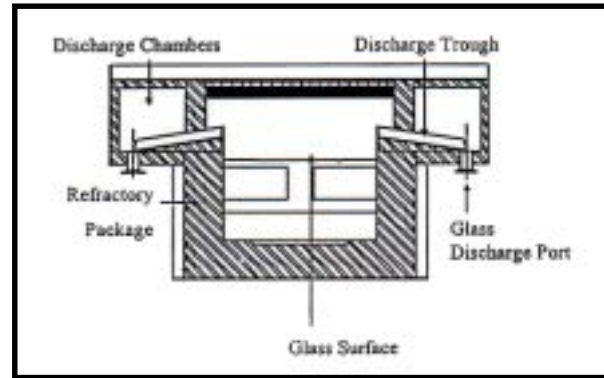


treatment of contaminated soils is generally conducted in-situ. A description of both ex-situ and in-situ vitrification processes follows.

### 2.1.5.1 Ex-Situ Vitrification

The ex-situ vitrification process is a thermal treatment process that both oxidizes and vitrifies wastes. It can treat wastes in the form of solids or as slurries. Typically waste and fuel are mixed in a pre-combustor before being transferred to a combustion chamber. Oxidation will take place in the combustion chamber. After the waste has been oxidized the ash is transferred to a vitrification chamber where it is mixed with glass making ingredients to create glass materials. In some systems, wastes treated this way are reportedly capable of passing the toxicity characteristic leaching procedure (TCLP).



*Schematic of high level waste melter used for ex-situ vitrification.*