

### **2.1.5 Vitrification Units**

The development of vitrification technology has been promoted by the large volume of low-level and high level radioactive waste requiring treatment at U.S. Department of Energy (DOE) sites. Much of this waste includes RCRA hazardous constituents and is regulated as mixed waste.

There are two general categories of vitrification processes: those applied to site remediation (e.g., contaminated soils) and those applicable to treatment of waste streams from uranium/plutonium processing (e.g., tank wastes). Vitrification processes used in the treatment of wastes are typically conducted as ex-situ vitrification whereas

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