RADIOACTIVE SOLID WASTE MANAGEMENT SITE (RSMS)

WASTE MANAGEMENT FACILITY, TROMBAY

WASTE MANAGEMENT DIVISION

Radioactive Solid Waste Management Site (RSMS) is mandated with safe management of Radioactive Solid Waste generated from various nuclear fuel cycle facilities and radiological laboratories of BARC Trombay. RSMS caters to safe collection of radioactive solid waste (Category-I, II & III), processing (Category-I) for amenable volume reduction, conditioning based on need and disposal in engineered disposal modules of Near Surface Disposal Facility.

The facility comprises of two NSDF sites, namely RSMS and IRE at Trombay. Disposal operation at IRE site is completed and site is presently under surveillance. At RSMS, various processing system and disposal modules are under operations for safe and effective management of radioactive solid waste. RSMS houses various processing systems such as Compaction system for compressible waste; Conventional diesel fired Incinerator for Cellulosic Waste; Plasma based incineration for mixed combustible wastes including rubber and plastics; Disused Source collection, storage and disposal system; High active Spent Resin Fixation system in cement matrix etc.

The facility also has various engineered modules, such as Stone Lined Trenches (SLT), Reinforced Concrete Trenches (RCT), Multi-tier Reinforced Disposal Module (MRDM), Tile Holes (TH) etc., for disposal of solid radioactive waste after imparting suitable treatment. Facility is also equipped with interim storage of Category-IV waste before its eventual treatment and/or disposal.



COMPACTION SYSTEM
Volume Reduction Factor: 3 - 5



INCINERATION SYSTEM Volume Reduction Factor: > 30





PLASMA PYROLYSIS/INCINERATION Volume Reduction Factor: > 30



Reinforced Concrete Trenches (RCT)



Multi-tier Reinforced Disposal Module (MRDM)