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Solid Waste Programs

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Solid Waste Programs



- Solid Waste Overview
- Solid Waste Generation
- Solid Waste Types



- **What is Solid Waste?**

- Solid, semi-solid, liquid, or contained gaseous material which is discarded or has served its intended purpose

- **SRS Solid Waste Management**

- Responsible for disposition of SRS solid waste, including
 - ✓ *Transuranic (TRU) Waste*
 - ✓ *Low-Level Waste (LLW)*
 - ✓ *Hazardous and Mixed Waste (HW/MW)*
 - ✓ *Sanitary Waste*



- Ongoing SRS Facility Operations
- Basic science research
- Environmental restoration
- Decontamination and dismantling of facilities
- Examples:
 - Discarded personal protective equipment
 - Tools and equipment with residual contamination
 - Soil and groundwater cleanup materials
 - Empty containers
 - Research residues
 - Excess chemicals



- **TRU Waste**
 - Radioactive waste containing more than 100 nanocuries of alpha-emitting transuranic (atomic number greater than 92 (uranium)) radionuclides per gram of waste with half-lives greater than 20 years, except material determined to be High Level Waste (HLW)
- **LLW**
 - Radioactive waste that is not HLW, spent nuclear fuel, TRU waste, byproduct material, or naturally occurring radioactive material
- **HW/MW**
 - Any solid waste that is determined to be hazardous (e.g., toxic, corrosive, reactive, or ignitable) as defined by South Carolina Hazardous Waste Management Regulations (SCHWMR) or Resource Conservation and Recovery Act (RCRA)
 - Mixed waste contains both radioactive and hazardous components as defined by the Atomic Energy Act and SCHWMR / RCRA, respectively
- **Sanitary Waste**
 - Solid waste includes both non-radioactive and non-hazardous components, typically classified as garbage or refuse

Solid Waste Types: TRU Waste

- Generated at SRS Facilities
- Stored at Solid Waste Management Facility (SWMF)
- Characterized at SWMF to meet Waste Isolation Pilot Plant (WIPP) requirements
- Offsite disposal at WIPP in Carlsbad, NM



Solid Waste Types: LLW

- Generated at SRS and Naval Reactor (NR) Facilities
- Stored at SWMF, if needed
- Onsite disposal
 - Different Disposal Unit types based on waste characteristics
- Offsite disposal, if needed
 - Disposal Vendor selected based on waste characteristics



Solid Waste Types: LLW Onsite Disposal Units



Solid Waste Types: HW/MW

- Generated at SRS Facilities
- Stored at SWMF in RCRA-Permitted Facilities
 - Up to 1-year of storage allowed
- No onsite disposal
- Offsite treatment, storage, and disposal (TSD)
 - TSD Vendor selected based on waste characteristics



Solid Waste Types: Sanitary Waste



- Generated at SRS Facilities
- No onsite disposal or storage
- Offsite disposal at Three Rivers Solid Waste Authority Landfill



Summary



- SWMF safely and compliantly manages TRU, LLW, HW/MW, and Sanitary Waste types
 - Onsite disposal of LLW
 - Onsite storage of TRU and HW/MW
 - Offsite disposal of TRU, HW/MW, and Sanitary Waste



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