Solid Waste Management

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Performance-Based Objectives

- Manage DOE waste in a manner that is
  - Protective of worker health and safety
  - Protective of public health and safety
  - Protective of the environment
  - Compliant with all applicable laws and regulations
Radioactive Waste Management

Radioactive Waste per DOE Order 435.1

From reprocessing SNF?  

- YES: High Level Waste
- NO: 

>100 nCi/g α emitting TRU with half-life >20 yrs?  

- YES: TRU Waste
- NO: 

Byproduct or NORM?  

- YES: Tailings or otherwise not LLW
- NO: Low Level Waste

SNF – spent nuclear fuel  
TRU – transuranic  
NORM – naturally occurring radioactive material  
LLW – low level waste
Low Level Radioactive Waste

SRS Generated Low-Level Radioactive Waste

Meets E-Area Waste Acceptance Criteria
- Vaults
- Trenches

Does Not Meet E-Area Waste Acceptance Criteria or Not Cost Effective for On-site Disposal
- Commercial Disposal (Energy Solutions, Waste Control Specialists)
- Off-site Federal Disposal (Nevada National Security Site)
Low Level Radioactive Waste

- Generate approximately 5,000 cubic meters per year
- No legacy waste in storage
- Only off-site receipts are from Naval Reactor Facilities
Hazardous and Mixed Low Level Wastes

SRS Generated Hazardous and Mixed Low Level Wastes

- Hazardous Only (RCRA)
  - Temporary Storage
    - Commercial Treatment and Disposal
      - Commercial Disposal (Energy Solutions, Waste Control Specialists)
  - Mixed Low Level Waste
    - Temporary Storage
      - Commercial Treatment
        - Federal Disposal (Nevada National Security Site)
Hazardous and Mixed Low Level Wastes

- No legacy waste in storage
- Generate approximately 30 cubic meters per year
- Permit only allows storage up to one year
TRU Waste

1. SRS Generated TRU Waste
2. Packaged to WIPP Requirements
3. Perform WIPP Characterization
4. Meets WIPP Waste Acceptance Criteria
5. Ship to WIPP for Disposal
TRU Waste

- Generate approximately 30 cubic meters per year
- Approximately 750 cubic meters in storage
- Working to meet new WIPP waste acceptance criteria
- Preparing to resume shipments
Questions ?