

Nuclear Materials at SRS

Description	Disposal Alternatives
Materials to be Dispositioned as Waste	
Am/Cm solution in F-Canyon	Transfer to HLW System Sludge Batch #3
Pu-239 solution heels in F-Canyon	Flush to HLW System F-Area Tank Farm
Pu-239 solution in H-Canyon	Transfer to HLW system directly to Sludge Batch
Neptunium solution in H-Canyon	Convert to oxide in HB-Line and send to Oak Ridge or Transfer to a Sludge Batch if Not Needed for Programmatic Use
Plutonium / Uranium bearing scrap and residues	Dissolve in H-Canyon/HB-Line & transfer solution to HLW system
Depleted uranium solution in F & H-Areas	Grout onsite or vendor disposal, interim storage outside F-Area may be beneficial
Cobalt and thulium slugs and Pu-242 flux monitor pins	Package for LLW or TRU disposal
HEPA filters and pre-filters	Package as waste
Natural and Depleted Uranium slugs/cores	Transfer to offsite disposition vendor
Drums of depleted uranium oxide	Transfer to offsite disposition vendor (procurement in progress)
Thorium and Pu/U scrap/residues	Package for WIPP disposal
Thorium elements	Consolidate into L-Basin pending future disposition to Yucca Mountain
SNF in RBOF	Consolidate into L-Basin pending future disposition to Yucca Mountain
Domestic and Foreign SNF	Consolidate into L-Basin pending future disposition to Yucca Mountain
Materials Included in HEU Blenddown Program	
HEU solution in H-Area	HEU Blenddown in H Area and ship to TVA as per TVA agreement

Unirradiated Mark 22 tubes	Accelerate dissolution in H Area, blend down HEU and ship to TVA
Irradiated Mark 16 assemblies	Dissolution & Blenddown in H Area and ship to TVA
HEU/Al ingots, plates & rods	Ship to NFS for inclusion in TVA agreement
Materials Proposed for Offsite Use	
Pu-238 sources	Ship to Lawrence Livermore
Neptunium standards	Ship to Oak Ridge
Drums of heavy water	Ship to federal or commercial users or determine alternate disposal
Material To be Stabilized and Packaged in 3013s For Storage	
Pu metal	Package in 3013 containers & store in 235-F/KAMS pending transfer to PDCF & MOX Facility
Pu oxide (MOX-able)	Package in 3013 containers & store in 235-F/KAMS pending transfer to MOX Facility
Pu alloys & oxide (Non-MOX-able)	Package in 3013 containers & store in 235-F/KAMS pending future disposition

Nuclear Materials Planned or Proposed to Come to SRS

Description	Disposal Alternatives
Pu/HEU Items	Package in 3013 containers at SRS & store in 235-F/KAMS pending transfer to PDCF and MOX
Pu contaminated HEU items	Receive and store in KAMS; pending disposition with Non-MOX-able materials
Drums of HEU oxide	Receive at 235-F; dissolve in H-Area & blend HEU with TVA stream
Drum of University of Washington material	Receive at SRS and Package for LLW disposal

3013 containers of Pu and Pu/HEU	Expand 235-F capacity; receive & store at 235-F/KAMS; transfer MOX-able items to PDCF & MOX Facility; disposition remaining Non-MOX-able materials
Casks of FFTF material	Expand K-Area storage capacity; direct disposition or disposition with Non-MOX-able materials
HEU/Pu scrap metal & oxide items	Receive and store in KAMS; disposition with Non-MOX-able materials
Pu contaminated HEU from PDCF	Integrate disposition with similar items