



Hanford Spent Nuclear Fuel Facility Aging

**Presented to: Nuclear Waste Technical
Review Board**

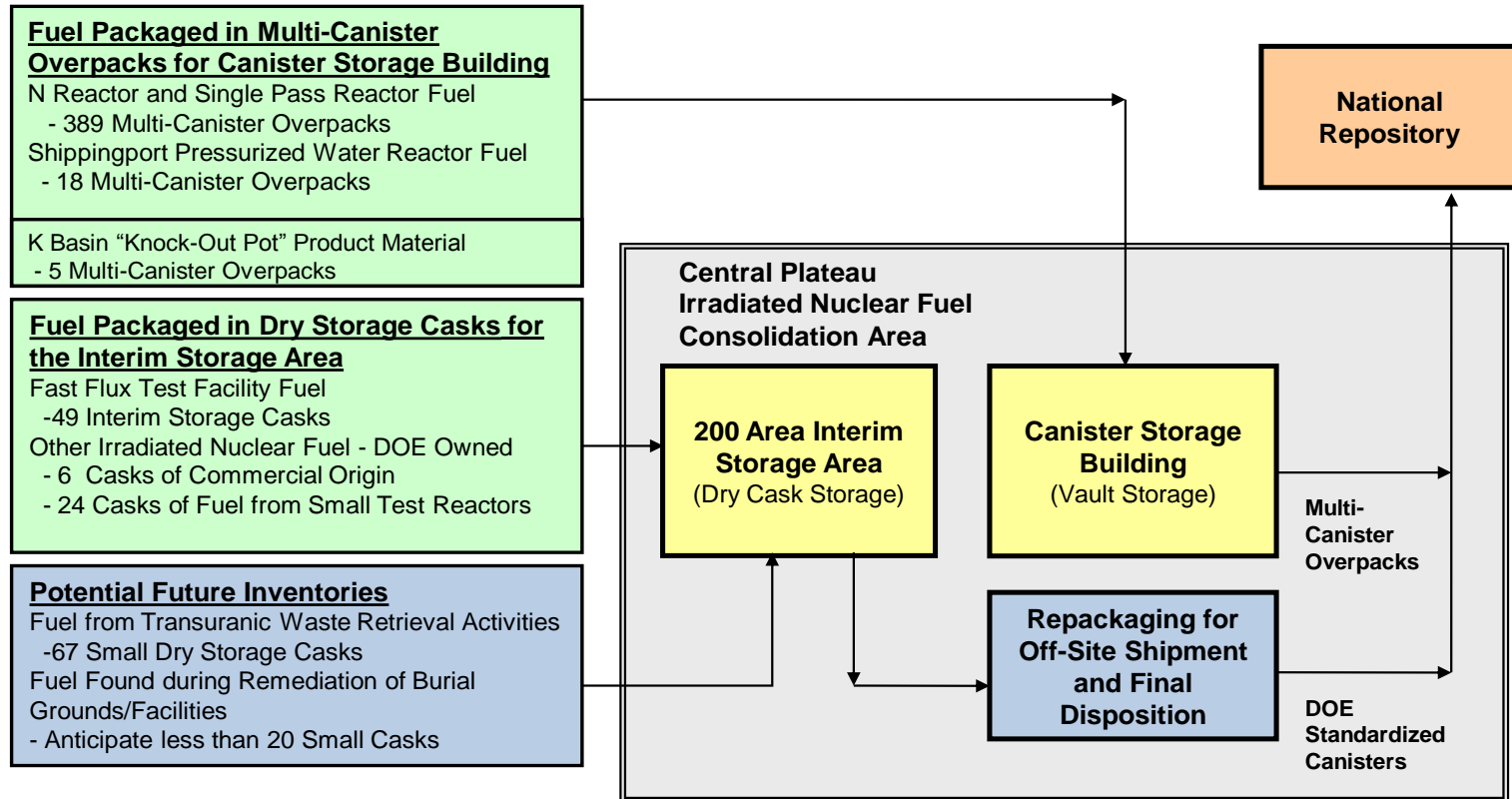
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Hanford Spent Nuclear Fuel

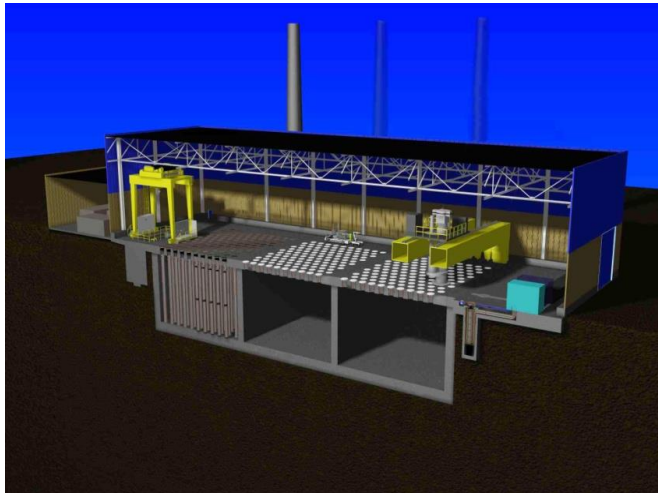
- Hanford Spent Nuclear Fuel (SNF) is consolidated at the Canister Storage Building and the 200 Area Interim Storage Area
 - ~2,100 metric tons of heavy metal
 - ~56 million curies of radioactivity in the SNF
- SNF safely stored awaiting disposition to a National Repository

Spent Nuclear Fuel Disposition Path



Canister Storage Building (CSB)

- Shielded vault storage of spent nuclear fuel in Multi-Canister Overpacks (MCOs)
- MCOs are passively cooled by convection
- Initiated operations in 2000
- CSB and MCOs have a 75-year design life



Left: CSB interior. Center: Empty MCO loading into cask at CSB. Far Right: CSB vault construction.

200 Area Interim Storage Area (ISA)

- Provides interim storage of spent nuclear fuel in dry storage casks
- Initiated operations in 2002
- Storage casks have design life of 40-50 years
- Repackaging required for off-site disposition



Far Left: Cask placement at ISA. Center: TRIGA Rad-Vault lid installation;. Far Right: NAC-1 Casks in ISO (standard) Containers