

Storage of Vitrified High Level Waste

Citizens Advisory Board
Waste Management Committee

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Purpose & Acronyms

- Provide information on the interim storage of vitrified high level waste
- Acronyms –
 - GWSB – Glass Waste Storage Building
 - SCT – Shielded Canister Transporter
 - HLW – High Level Waste
 - SR – Savannah River Operations Office
 - SRR – Savannah River Remediation, LLC
 - PC – Performance Category



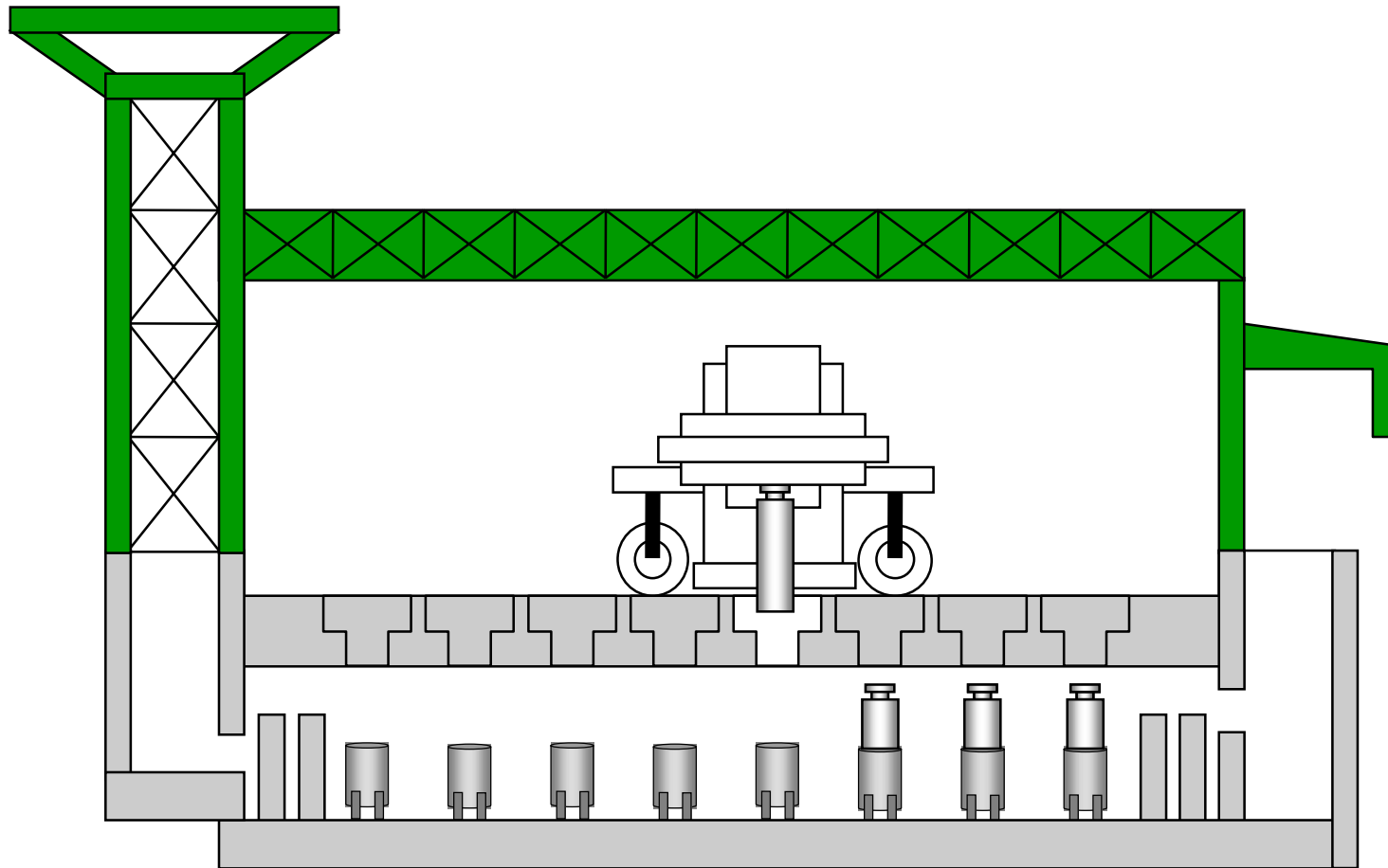
Impacts of Yucca Mountain Delay

NO IMPACT to SR operations/storage

- SR will continue to produce canisters in accordance with requirements
- SR will continue to **interim** store vitrified HLW in the GWSBs until a geologic repository is available



Glass Waste Storage Building



Glass Waste Storage Buildings

- Currently two GWSBs
 - Vault – PC- 2
 - Metal bldg – PC-1
- Ventilation –
 - GWSB #1 – forced and passive
 - GWSB #2 – passive only
- Capacity:
 - GWSB #1 – 2,253 usable positions
 - GWSB #2 – 2,340 positions
- Design Life – 50 years
- Estimated Useful Life – 100 years
- GWSB #3 – planned for 2020



Funding

- Funding through PBS-14 Liquid Radioactive Waste Management
- New Liquid Waste Contract – SRR
 - Will establish new baseline in 6-8 months
 - Proposal costs lower than projected in Request for Proposal
- GWSB #3 – projected Line Item



Canister Design



- Vitrified waste form – best available technology to stabilize high radioactive liquid waste
- Canister made of 304L stainless steel – 3/8" thick
- Life expectancy estimated ~1000 years
- Canisters do not breach on drop test of over 7 meters
- Canisters are used for transportation and interim storage



Summary

- The GWSBs and the vitrified high level waste canisters are of robust design
- Safe **interim** storage will continue until such time as a geologic repository becomes available

