



# THE HANFORD SITE

## Management of Cesium and Strontium Capsules Project Status

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- Stay within the limits of your knowledge
- Avoid snowshoeing alone whenever possible
- Always leave your trip plan with a responsible person
- Always come prepared with the appropriate gear, including plenty of warm clothing, food, water and the ten essentials
- Know how to navigate
- Stay warm and dry
- Stay hydrated: a vacuum bottle with hot drinks or soup can help you stay both hydrated and warm

What is being briefed:

- Management of Cesium and Strontium Capsules Project (W-135) mission
- Process for transfer of capsules to dry storage
- Status of W-135 Project

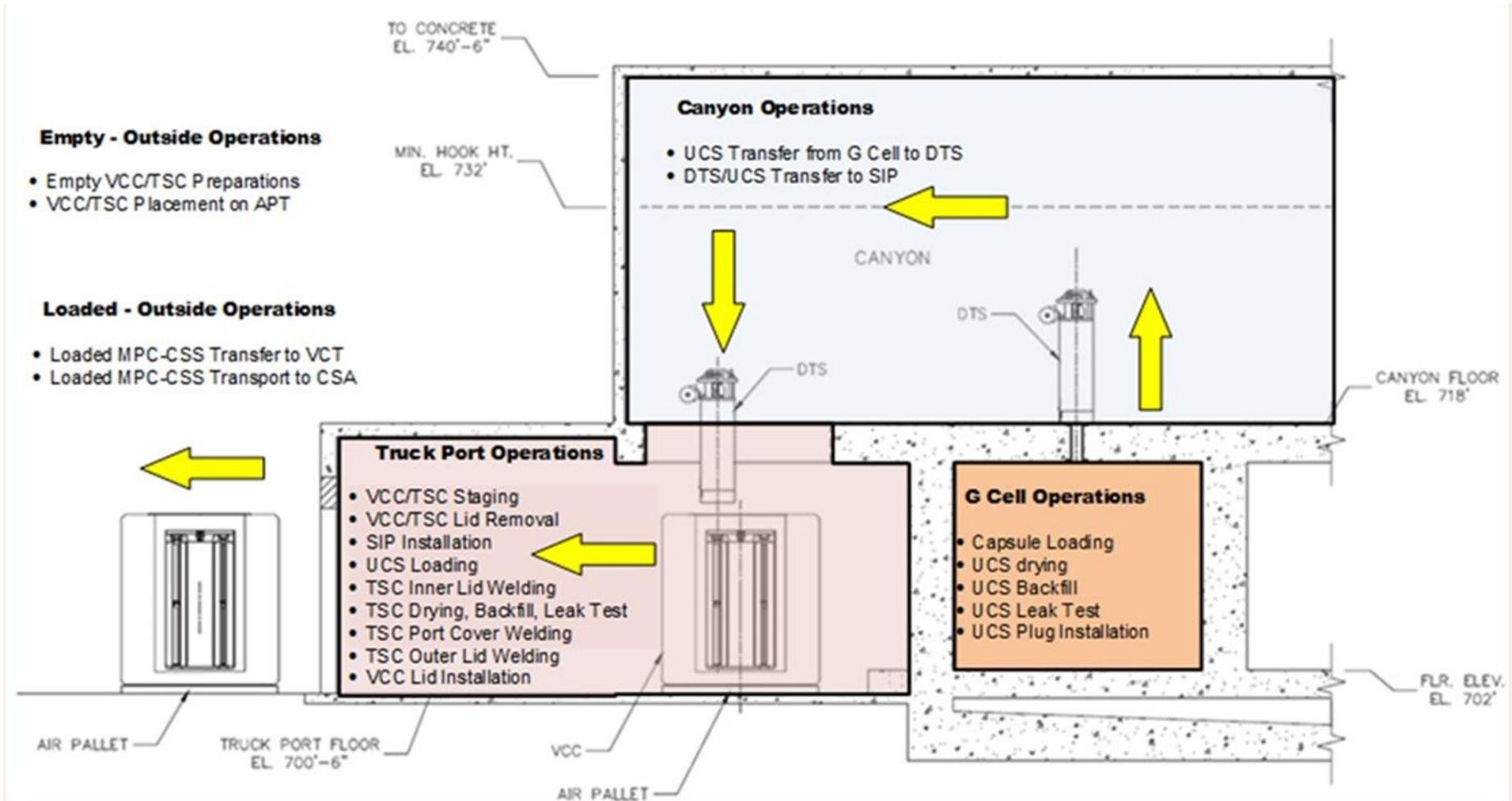
What do we want the HAB to do with this information?  
Information is relevant in continued policy-level discussions regarding the project.

The W-135 Project mission is to provide safe, compliant and cost-effective storage of the cesium and strontium capsules until a disposal path for the capsules is established and implemented.

## **The W-135 Project consists of the following subprojects:**

- Waste Encapsulation and Storage Facility modifications (WESF mods)
- Cask Storage System: Vertical concrete casks and transfer equipment (including installation)
- Capsule Storage Area (CSA): Storage pad, road improvements and utilities
- WESF Mock-up

# Capsule Transfer Process





## Management of the Cesium and Strontium Capsule Storage Project



- This project provides the necessary facility modifications required to install and operate the Cask Storage System equipment for capsule transfer to dry storage
- Class 3 Permit Modification issued - December 2020
- Approved DOE's Critical Decision (CD)-2, "Approve Performance Baseline" and CD-3, "Approve Start of Construction" - January 2021
- Construction activities to begin - February 2021



G-Cell window refurbishment



WESF canyon crane



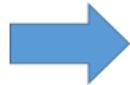
Removing waste from canyon



Repainted canyon

# Cask Storage System

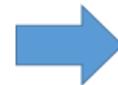
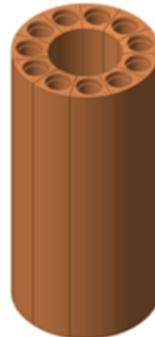
**Universal Capsule Sleeve (UCS)**



**Dry Transfer System (DTS)**



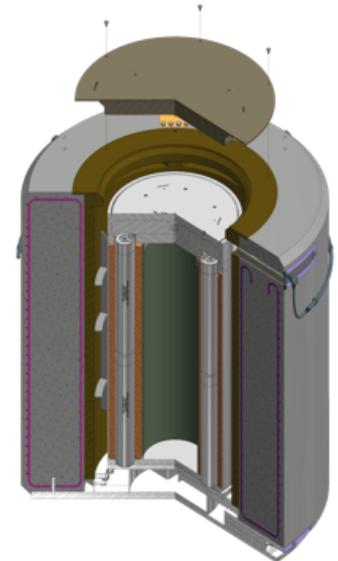
**Transportable Storage Canister Basket**



**Transportable Storage Canister (TSC)**



**Vertical Concrete Cask (VCC)**



The UCS is designed to hold 6 standard Cs/Sr capsules or 2 Type-W overpacks.

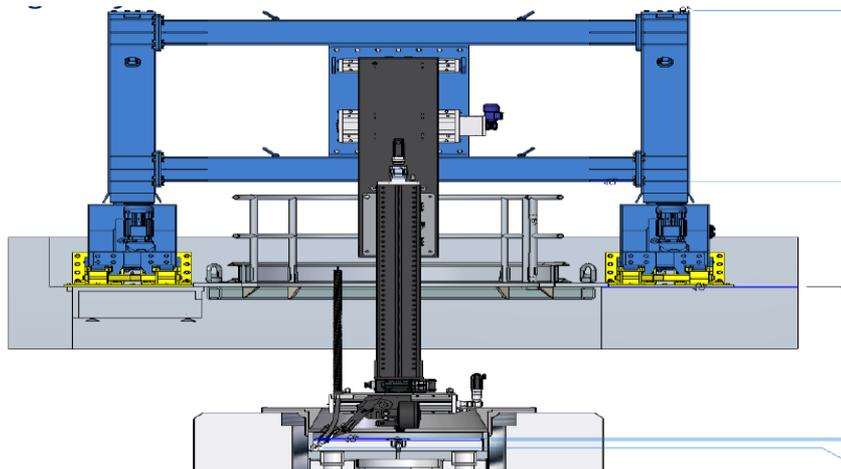
The DTS will be used to transfer the UCS from G Cell to the TSC in the truck port.

The TSC Basket will house 2 UCSs inside each of eleven openings.

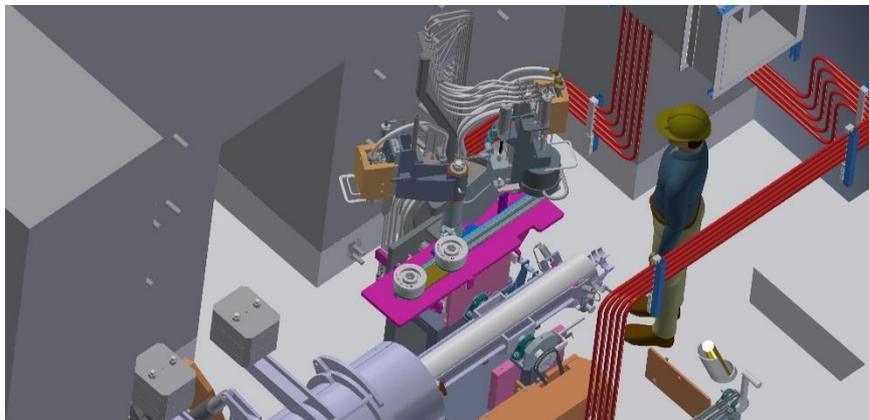
The TSC is designed to fit inside VCC for storage. The TSC houses the TSC basket.

The VCC is the storage overpack that houses the TSC. Once loaded, the CSS will be transported to the Cask Storage Area with the Vertical Task Transporter.

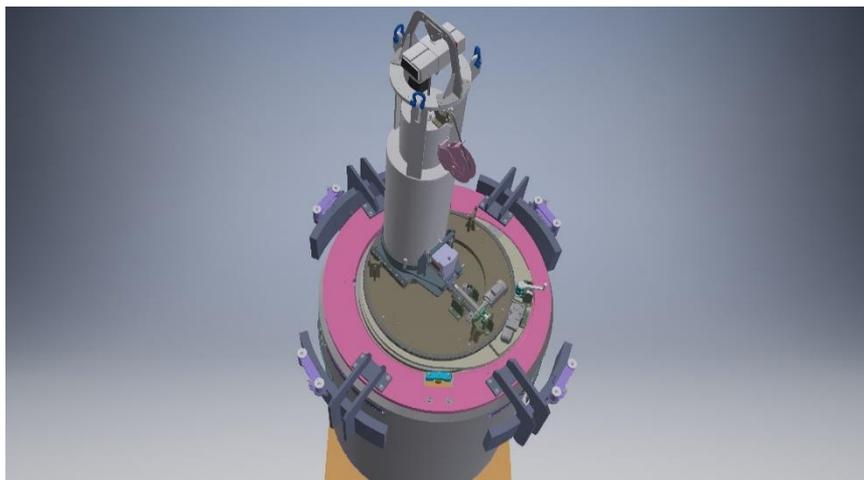
# Cask Storage System (cont.)



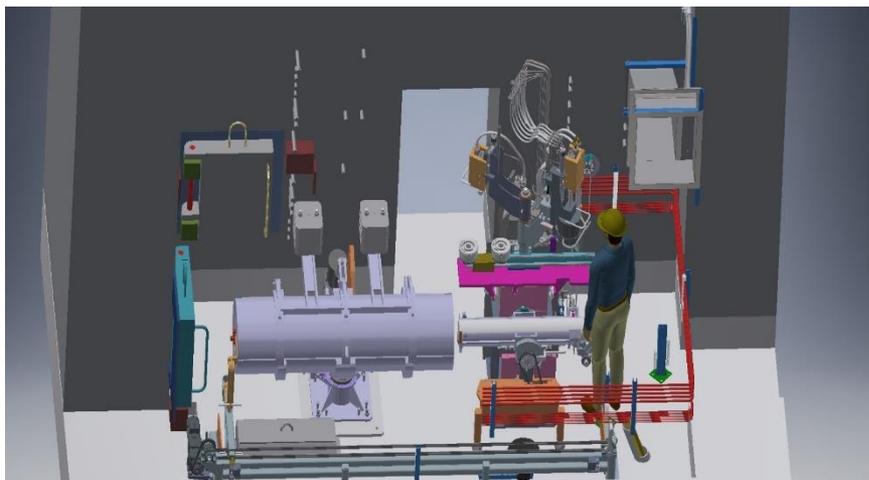
Automated weld and gantry system



Up-ender



Indexer



G-Cell assembly

# Cask Storage System (cont.)



Automated Welding visual inspection system



Capsule spacers

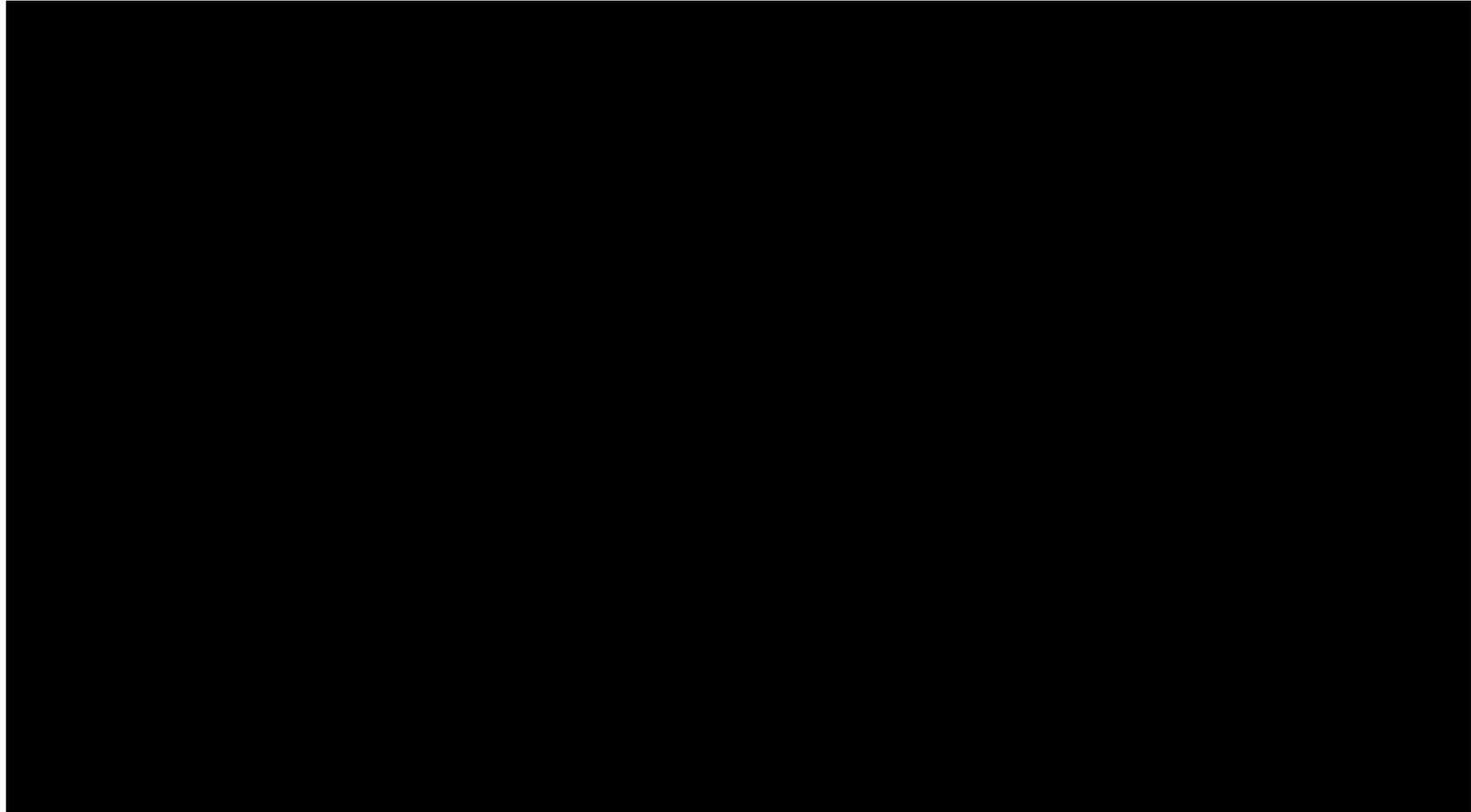


G-Cell gate



Recover shield Assembly

# Capsule Storage Area



# Capsule Storage Area



Gravel surfacing for CSA yard area



New transformers to power CSA

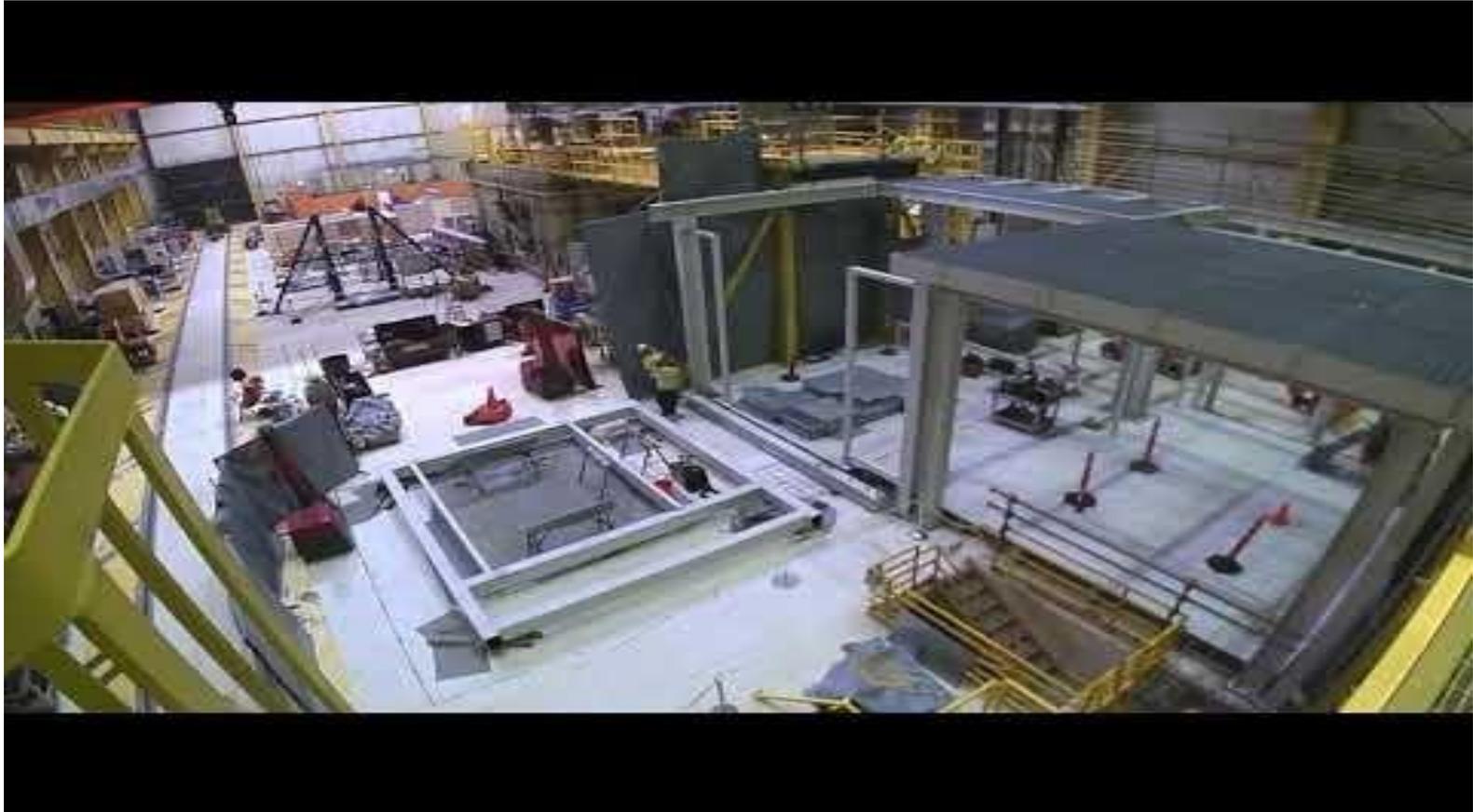


Fire protection Raw Water line install



Temperature Monitoring System control panel installation

# WESF Mock-up at the Maintenance and Storage Facility



# Vertical Cask Transporter



- We have made significant progress this past year
- We continue to make progress in FY21
  - Start WESF modification construction activities
  - CSA construction complete in FY21
  - Continue to fabricate CSS equipment with delivery of test equipment for WESF Mock-up early FY22