



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

Presentation on Target Residue Material

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May 23, 2017

Purpose

- To Provide an overview of the Target Residue Material Handling in H-Canyon



- Intermodal Container (aka ISO* Container) with a Legal Weight Transport (LWT) Cask inside, being transported to H-Canyon

* ISO = International Organization for Standardization



- Straddle carrier being moved into position around the ISO container





- ISO container lifted from the transport trailer by the straddle carrier
- Preparing to pull the transport trailer away from the straddle carrier

- Straddle Carrier has placed the ISO container on a dolly
- Lid has been lifted by a forklift from the ISO container
- Preparing to move the lid to a temporary storage location
- Preparing to move the ISO container into the Canyon Truck-well



- Container has been wrapped to prevent contamination of the ISO container and cask
 - Load mover* (tug) is moving the ISO container into the truck well
- * Load Movers (tugs) are also used to move airplanes at airports



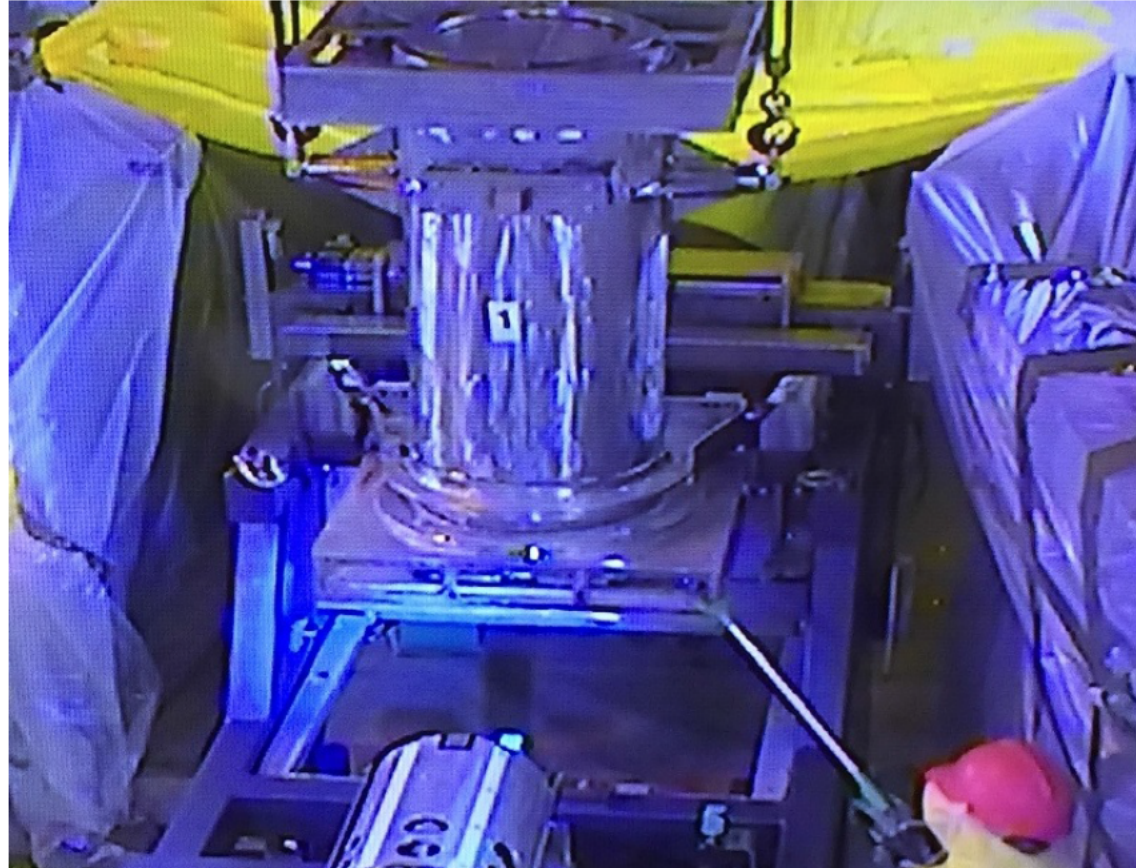
Overview

- The cask impact limiter and cask plug have been removed
- The cask is in the upper part of the picture with the end of the cask barely visible.
- The Container Retrieval System has been mounted to the cask and is preparing to pull a container into the pig (shown in horizontal position near the middle of the picture).
- The gripper used to remove the container from the cask is in the lower left corner of the picture



Overview

- Pig has been up-righted
- Preparing to lift the pig from the Container Retrieval System
- Note the remote reach tool being used by the operator in the lower right corner



Overview

- Pig is being moved to the Container Unloading Station
- Note the use of remote reach tools again



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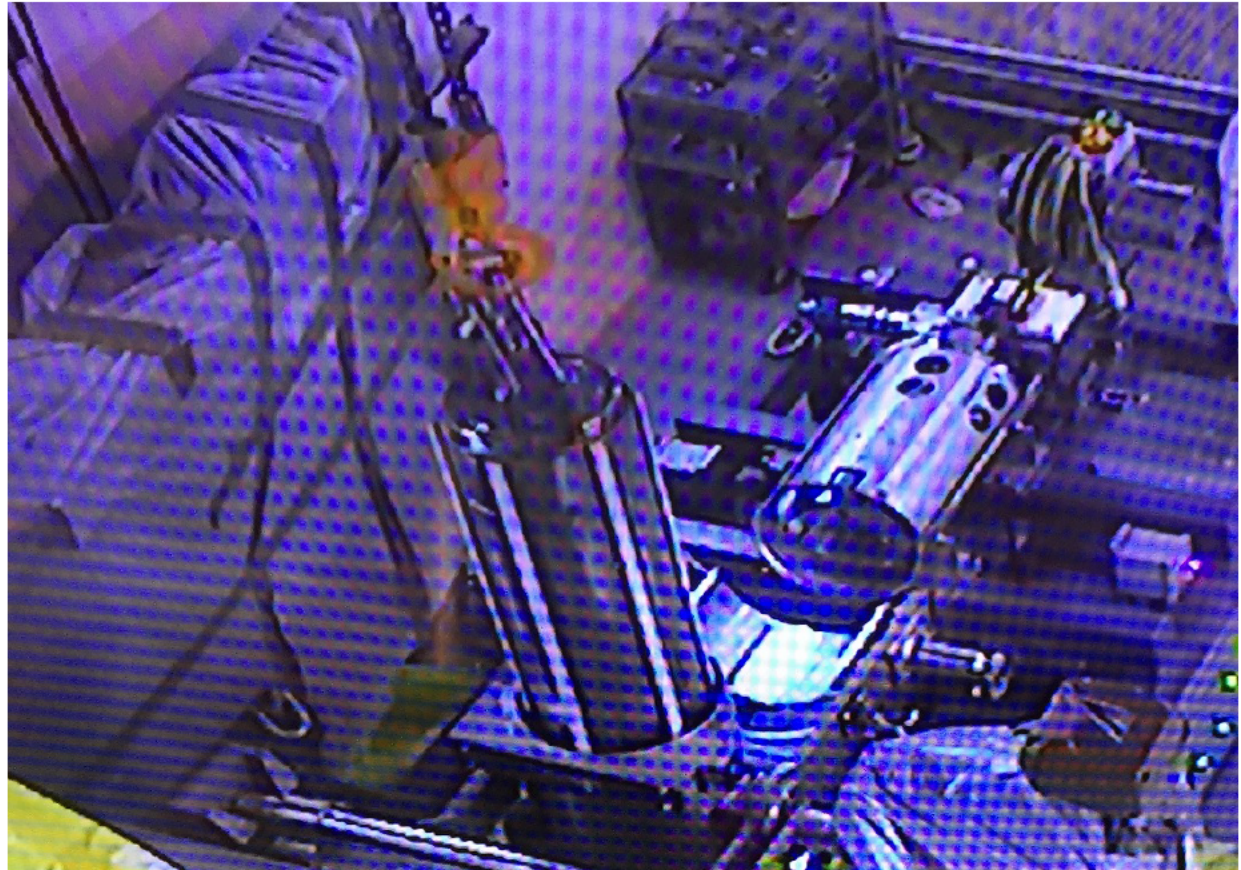
- Empty container is being “swiped”* to check for potential contamination
- Preparing to insert an empty container into the shipping cask

* Swipes are counted using instruments that are able to detect contamination



Overview

- Empty container is being lowered into an unshielded “half pig”
- Next: half pig with container will be rotated horizontally



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- Empty container is being pushed from the “half pig” into the shipping cask
- Final steps: cask will be prepared for shipment back to Canada with empty containers

