



# ***Hanford Plateau Remediation Project Update***

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CHPRC-03037



U.S. DEPARTMENT OF  
**ENERGY**

# Hanford Plateau Remediation Projects

- Plutonium Finishing Plant (PFP) Demolition
- Sludge Treatment Project (STP)
- Soil and Groundwater Remediation Project (SGRP)
- Capsule Extended Storage Project (CESP)
  - Phase I: Waste Encapsulation and Storage Facility (WESF) Ventilation and Stabilization
- Legacy and Transuranic (TRU) Waste

# Plutonium Finishing Plant Closure Project



**68% Complete**

7,100 feet of Process Vacuum Piping



**69% Complete**

59 Filter Boxes



**91% Complete**

28,900 feet of Asbestos



**65% Complete**

8,900 feet of Ventilation Ducting

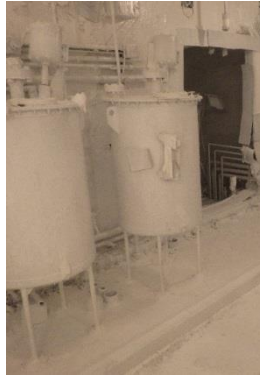


**49% Complete**

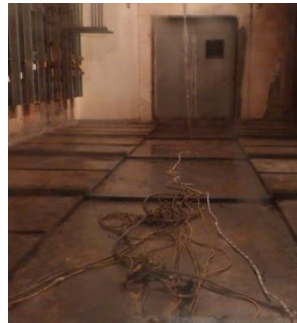
91 Structures



# Plutonium Finishing Plant Closure Project



242-Z: Ready for Demolition



236-Z: Demolition Imminent



## Demolition Sequence and Duration

1	Plutonium Reclamation Facility (236-Z)	12 weeks
2	Americium Recovery Facility (242-Z)	2 weeks
3	Plutonium Finishing Plant (234-5Z)	17 weeks
4	Ventilation Stack and Fan House (291-Z)	9 weeks

# Plutonium Finishing Plant Closure Project – Expected Waste from Demolition

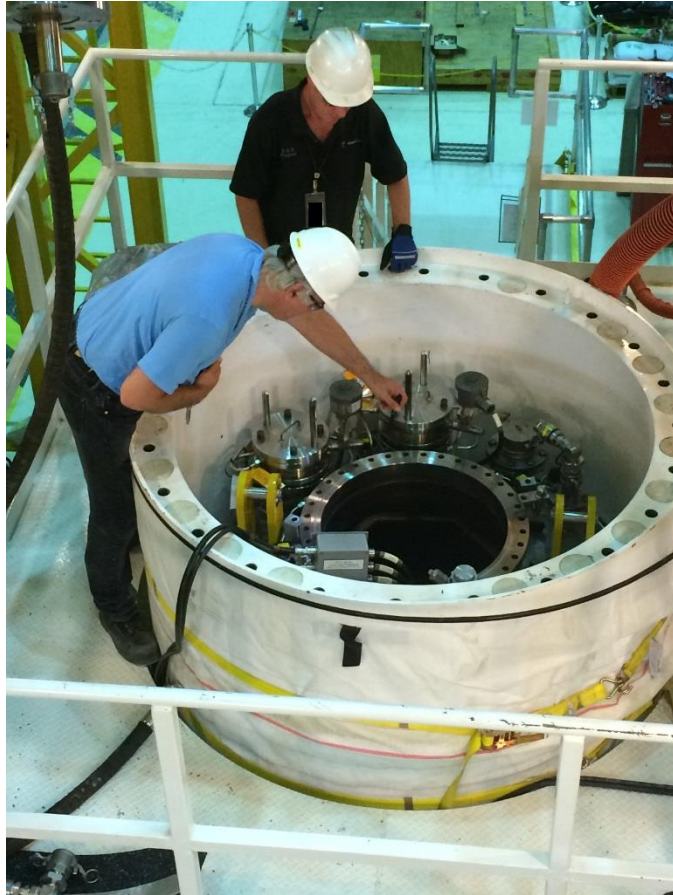
**Both TRU and LLW will be generated.**

- 50 large boxes of TRU that will require size reduction/repackaging into WIPP certifiable containers
- Over 400 55-gallon drums and 200 SWBs of TRU/M
- Over 17000 tons of building debris to onsite LLW disposal facility





# Sludge Treatment Project



Inspecting STSCs at MASF

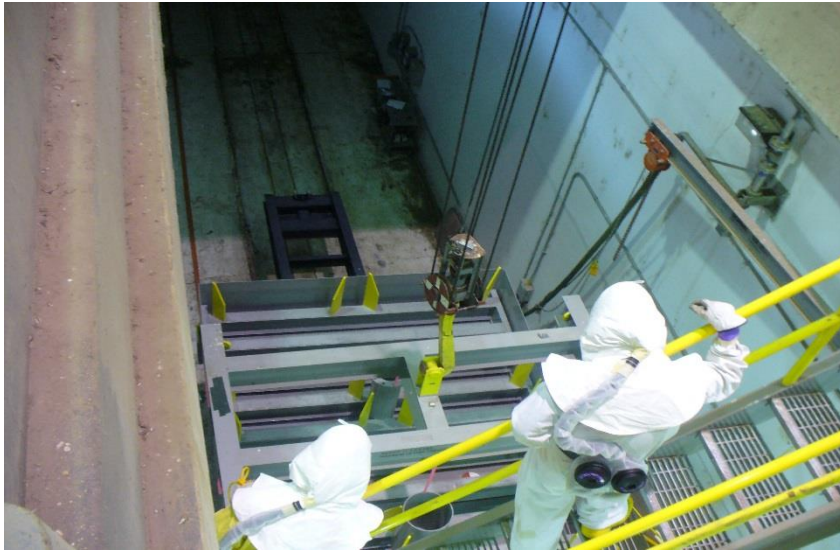
- Remove and transfer 27 m<sup>3</sup> of highly radioactive sludge stored in basins near Columbia River to Central Plateau for storage
- Cold testing equipment at MASF basins near Columbia River



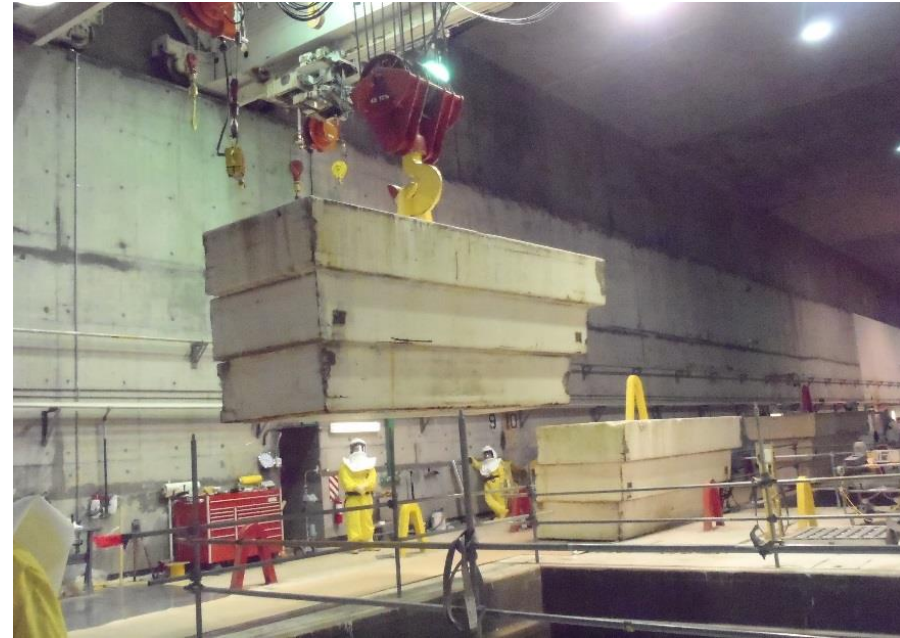
Training for relidding at MASF

# Sludge Treatment Project

- Package sludge for transportation & storage
- Preparations for T Plant to accept sludge



Platform being lifted in tunnel for cell placement



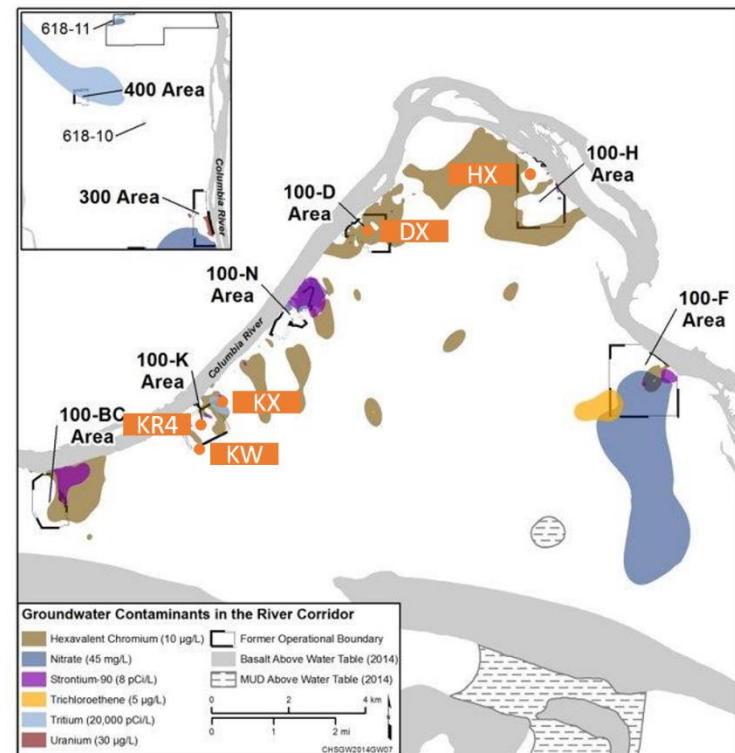
Cover block being lifted



# Soil and Groundwater Remediation Project



*Groundwater contamination from past reactor operations along the Columbia River*



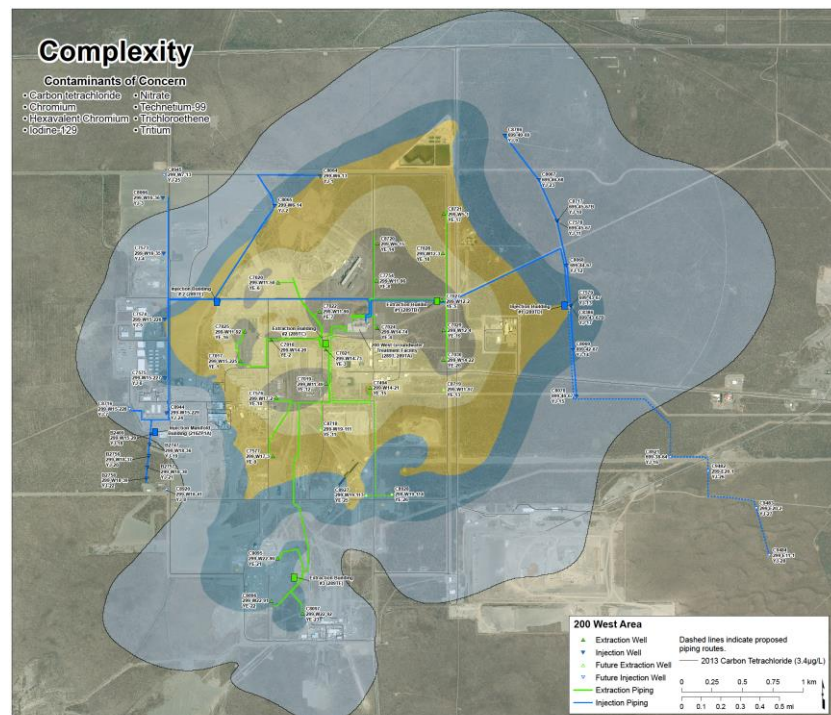
*The largest contaminant plumes in the former reactor areas are hexavalent chromium and nitrate*



# Soil and Groundwater Remediation Project

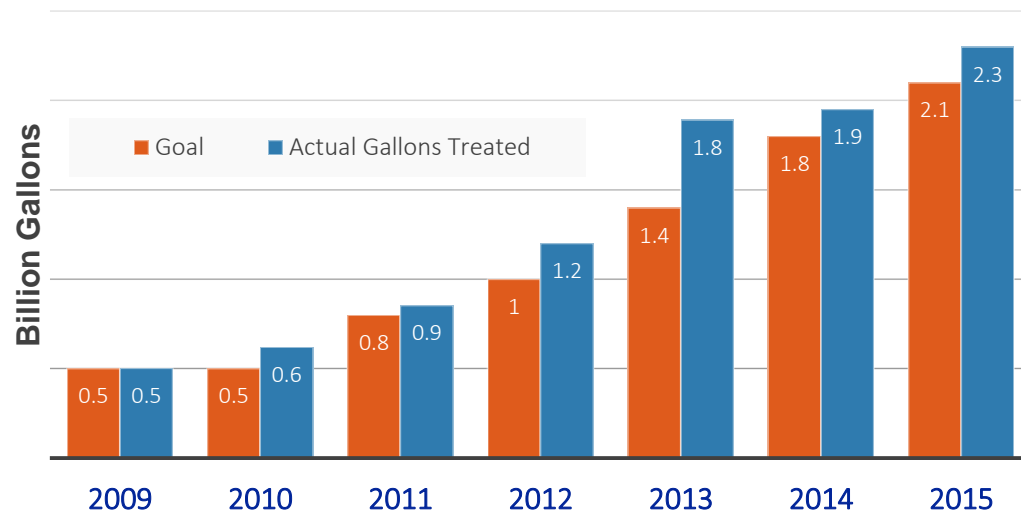
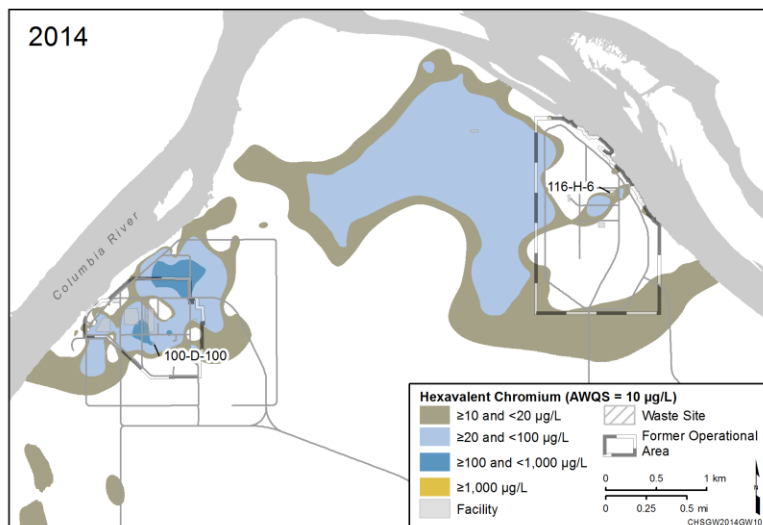
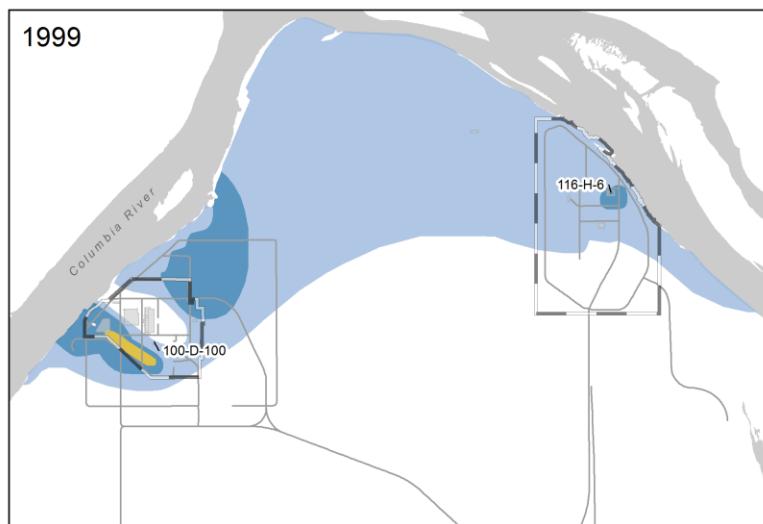


Groundwater contamination from past liquid waste disposal



CH2M operates the 200 West Pump and Treat on the Central Plateau to treat a 5-square-mile contaminant plume

# Soil and Groundwater Remediation Project

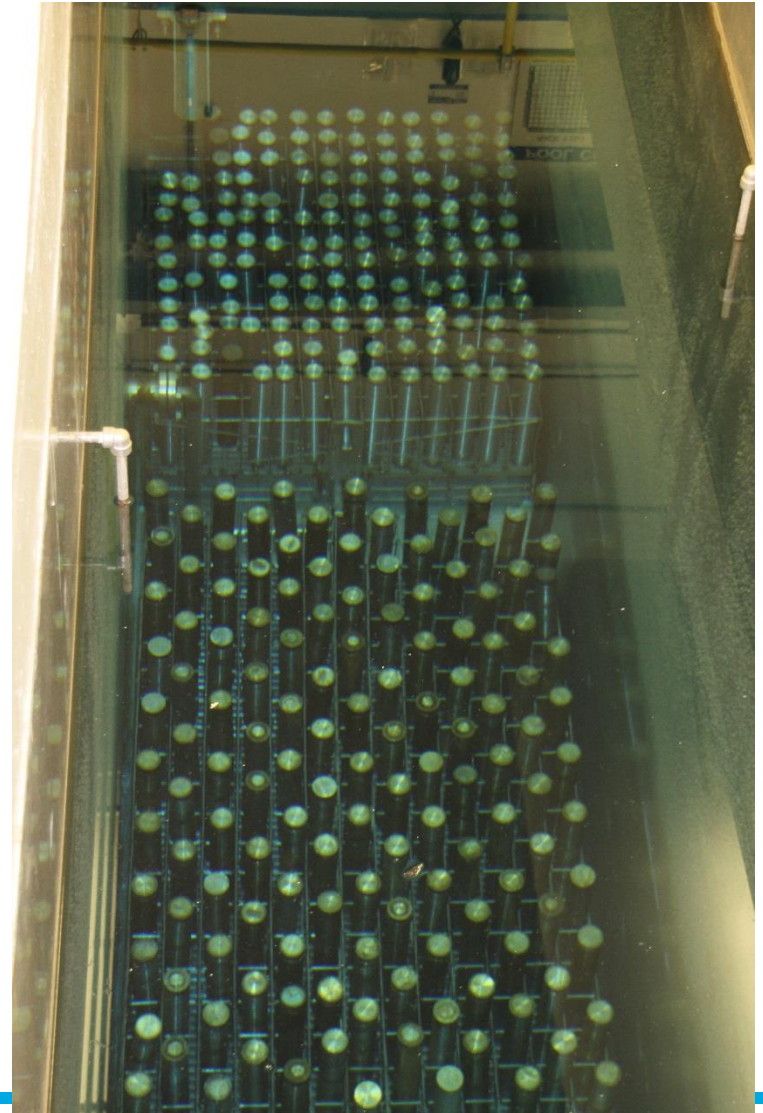




# Capsule Extended Storage Project

- 1936 Cs/Sr capsules currently stored underwater.
- Continued storage will exceed Facility design life.
- Completed Alternatives Analysis for Extended Storage to transfer Cs/Sr capsules to extended storage.

Capsules in wet storage



## Capsule Extended Storage Project (cont.)

- Issued RFP to transfer Cs/Sr capsules to extended storage. Award contract December 2016.
- Complete WESF Ventilation and Stabilization Project.
  - Replace facility ventilation
  - Grout hot cells & underground ductwork

Separation of old K3 duct to stack





# Legacy and TRU Waste

- Continue Repack of Large Boxes for FY17 & FY18 to meet TPA Milestones
- Non-destructive Assay (NDA) of large boxes for Repack feed
- Procure additional Large Box shipping capabilities
- Complete Alternatives Analysis for M-91 capabilities



## Washington Closure Hanford Transition

Work scopes that transitioned to CHPRC includes:

- Continued operations of Environmental Remediation Disposal Facility (ERDF). Transitioned 8/29/16.
- Complete cleanup of burial ground 618/10 and Surveillance & Maintenance for burial ground 618-11. Transitioned 8/29/16.
- Management of the 324 Facility pending Cleanup of waste site beneath and D&D of 324 Building. Transitioned 4/25/16.