U.S. DEPARTMENT OF ENERGY

Hanford Advisory Board

DOE-RL Update

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River Corridor Division Director and

DDFO to the Hanford Advisory Board

June 7, 2012

River Corridor

- River Corridor scope has grown significantly since contract start:
  - Over 100 waste sites added to the contract
  - Discovery of deep chromium soil contamination at 100-B/C and 100-D Areas
  - Highly contaminated soils discovered under the 324 Building B Cell
- New scope performed using cost savings ($270M) and work resequencing

River Corridor C,D,F & H Area

Soil & Groundwater Remediation

- Removed 685,095 tons of soil in Fiscal Year (FY) 2012
- Prioritizing high chromium sites
- Extensive new and expanded waste sites
- Excavation of deep chromium waste sites (100-D-100/104/30) completed to 55 feet
- Power line and groundwater well relocation required to access deep vadose zone chromium contamination
- F Area remediation complete

D-Pit Excavation

100-D-100

River Corridor N Area

- Complete removal of river structures in June
- N Reactor Fuel Basin decontamination and decommissioning complete
- Complete N Reactor Interim Safe Storage (ISS) in July
- Deactivation, decommission, decontamination, and demolition (D4) of excess structures will be complete in June

River Corridor K Area

K Area Sludge Removal

- Processed and shipped the last of the known basin and burial ground found spent nuclear fuel to the Canister Storage Building
- Completed Knock-Out Pot readiness assessment and will start processing Knock-Out Pot material in June
- Awarded the contract for the K West Annex modification – Hazardous Category 2 modification
- Initiated ISS of K East

MCO #389 movement to trailer inside 105KW Transfer Annex

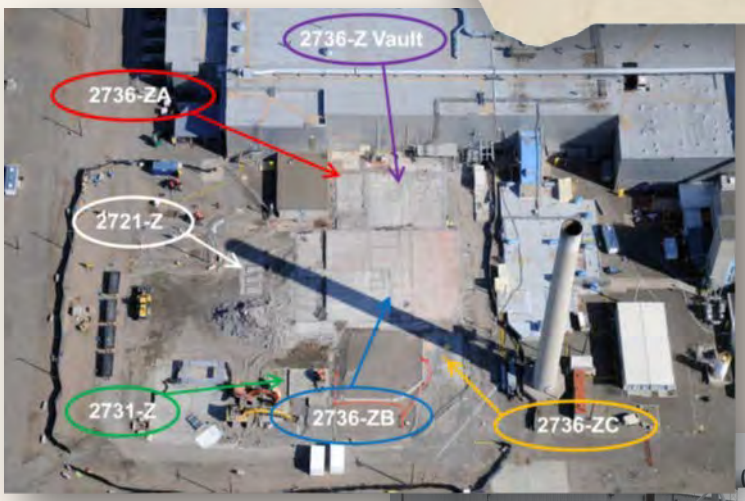
MCO #389 transport to the Canister Storage Building

River Corridor 618-10

- **618-10 Burial Ground**
  - 60,000 cubic meters of waste remediated from 618-10 trenches
  - 1,400 Environmental Restoration Disposal Facility containers shipped for disposal
  - 320 drums removed from trenches
  - Started “bottle crushing” process to eliminate handling of individual containers

Central Plateau
Inner Area: Plutonium Finishing Plant

- Completed demolition of a plutonium vault complex (six structures and approximately 20,000 square feet)
- Strengthened operational and work management elements increasing field work time and efficiency
- Continue decommissioning the remainder of the Plutonium Finishing Plant, removing glove boxes and other radiological and industrial hazards to prepare the plant for demolition



Demolition of PFP Vault Building

Groundwater

- **Groundwater Treated:** 688 million gallons treated in FY 2012, approximately 100 million gallons of groundwater treated a month
- **New Facility:** The 200 West Groundwater Treatment Facility received the first Leadership for Energy and Environmental Design (LEED®) — gold certification for sustainable design in the DOE complex of sites that produced nuclear materials for national defense
- Major construction of the 200 West Groundwater Treatment Facility was completed, under American Recovery and Reinvestment Act, in 2011
- Following acceptance testing, operations will begin this summer

200 West Groundwater Treatment LEED Facility

Maintaining Site Infrastructure: 200 Area Raw Water Reservoir Rehabilitation Project

- Reservoir with pump house constructed in early 1940's
- Furnishes raw water from export grid to 200W raw water grid as well as 283W water treatment facility
- Capacity of 3 million gallons, however administratively controlled at times to minimize impacts of leakage
- Project scope includes structural repairs, liner and leak detection installation, and replacement of suction bells and valving with estimated completion date July 2012

Waste Treatment Plant Interface

- Waste Treatment Plant (WTP) Interface Management Plan approved by RL and ORP
- Joint federal/contractor teams revising Interface Control Documents to refine infrastructure requirements for WTP operations
- Electrical substation and distribution system design modifications in progress to support Waste Feed and Delivery System to WTP
- Central Plateau water system improvements in progress to support the Hanford Site and reliable water delivery to WTP and Tank Farms

Asbestos Update

- Implemented corrective actions; most of the actions have been completed
- Sampling results summarized in a industrial hygiene (IH) report
- Sampling analysis indicates no samples above Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL)
- Continue to track and implement the long term actions identified by the team

http://www.hanford.gov/page.cfm/EmployeeAsbestosInformation

Getting the Word Out

The Hanford Story

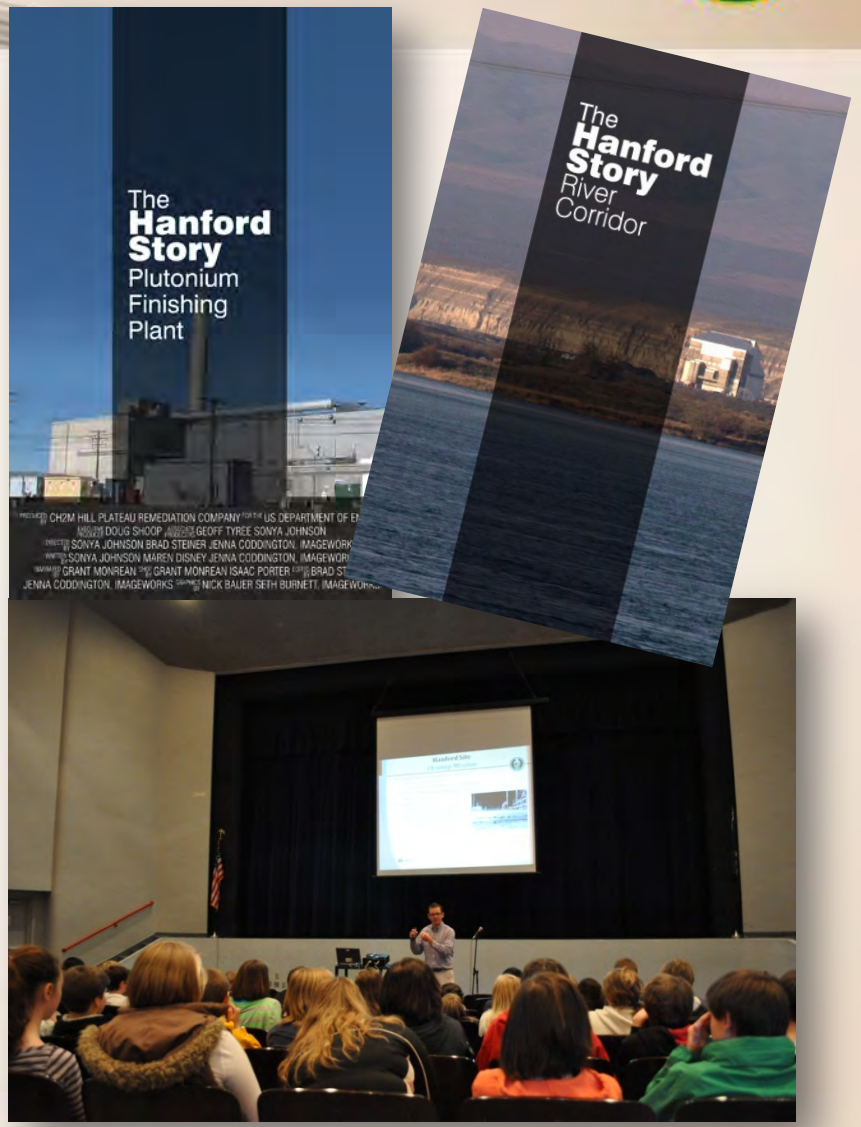
- Plutonium Finishing Plant
- River Corridor

Hanford Site Tours - 2012

- 16 Hanford Site Public Tours – 575 visitors
- 7 College/University Classroom tours -151 faculty and students

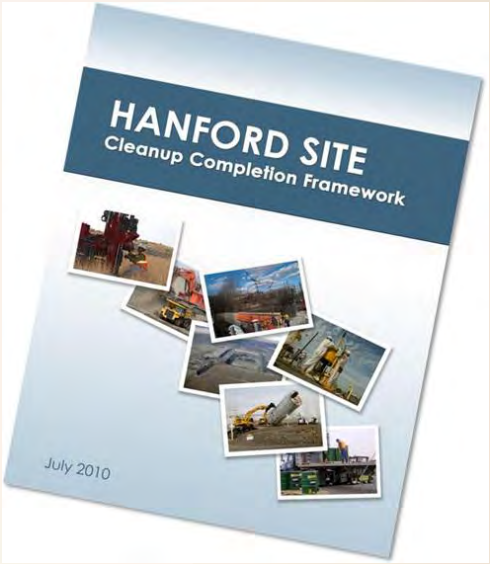
B Reactor Tours

- 76 Tours reaching 2,455 visitors. 346 visitors were between the ages of 12 and 18
- Speakers Bureau
- 899 audience participants at 11 venues past two months. Two of those were University classes



Did You Know

- River Corridor Informational Workshops
  - June 12 - Seattle
  - June 13 – Portland
  - June 14 – Hood River
  - June 26 – Richland
- Hanford Site Wide Safety Culture Survey
  - Conducted by an independent company, EurekaFacts
  - Participants are Hanford federal and contractor employees
  - Survey runs from June 6 through June 20; results expected September 2012
- Employee Concerns Assessment
- Secretary Chu will visit Hanford June 14-15
- Revised *Hanford Site Cleanup Completion Framework* will go out for informal review and comment this summer



Questions

Back-Up Slides

The 2015 Vision
Hanford Site Cleanup

Richland Operations Office

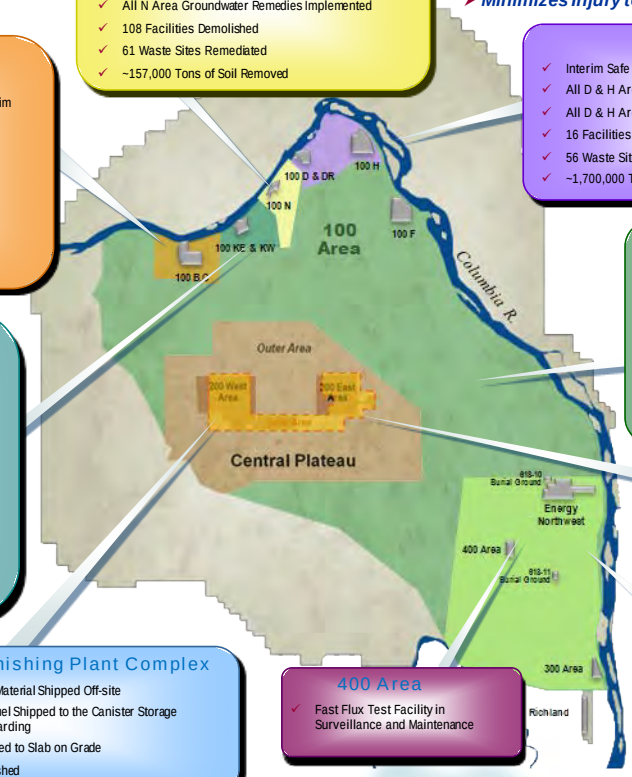
Safe and Effective Cleanup that Protects the Columbia River

- *Reduces the Active Site Footprint of Cleanup to 75 Square Miles (586 to 75)*
- *Significantly Reduces Long-Term Mortgage Costs*
- *At Completion, Shifts Emphasis and Resources to Full Scale Cleanup of the Central Plateau (75 square miles)*
- *Reduces Costs by "Right Sizing" Hanford's Infrastructure via a Mission Support Contract*
- *Minimizes Injury to Natural Resources*

N Area
- ✓ Interim Safe Storage of N Reactor Complete
- ✓ All N Area Final ROD Remedial Actions Complete and TSD Units Closed
- ✓ All N Area Groundwater Remedies Implemented
- ✓ 108 Facilities Demolished
- ✓ 61 Waste Sites Remediated
- ✓ ~157,000 Tons of Soil Removed

B & C Area
- ✓ Interim Safe Storage of C Reactor Complete
- ✓ B Reactor Designated as a Museum or Interim Safe Storage Complete
- ✓ All B & C Area Final ROD Remedial Actions Complete
- ✓ All B & C Area Groundwater Remedies Implemented
- ✓ 6 Facilities Demolished
- ✓ 40 Waste Sites Remediated
- ✓ ~381,000 Tons of Soil Removed

D & H Area
- ✓ Interim Safe Storage of D, DR, and H Reactors Complete
- ✓ All D & H Area Final ROD Remedial Actions Complete
- ✓ All D & H Area Groundwater Remedies Implemented
- ✓ 16 Facilities Demolished
- ✓ 56 Waste Sites Remediated
- ✓ ~1,700,000 Tons of Soil Removed



IU2 & IU6 Area
- ✓ Interim Safe Storage of F Reactor Complete
- ✓ All IU2 & IU6 Area Final ROD Remedial Actions Complete
- ✓ All IU2 & IU6 Area Final ROD Groundwater Remedial Actions Complete
- ✓ 1 Facility Demolished
- ✓ 50 Waste Sites Remediated
- ✓ ~962,000 tons of Soil Removed

K Area
- ✓ K East Basin Demolished
- ✓ Interim Safe Storage of K East Reactor Complete
- ✓ K West Sludge Removed from the River Corridor
- ✓ Interim Safe Storage of K West Reactor Initiated
- ✓ All K Area Final ROD Remedial Actions Complete and TSD Units Closed with the exception of those associated with K West
- ✓ All K Area Groundwater Remedies Implemented
- ✓ 2300 Tons of Scrap Nuclear Fuel Removed
- ✓ 109 Facilities Demolished
- ✓ 2 Waste Sites Remediated
- ✓ ~361,000 Tons of Soil Removed

Central Plateau Cleanup
- ✓ All 200 West Carbon Tetrachloride, Uranium and Technetium 99 Groundwater Remedies Implemented
- ✓ Conduct Additional Cleanup as Funds Become Available

300 Area
- ✓ All 300 Area Final ROD Remedial Actions Complete and TSD Units Closed
- ✓ All 300 Area Groundwater Remedies Implemented
- ✓ 186 Facilities Demolished
- ✓ 95 Waste Sites Remediated
- ✓ ~923,000 Tons of Soil Removed
- ✓ Final Remediation of 618-10 & 618-11 Burial Grounds Complete

Plutonium Finishing Plant Complex
- ✓ All Special Nuclear Material Shipped Off-site
- ✓ Slightly Irradiated Fuel Shipped to the Canister Storage Building for Safe Guarding
- ✓ PFP Complex Reduced to Slab on Grade
- ✓ 18 Facilities Demolished

400 Area
- ✓ Fast Flux Test Facility in Surveillance and Maintenance

* Does not reflect all work

IU = Isolated Unit
ROD = Record of Decision
TSD = Treatment, Storage, Disposal

September 2008

Natural Gas Pipeline and Natural Gas Utility Service Environmental Impact Statement (DOE/EIS-0467)

- February 2012 – May 2012
  - Tribal consultation
- May 15, 2012 - EIS Interaction Training and tribes participated
- Engineering feasibility study (underway)
  - Route selection criteria and identifying preliminary/conceptual pipeline route corridor development
  - Map preparation (e.g., topographical, aerial); identification of existing land uses and ownership
  - Environmental factors (e.g., biological and cultural resources work)
  - Alternative route alignments
- Draft EIS activities (underway)
  - Development of technical approach
  - Literature searches and reviews, and data collection and analyses (e.g., existing environmental baseline)
- EIS Schedule (planned)
  - Draft EIS – Spring 2013
  - Final EIS – Fall 2013
  - Record of Decision – > 30 days after Final EIS