Hanford Advisory Board

DOE-RL Update

Dana Bryson

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
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
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
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
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
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

Richland Operations Office

K Area
- K East Basin Demolished
- Interim Safe Storage of K East Reactor Complete
- K East Sludge Removed from the River Corridor
- All K Area Final ROD Remedial Actions Complete
- All K Area Groundwater Remedies Implemented
- 6 Facilities Demolished
- 40 Waste Sites Remediated
- ~361,000 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
- ~361,000 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
- 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 Groundwater Remedial Actions Complete
- 1 Facility Demolished
- 50 Waste Sites Remediated
- ~962,000 Tons of Soil Removed

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

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

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

September 2008

* Does not reflect all work
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