Economic Recovery Funding

• EM developed proposals for stimulus funding to be spent between 2009 and 2011 with three priorities in mind
  – Creating/saving jobs
  – Shrinking the footprint of active site cleanup
  – Saving on lifecycle costs
• Potential work scope intended to be consistent with priorities of regulatory agencies, tribes, and stakeholders
• Proposed work scope covered by existing prime contracts, and most work could commence immediately
• Budget allocation to be announced in the near future
ORP Recovery Funding Priorities

Additional Funding

• Scope of work is within contract scope

Proposed scope for additional funding

• Evaporator capacity increase to support Double Shell Tank Feed Readiness
• Completing Tank Farm Upgrades supporting Double Shell Tank Feed Readiness and Life Extension
• 222-S Laboratory Upgrades and Life Extension that support feed characterization and feed delivery to the Waste Treatment Plant
• 242-A Evaporator Upgrades and Life Extension to support waste feed delivery
• Single Shell Tank (SST) Integrity and Life Extension, and SST Consolidation
• Cross Site Transfer Line Upgrade for Slurry Feed that supports feed delivery to the Waste Treatment Plant
• Secondary Waste Treatment and Effluent Treatment Facility Upgrades to support WTP start-up
• Waste Feed Engineering Procurement Construction and Commissioning
• Canister Storage Building modifications to support WTP start-up in 2019
Shrinking the Footprint of Active Site Cleanup

Work in four areas

- River Corridor (~210 sq. miles)
- Central Plateau, Outer Zone (~65 sq. miles)
- Central Plateau, Inner Zone (~10 sq. miles)
- Hanford Reach National Monument (~300 sq. miles) (including Arid Lands Ecology Reserve)
River Corridor (~210 sq. mi.)

- 100 K Area
  - Demolish excess facilities
  - Remediate waste sites
  - Disposition K East Reactor
• Waste Site Remediation
  – Remediate 618-10 Burial Ground trenches
  – Remediate newly identified waste sites in 100 Areas
River Corridor (~210 sq. mi.)

- Groundwater Remediation
  - 100 K Area (contain/treat chromium)
    - Install additional wells for the new pump & treat system (KR-4)
River Corridor (~210 sq. mi.)

- Groundwater Remediation
  - 100 D/H Areas (contain/treat chromium)
    - Accelerate construction of pump & treat facility, expand current pump & treat operations, install additional wells
    - Accelerate bioremediation test
    - Complete improvements to chemical reactive barrier (In-Situ Redox Manipulation) in 100 D Area
River Corridor (~210 sq. mi.)

- Groundwater Remediation
  - 100 D/H Areas, cont’d
    - Retrofit existing facility to regenerate resin from pump & treat facilities (currently sending off-site for regeneration)
    - Evaluate effectiveness of hydraulic control (maintain high-river stage groundwater gradient throughout the year)
Potential Work Scope

March 2009

Columbia R.

River Corridor (~210 sq. mi.)

- Groundwater Remediation
  - 100 B/C Area
    - Remediate chromium contamination in soil
  - 100 N Area (contain strontium-90)
    - Drill ~170 injection and monitoring wells to support apatite barrier expansion across the width of the Sr-90 plume (2,400 ft.)
    - Conduct field test of treatment methods for strontium-90 above the water table
• Groundwater Remediation
  - 300 Area (contain uranium)
    - Accelerate polyphosphate treatability test to fix uranium contamination in place
    - Accelerate drilling of 15 wells to be used for sampling/treatment
Central Plateau, Outer Zone (~65 sq. mi.)

- CERCLA Record of Decision for Outer Zone (a “7th” ROD)
Central Plateau, Outer Zone (~65 sq. mi.)

- 200 North Area
  - Demolish spent fuel transfer storage facilities (212 N/P/R)
  - Remediate waste sites
  - Dispose of locomotive and rail cars
Central Plateau, Outer Zone (~65 sq. mi.)

- Complete cleanup of B/C Control Area (contaminated area surrounding the B/C Cribs)
- Remediate up to 20 waste sites
- Decommission 350 wells
Central Plateau, Outer Zone (~65 sq. mi.)

- Complete closure plans/design for remediation of Non-Radioactive Dangerous Waste Landfill (NRDWL) and Solid Waste Landfill (SWL)
- NRDWL was used for non-radioactive, hazardous waste (e.g. batteries, old fluorescent lights)
- SWL was used for non-hazardous solid waste (e.g., office refuse)
Central Plateau Inner Zone (~10 sq. mi.)

- Plutonium Finishing Plant
  - Demolish 13 facilities
  - Remove glove boxes, laboratory hoods, and pencil tanks (Plutonium Reclamation Facility)
Central Plateau Inner Zone (~10 sq. mi.)

- U Plant Canyon
  - Demolish 5 remaining ancillary facilities
  - Disposition Cell 30 tank contents
  - Clear off canyon deck and grout-fill cells
Central Plateau Inner Zone (~10 sq. mi.)

- Facility Demolition
  - Demolish 14 industrial facilities in 200 East and West Areas
  - Demolish 209-E Facility (plutonium criticality laboratory) in 200 East Area
Central Plateau Inner Zone (~10 sq. mi.)

- Waste Site Remediation
  - Non-intrusive remedial investigation (e.g., ground penetrating radar) of radioactive waste burial grounds in the 200 East/West Areas (SW-1, SW-2 Operable Units)
Central Plateau Inner Zone (~10 sq. mi.)

- Groundwater Remediation
  - Accelerate construction of pump & treat system for groundwater contaminants in both 200 West Area operable units: 200-ZP-1 (northern portion of 200 West) and 200-UP-1 (southern portion)
  - Objective is to contain / treat carbon tetrachloride, technetium-99 and uranium
  - Contain contaminants to the Central Plateau
  - Restore groundwater to highest beneficial use (drinking water standards)
Central Plateau Inner Zone (~10 sq. mi.)

- Environmental Restoration Disposal Facility (ERDF)
  - Construct two new disposal cells (9 and 10)
  - Expand operations to accommodate additional disposal activities
Central Plateau Inner Zone (~10 sq. mi.)

- Transuranic (TRU) and Solid Waste
  - Continue retrieving and repackaging contact-handled TRU waste
  - Initiate retrieval of remote-handled TRU waste
  - Continue building backlog of waste for shipments to the Waste Isolation Pilot Plant
  - Upgrade T Plant (e.g., canyon crane, epoxy floor)
  - Complete treatment of current backlog of legacy mixed, low-level waste
  - Transport plutonium 238 drums off-site
Hanford Reach Nat’l Monument (~300 sq. mi.)

- Arid Lands Ecology Reserve
  - Demolish 11 excess facilities
  - Clean up nearly 300 debris areas (not contaminated)