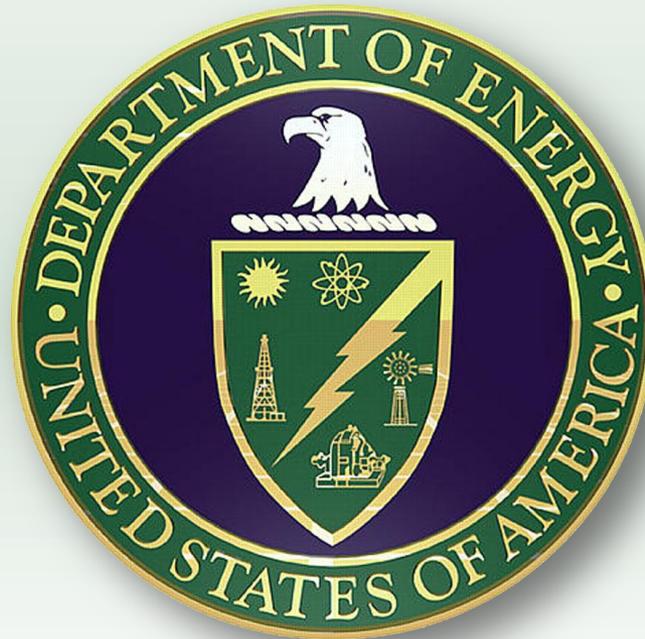


Environmental Management
Richland Operations Office
Fiscal Year 2012 Budget Briefing
Hanford Advisory Board –
Budgets and Contracts Committee



U.S. Department of Energy
Jonathan Dowell

March 15, 2012

**Richland Operations Office –
Fiscal Year 2012 Allocation of EM Cleanup Funding
\$ in thousands**

PBS	PBS TITLE	FY10 APPROPRIATION	FY11 APPROPRIATION	FY12 APPROPRIATION
RL-11	NM Stabilization & Disposition-PFP	85,321	69,266	99,195
RL-12	SNF Stabilization & Disposition	124,729	94,235	111,952
RL-13	Solid Waste Stabilization & Disposition-200 Area	128,154	128,477	143,482
RL-30	Soil & Water Remediation-Goundwater/Vadose Zone	199,689	164,861	190,705
	Central Plateau	537,893	456,839	545,334
RL-40	Nuclear Facility D&D-Remainder of Hanford	98,930	139,791	56,121
RL-41	Nuclear Facility D&D-River Corridor Closure Project	331,317	351,027	329,048
	River Corridor/Other	430,247	490,818	385,169
RL-100	Richland Community & Regulatory Support	21,940	19,540	19,540
RL-20	Safeguards & Security	82,771	69,399	69,078
RL-42	Nuclear Facility D&D-FFTF	7,652	3,652	2,703
	RL Office Total	1,080,503	1,040,248	1,021,824*

*\$1,025M Appropriation less contractor pay freeze savings of \$3.2M returned to Congress



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

Richland's 2015 Cleanup Vision



- Make the 2015 Vision a Reality
 - Complete Cleanup of the River Corridor
 - Larger in size and complexity than Rocky Flats, Fernald and Mound combined
 - Completed on schedule and significantly under budget
 - Reduces Hanford footprint of cleanup from 586 to less than 75 square miles
 - Completes cleanup of reactor areas, contaminated facilities and hazardous waste sites in the 220 square mile area adjacent to the Columbia River
 - Removes highly-radioactive sludge away from the river (highest source term near river)
 - Eliminates Hanford's highest hazard nuclear facility by demolishing the Plutonium Finishing Plant
 - Implements groundwater treatment systems in the River Corridor and Central Plateau necessary to protect the Columbia River
 - Cleanup site support provided to both Richland Operations Office (RL) and Office of River Protection (ORP)



Fiscal Year 2012 Planned Accomplishments Plutonium Finishing Plant

Plutonium Finishing Plant

- Achieve the necessary minimum safe and essential services for over forty radiological and nuclear Plutonium Finishing Plant facilities
- Program management and support activities necessary for minimum safe operations and essential services
- Continue the Plutonium Reclamation Facilities deactivation activities by completing size reduction and disposition of an additional 30 pencil tanks and deactivation of highly contaminated gloveboxes
- Continue deactivation and removal of highly contaminated gloveboxes from the RMA/RMC lines and Backside Rooms
- Complete the deactivation and demolition of the Plutonium Finishing Plant vault facilities (6 facilities)
- Continue deactivation activities in the 234-5Z Facility; i.e. removal of process vacuum lines, process transfer piping and asbestos from piping
- Provides for site-wide services allocation

***NM Stabilization/Disposition –
PFP (RL-0011): \$99,195K***



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

Fiscal Year 2012 Planned Accomplishments

100 K Area

- Process site found fuel
- Operation and Maintenance support to maintain KW Basin safe & compliant (incl. minimum required surveillance & maintenance)
- Procure Multiple Canister Overpacks & Sludge Treatment Storage Containers
- Continue modification of KW Basin Annex [Sludge Treatment Project (STP) Phase 1]
- Complete processing of Knock-Out Pot material [Tri-Party Agreement (TPA) M-016-172]
- Perform Technical Readiness Assessment (supporting Critical Decision 2/3)
- Perform Siting Study (STP Phase 2)
- Complete TPA M-016-171 milestone, Complete STP Technology Evaluation Report and submit schedule for bench scale testing
- Provides for site-wide services allocation

***K Basin Closure Project (RL-0012):
\$111,952K***



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

Fiscal Year 2012 Planned Accomplishments Waste Treatment / Disposal

- Provide base operations necessary to support safe and compliant storage of spent nuclear fuel (SNF). Included are activities to operate and maintain the Canister Storage Building and 200 Area Interim Storage Area (ISA) facilities
- Provide minimum safe operations for the Central Waste Complex; including Solid Waste base operations, Mixed Waste Disposal Trenches, Integrated Disposal Facility, and Environmental Restoration Disposal Facility (ERDF) interface
- Operate and maintain the Waste Encapsulation Storage Facility (WESF) for compliant storage of the cesium and strontium capsules
- Provides site-wide services allocation

***Solid Waste Stabilization and
Disposition (RL-0013): \$143,482K***



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

Fiscal Year 2012 Planned Accomplishments

Waste Treatment / Disposal

- Maintain the T Plant Complex in a safe and compliant condition and Provide the base operations at T Plant necessary to support the receipt and storage of K-Basin sludge
- Maintain the Waste Receiving and Processing (WRAP) Facility in a safe and compliant condition
- Provide base operations and necessary upgrades to treat Hanford Site effluents in accordance with state permit requirements. The Liquid Effluent Facility supports ongoing site cleanup activities including: groundwater remediation; radioactive waste tank volume reduction; and disposal facility leachate as required by permit requirements
- Provides for site-wide services allocation

Solid Waste Stabilization and Disposition (RL-0013): \$143,482K



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

Fiscal Year 2012 Planned Accomplishments Safeguards and Security

- Maintain appropriate Hanford Site access controls, emergency response, and physical security at the Hanford Site. Maintain Material Control and Accountability, Information Security, Personnel Security, and Protective Force

***Safeguards and Security (RL-0020):
\$69,078K***



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

Fiscal Year 2012 Planned Accomplishments

Soil & Groundwater Project

Groundwater Remediation

- Continue Operations of existing groundwater remediation systems in support of final remedies
- Completes characterization and decision documentation for the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Readiness Investigation (RI)/ Feasibility Study (FS) process and support the final Records of Decision for the 100 and 300 Area groundwater River Corridor operable units (100-HR-3, 100-KR-4, 100-NR-2, 100-FR-3, 100-BC-5, and 300-FF-5) The following TPA milestone-driven key decision documents are submitted to lead regulatory agencies:
 - M-015-62-T01: Submit FS Report and Proposed Plan (PP) for 100-NR-1 and 100-NR-2 Operable Units
 - M-015-64-T01: Submit CERCLA RI/FS Report and PP for 100-FR-1, 100-FR-2, 100-FR-3, 100-IU-1, and 100-IU-6 Operable Units
 - M-015-66-T01, Submit CERCLA RI/FS Report and PP for the 100-KR-1, 100-KR-2 and 100-KR-4 Operable Units
 - M-015-68-T01: Submit CERCLA RI/FS Report and PP for 100-BC-1, 100-BC-2, and 100-BC-5 Operable Units
 - M-015-70-T01, Submit FS Report and PP for the 100-HR-1, 100-HR-2, 100-HR-3, 100-DR-1 and 100-DR-2 Operable Units
 - M-015-72-T01: Submit FS/PP for 300-FF-2 and 300-FF-5 Operable Units

***Groundwater Protection (RL-0030):
\$190,705K***



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

www.em.aoe.gov

Fiscal Year 2012 Planned Accomplishments Soil & Groundwater Project

Groundwater Protection

- Continues integration of site-wide groundwater and vadose zone cleanup activities, groundwater contamination monitoring, as well as operations, maintenance, and necessary modifications of existing remediation systems
- Complete Acceptance Test Plan, Operations Test Plan, and Operational startup for new 100-HX Pump and Treat Facility
- Complete operational testing of the groundwater system for treating Technician (Tc) 99 at S-SX tank farm (M-016-120)
- Begin Phase 1 operation of 200W pump and treat system (M-016-122)
- Continue ongoing deep vadose zone treatability testing of technologies to accomplish clean up of waste sites where deep vadose zone contamination exists
- Provides site-wide service allocation

***Groundwater Protection (RL-0030):
\$190,705K***



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

Fiscal Year 2012 Planned Accomplishments Central Plateau Remediation and Infrastructure (RL-0040)

- Provide surveillance and maintenance activities to ensure safety for inactive waste sites and facilities on Hanford's Central Plateau
- Provide steam for critical site heating systems; maintain Richland Operation Office integrated baseline and baseline certification
- Provide realistic training for the safety and health of workers at approximately 36,000 student training days
- Maintain HAMMER facilities in a ready-to-serve state

***Nuclear Facility D&D – Remainder
of Hanford (RL-0040): \$56,121K***



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

Fiscal Year 2012 Planned Accomplishments

River Corridor

- River Corridor Cleanup
 - Complete the interim remedial actions for the 100 D Area (M-016-47)
 - Complete the interim remedial actions for the 100 H Area (M-016-51)
 - Complete the interim remedial actions for 100-IU-2 and 100-IU-6 (M-016-56)
 - Complete interim remediation for all 300 area "inside the fence" waste sites north of Apple Street (M-016-74)
 - Complete 105-N reactor interim safe storage (M-093-20)
 - Complete the selected removal and/or remedial actions for 11 of the high priority facilities in the 300 Area (M-094-08)
 - Field remediation (FR), and deactivation/decontamination/decommissioning/demolition (D4) will also continue in other areas along the Columbia River Corridor as well as maintaining critical functions in engineering, SH&Q, environmental compliance, and project controls
 - Operations of the ERDF will be continued disposing thousands of tons of waste in support of FR and D4.
- Continue D4 of 100K Area facilities (2); remediation of waste sites and Interim Safe Storage activities for KE Reactor
- B Reactor
- Provide necessary general utilities, fire department, and analytical services to support minimum safe operations

**Nuclear Facility D&D – River Corridor
Closure Project (RL-0041): \$329,048K**



Fiscal Year 2012 Planned Accomplishments Fast Flux Test Facility

- Provide surveillance and maintenance activities necessary to ensure minimum safety for Fast Flux Test Facility (FFTF) and support facilities which includes residual and stored bulk sodium at FFTF
- Provides site-wide services allocation

***Nuclear Facility D&D – FFTF
(RL-0042): \$2,703K***



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

Fiscal Year 2012 Planned Accomplishments Community & Regulatory Support

- Support Washington and Oregon States emergency preparedness, environmental oversight and other activities related to Hanford cleanup
- Support the Washington State Department of Ecology Resource Conservation and Recovery Act of 1976 (RCRA) Mixed Waste Fee; Washington State Department of Health's air emissions monitoring invoice; Payment in Lieu of Taxes for Grant, Benton, and Franklin Counties; and Hanford Advisory Board
- Natural Resource Trustee Council and Natural Resource Injury Assessment

***Community & Regulatory Support
(RL-100): \$19,540K***



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure