Environmental Management

Budget Briefing

FY 2018 President's Budget
FY 2019 Estimated Requirements

Greg Jones, Richland Operations Office

June 7, 2017

Richland Cleanup

June 2017

- Maintain safe, secure and compliant activities, facilities and operations
- Continue groundwater pump-and-treat operations and implement additional groundwater remedies
- Continue progress toward River Corridor cleanup
- Continue preparation to move sludge from 100 K Area Basin (K Basin) near the Columbia River to interim storage in the Central Plateau
- Continue repackaging of large transuranic (TRU) containers and waste drums
- Continue to maintain surplus nuclear facilities and site infrastructure

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Richland Prime Contracts

June 2017

ch2m: Plateau Remediation Contract PRC	MSA Mission Support Alliance Mission Support Contract MSC
Facility and waste site cleanup, groundwater remediation, waste management	Cost-effective infrastructure and site services to support the cleanup mission
Awarded in 2008 for 5 years, with 5 option years Total Contract Value: $5.8B Cost-plus award-fee contract	Awarded in 2009 for 5 years with 2 and 3-year option years Total Contract Value: $3.6B Cost-plus award-fee contract

HPM Corporation (HPMC) provides occupational medical services to DOE, Hanford contractors

Awarded in 2012 for 2 years with four 1-year option periods, a hybrid contract that includes firm-fixed price with award fee, cost reimbursement, and Indefinite Delivery Indefinite Quantity (IDIQ) component.

Total Contract Value: $99.5M

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RL Profile by Congressional Control Point

June 2017

($ in Thousands)

PBS	PBS Title	FY 2017 Omnibus	FY 2018 President's Budget***
RL-0011	NM Stabilization and Disposition - PFP	143,404	
RL-0012	SNF Stabilization and Disposition	24,645	
RL-0013C	Solid Waste Stabilization and Disposition - 200 Area	91,820	
RL-0030	Soil and Water Remediation - Groundwater/Vadose Zone	127,476	
RL-0201	Hanford Site Wide Services*	272,473	
Central Plateau Remediation		**659,818**	
RL-0040	Nuclear Facility D&D - Remainder of Hanford	31,400	
RL-0041	Nuclear Facility D&D - River Corridor Closure Project	112,355	
River Corridor and Other Cleanup Operations		**143,755**	
RL-0012	**15-D-401 Containerized Sludge Removal Annex**	**11,486**	
RL-0013C	**18-D-404 WESF Modifications and Capsule Storage**		
RL-0020	**Safeguards and Security**	**74,176**	
RL-0025	**Richland Cyber Security**		
RL-0042	**Nuclear Facility D&D - Fast Flux Test Facility Project**	**2,240**	
RL-0100	**Richland Community and Regulatory Support****	**24,701**	
Total	**Richland Field Office Funding Summary**	**916,176**	**800,422**

* These costs were distributed among several PBSs in FY 2016
** State regulatory/oversight costs are transferring to RL-0201 in FY 2018
*** Individual PBS dollar amounts for FY 2018 President's Budgets are still to be determined

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Hanford Safety and Health

June 2017

- Voluntary Protection Program (VPP) – Star status for all contractors
- Beryllium Corrective Action Plan completed
- Plutonium Finishing Plant focus

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Site-Wide Services

Provide site-wide services for day-to-day operations to include, but not limited to, general utilities and fire department

Starting in FY 2017, Richland has funded these services entirely from Project Baseline Summary RL-0201

Hanford Infrastructure

June 2017

Maintaining utility lines and managing electrical fires

Repairing water lines

Water Systems

- Over 95 miles of buried pipe
- 800 million gallons of water used annually

Electrical Utilities

- 246 miles of power lines
- 6,000 power poles
- Loads will double with Waste Treatment Plant

Emergency Services and Immobilization Systems

- Radio Fire Alarm Reporting is essential to the safety and security of facilities and employee welfare

Information Technology

- Legacy applications
- Cyber security

Roads

- Over 5,700 passenger vehicles (daily average)
- 350+ lane miles of paved roads
- 500 trips by heavy haul trucks (daily average)

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RL Budget Overview

PROJECT WORK – RIVER CORRIDOR

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River Corridor – RL-0012

FY 2018 Planned Accomplishments

K West Reactor Basin Closure, RL-0012

- Operate and maintain K Basin, a Category 2 nuclear facility, and associated structures in a safe and compliant manner and support required surveillance and maintenance activities
- Continue preparations to remove contaminated sludge off the river
  - Complete readiness reviews required at T-Plant to support sludge operations
  - Initiate sludge removal operations to move sludge from the 105 KW Basin to T-Plant for interim storage

Sludge Removal Project Line Item, RL-0012

- Complete readiness reviews at 105 KW Basin and Annex
- Continue Sludge Transport and Storage Container (STSC) procurements

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River Corridor – RL-0012

Proposed FY 2019 Work Description

K West Reactor Basin Closure, RL-0012

- Complete sludge removal operations moving sludge from the 105 KW Basin to T-Plant for interim storage

River Corridor – RL-0041

FY 2018 Planned Accomplishments

Nuclear Facility D&D – River Corridor Closure Project, RL-0041

- Support activities for safe K Area Remediation and the 324 Building
- Complete close-out verification sampling and backfill of 618-10 Burial Ground and 316-4 and 600-63 waste sites
- Continue equipment procurement and cell cleanout activities in support of remediation of waste site 300-296
- Continue remediation of 100 K Reactor Area waste sites

324 Building airlock entry

618-10 Burial Ground

316-4 Waste Site

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River Corridor – RL-0041

Proposed FY 2019 Work Description

Nuclear Facility D&D – River Corridor Closure Project, RL-0041

- Operate and maintain K Basin, a Category 2 nuclear facility, and associated structures in a safe and compliant manner including required surveillance and maintenance activities
- Support service activities for safe K Area Remediation
- Complete equipment installation and initiate soil removal activities of waste site 300-296
- Continue remediation of 100 K Reactor Area waste sites
- Initiate deactivation of the 105 KW Basin
- Initiate planning for 324 Building D4 activities

Mock-up of B-Cell floor cutting

Waste site remediation

RL Budget Overview

PROJECT WORK – CENTRAL PLATEAU

U.S. DEPARTMENT OF ENERGY

Solid and Liquid Waste Management – RL-0013

FY 2018 Planned Accomplishments

Solid Waste Stabilization and Disposition, RL-0013

- Continue operation of waste treatment and compliant storage facilities: Central Waste Complex (CWC), solid waste base operations, mixed waste disposal trenches, T Plant, Waste Encapsulation Storage Facility (WESF) and Environmental Restoration Disposal Facility (ERDF)
- Continue to repackage drums of radioactive/hazardous waste and large boxes at Perma-Fix Northwest
- Continue preparations for the movement of cesium and strontium (Cs/Sr) capsules to dry storage

Shipment of large package of transuranic waste to Perma-Fix Northwest

Solid and Liquid Waste Management – RL-0013

Proposed FY 2019 Work Description

Solid Waste Stabilization and Disposition, RL-0013

- Provide base operations to support safe and compliant storage of special nuclear fuel and Cs/Sr capsules
- Operate waste treatment and compliant storage facilities: CWC, solid waste base operations, mixed waste disposal trenches, T Plant, WESF and ERDF
- Continue to repackage drums of radioactive/hazardous waste and large boxes at Perma-Fix Northwest
- Continue preparations for the movement of Cs/Sr capsules to dry storage

Groundwater – RL-0030

FY 2018 Planned Accomplishments

Soil and Water Remediation – Groundwater, RL-0030

- Continue integration of site-wide groundwater and vadose zone cleanup activities; groundwater contamination monitoring; and operations, maintenance and modifications of existing remediation systems
- Continue operation of River Corridor and Central Plateau Area pump-and-treat facilities for treatment of at least 2.2 billion gallons of contaminated groundwater
- Continue progress toward completing decision documentation for the Comprehensive Environmental Response, Compensation, and Liability Act Remedial Investigation/Feasibility Study process to obtain the final Records of Decision (RODs) for the River Corridor and the Central Plateau
- Continue groundwater remedy implementation for the River Corridor RODs
- Continue to support well drilling commitments in Tri-Party Agreement (TPA) Milestone M-024

100 F Area

Groundwater – RL-0030

Proposed FY 2019 Work Description

Soil and Water Remediation – Groundwater, RL-0030

- Continue integration of site-wide groundwater and vadose zone cleanup activities; groundwater contamination monitoring; as well as operations, maintenance, and modifications of existing remediation systems
- Continue operation of River Corridor and Central Plateau Area pump-and-treat facilities for treatment of at least 2.2 billion gallons of contaminated groundwater
- Continue progress on completing the groundwater characterization and supporting decision documentation needed for Comprehensive Environmental Response, Compensation, and Liability Act requirements and to obtain final remediation RODs for operable units in the River Corridor and Central Plateau
- Continue groundwater remedy implementation for the River Corridor RODs
- Continue to support RCRA well drilling commitments in TPA Milestone M-024

200 West Pump-and-Treat Facility

Deactivation and Demolition – RL-0040

FY 2018 Planned Accomplishments

Nuclear Facility D&D for the Remainder of Hanford, RL-0040

- Continue surveillance and maintenance activities to ensure safety for inactive waste sites and surplus facilities on the Central Plateau
- Continue facility risk mitigation activities
- Complete remediation of 10 waste sites

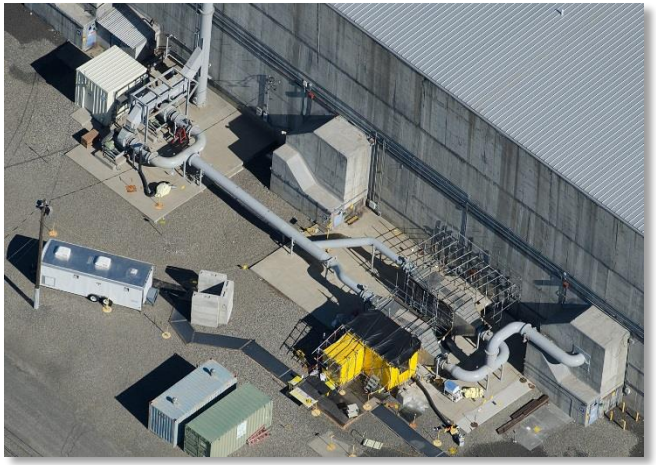
Canyon facility risk mitigation activities

Deactivation and Demolition – RL-0040

Proposed FY 2019 Work Description

Nuclear Facility D&D for the Remainder of Hanford, RL-0040

- Continue surveillance and maintenance activities to ensure safety for inactive waste sites and surplus facilities on the Central Plateau
- Continue canyon facility risk mitigation activities
- Complete remediation activities for 3 waste sites
- Continue 200 Area remediation in support of TPA milestone series M-016 with focus on U Plant area



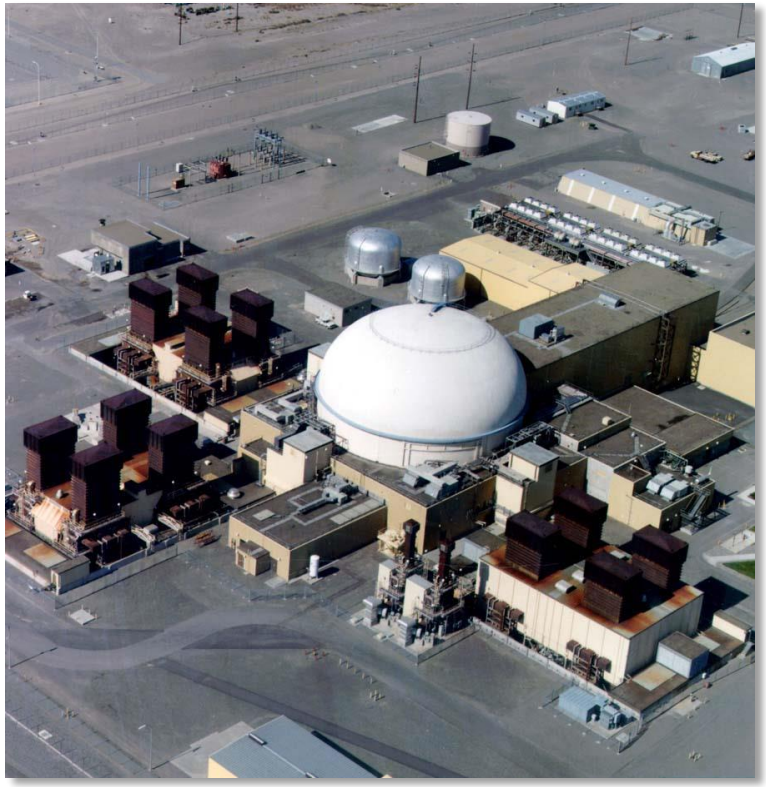
Canyon surveillance and maintenance activities: B Plant pre-filter change out

Fast Flux Test Facility– RL-0042

FY 2018 Planned Activities and Proposed FY 2019 Work Descriptions

Nuclear Facility D&D Fast Flux Test Facility, RL-0042

- Support long-term safe and compliant surveillance and maintenance for Fast Flux Test Facility and support facilities
  - Support is required until the residual and bulk sodium is dispositioned and facility deactivation and decommissioning is resumed



Hanford Site Support – RL-0100

FY 2018 Planned Activities and Proposed FY 2019 Work Descriptions

Community & Regulatory Support FY 2018 and FY 2019 Requirements

- Support activities related to Hanford cleanup

Hanford Site Support – RL-0020/0025

FY 2018 Planned Activities and Proposed FY 2019 Work Descriptions

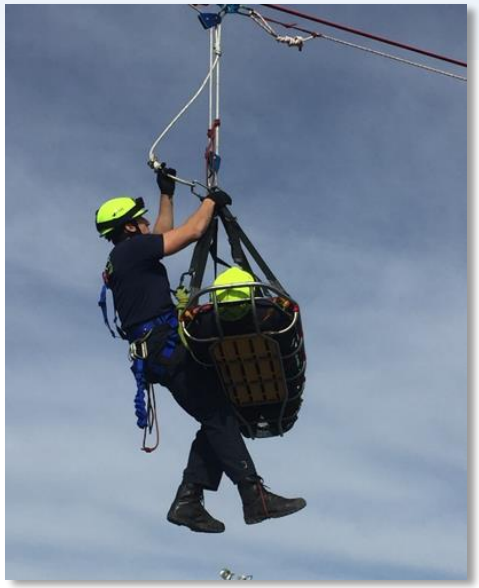
Safeguards and Security (SAS)

- Maintain safe SAS services at the Hanford Site, including Category 1 special nuclear material
- Maintain programs including: cyber security, protection program management, emergency response, physical security, information protection, protective force, personnel security, and nuclear material control & accountability at the Hanford Site for RL and ORP

Hanford Protective Force training exercise

Hanford Patrol K-9 conducting vehicle search at the Patrol Training Academy

Site-Wide Services – RL-0201

FY 2018 Planned Activities and Proposed FY 2019 Work Descriptions

- Provide site-wide services for day-to-day operations and cleanup support
- Fund RL-direct services including but not limited to roads and transportation services; electrical and water services; facility maintenance; network and software engineering; and records management
- Support infrastructure upgrades and site maintenance