

*Environmental Management
Office of River Protection*
FY 2014 President's Budget



Ben Harp, Manager

**Waste Treatment Plant Start-Up and
Commissioning Integration**

U.S. Department of Energy

May 1, 2013

Environmental Management (EM) Mission

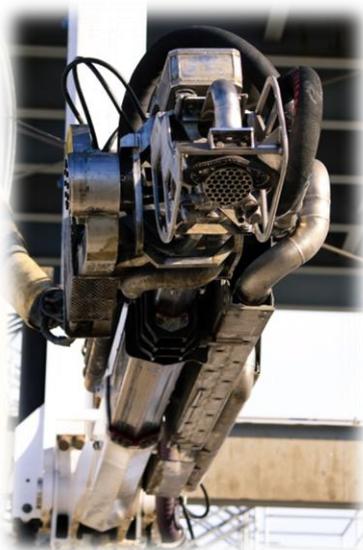
May 2013

FY 2014 Regulatory Briefing - Office of River Protection

“Complete the safe cleanup of the environmental legacy brought about from five decades of nuclear weapons development, production, and Government-sponsored nuclear energy research”



- From a legacy of weapons production to the world’s largest environmental cleanup program
- Operating in the world’s most complex regulatory environment
- Environmental Management (EM) clean-up enables Department of Energy (DOE) to maintain ongoing operations and other critical missions [National Nuclear Security Administration (NNSA)/Service Center (SC)] while achieving compliance with governing environmental laws



EM Program Priorities

May 2013

FY 2014 Regulatory Briefing - Office of River Protection

- Activities to maintain a safe and secure posture in the EM complex
- Radioactive tank waste stabilization, treatment, and disposal
- Spent nuclear fuel storage, receipt, and disposition
- Special nuclear material consolidation, processing, and disposition
- High risk soil and groundwater remediation
- Transuranic and mixed/low-level waste disposition
- Soil and groundwater remediation
- Excess facilities deactivation and decommissioning



AN-106 Pump Removal



AN-106 Pump Installation

Environmental Management: A National Responsibility

May 2013

FY 2014 Regulatory Briefing - Office of River Protection

- We reduce risks and protect our workers, our communities and the environment through cleanup
- Our mission is not discretionary – it is a federal obligation to address the cold war environmental legacy cleanup and honor our regulatory commitments
- Time is not on our side – costs and risks increase over time
- The EM portfolio is one of our nation's largest liabilities – we have a responsibility to relieve future generations of this environmental and financial liability



Crawler at the Cold Test Facility



Tank C-109 after retrieval



High-Level Waste Facility Filter Cave

Fiscal Year (FY) 2013 Continuing Resolution

May 2013

FY 2014 Regulatory Briefing - Office of River Protection

- Office of River Protection (ORP) funding is \$1,089,729
- President Budget was \$1,172,000
- *Specific impacts include:
 - Some layoffs and furlough to workers
 - Reduced Single-Shell Tanks (SST) integrity activities
 - Other impacts may occur if reprogramming package is not approved



*Washington River
Protection Solutions
Tank Operations Contract*

*Bechtel National, Inc.
Waste Treatment & Immobilization
Plant Project*



**reflects sequestration*

ORP Profile

May 2013

FY 2014 Regulatory Briefing - Office of River Protection

\$ in 000's

PBS	PBS Title	FY 2013 Full Year CR	FY 2014 President's Budget
ORP-0014	Radioactive Liquid Tank Waste Stabilization and Disposition	\$ 409,223	\$ 520,216
Subtotal	Radioactive Liquid Tank Waste Stabilization and Disposition	\$ 409,223	\$ 520,216
ORP-0060	Major construction – Waste Treatment Plant	\$ 680,506	\$ 690,000
Subtotal	Major construction – Waste Treatment Plant	\$ 680,506	\$ 690,000
Total – ORP	Office of River Protection Funding Summary	\$1,089,729	\$1,210,216

TPA Milestone Impacts

May 2013

FY 2014 Regulatory Briefing - Office of River Protection

Number	Milestone	Due Date
M-045-91F	Provide Summary Conclusions Report on Leak Integrity	12/31/2013
M-045-91G	Provide Summary Conclusions Report of Analysis of Record for SST's	04/03/2014
M-045-61	Phase 2 Resource Conservation and Recovery Act of 1976 (RCRA) Facility Investigation/Corrective Measures Study	12/31/2014
M-045-62	Phase 2 Corrective Measurements Implementation Work Plan for Waste Management Area (WMC) C	06/30/2015
M-045-82	Submit Complete Permit Modification Request for Tiers 1, 2, 3	09/30/2015

ORP Cleanup Priorities

May 2013

FY 2014 Regulatory Briefing - Office of River Protection

- Base Operations
- Technical Issues Resolution
- Waste Treatment Plant (WTP) Low Activity Waste (LAW)/Analytical Laboratory/Balance of Facilities (BOF) Completion
- C Farm Retrieval
- Glass as soon as possible
- Retrieval of next nine SSTs

Tank Farms (ORP-0014)

May 2013

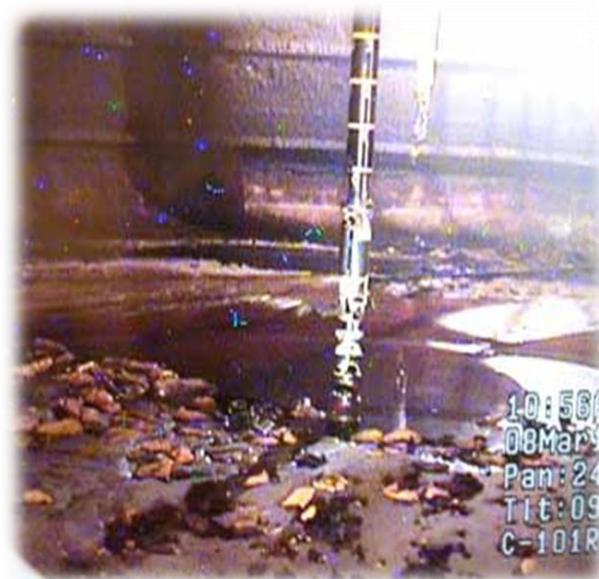
FY 2014 Regulatory Briefing - Office of River Protection

Planned Accomplishments through FY 2013

- Maintain Tank Farms in a safe and compliant manner
- Continue C Farm Retrieval activities
- Continue SST Integrity activities
- Complete AY/AZ Ventilation System Upgrade design
- Continue Technology Development activities to support mixing and sampling
- Conduct video inspection of seventeen SSTs and seven Double-Shell Tanks (DSTs)

Planned Accomplishments through FY 2014

- Maintain Tank Farms in a safe and compliant manner
- Complete C Farm Retrieval activities
- Continue SST Integrity activities
- Continue Technology Development activities to support mixing and sampling
- Continue video inspection of SSTs
- Continue ventilation system upgrades for DSTs



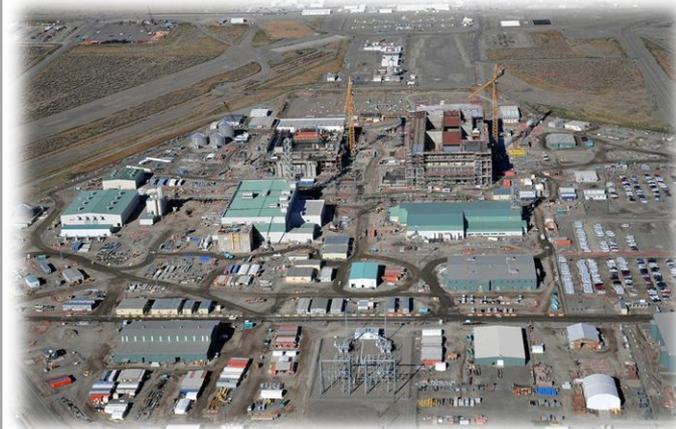
Waste Treatment Plant (ORP-0060)

May 2013

FY 2014 Regulatory Briefing - Office of River Protection

Planned Accomplishments through FY 2013

- Complete construction of Chiller Compressor Plant and Glass Former Storage Facility
- Complete mechanical installation of Autosampling system
- Complete Consent Decree milestone for Laboratory construction substantially complete
- Complete review of High Level Waste (HLW) Design/Authorization Basis Alignment
- Resolve HLW High-Efficiency Particulate Air (HEPA) Filter Design Issues and Test Prototypes
- Complete construction of full-scale vessel test platform
- Issue final report of criticality for PTF vessels (Black Cell Analysis)
- Submit Implementation Plan for Defense Nuclear Facility Safety Board (DNFSB) Recommendation 2010-2



Planned Accomplishments through FY 2014

- Receive LAW mechanical handling and system (melter off-gas caustic scrubber thermal catalytic oxidizer)
- Complete installation of BOF standby diesel generator
- Initiate system turnover to startup for facilities (water treatment, cooling tower, fuel oil, chiller compressor plant, steam plant, non-radioactive liquid waste disposal pump house)
- Complete resolution of major HLW technical issues (mixing/corrosion)
- Complete full-scale vessel testing of RLD-8 vessel to confirm mixing performance
- Resolve structural design issues with PTF vessels

Maintaining the Hanford Site Vision

May 2013

FY 2014 Regulatory Briefing - Office of River Protection

- We are committed to maintaining worker and public safety
- Protecting the Columbia River is vital, urgent and our obligation to the people of the Pacific Northwest
- ORP and RL are committed to continued progress at the Hanford Site in dealing with the largest environmental liability in the EM cleanup program
- We appreciate your continued input to our priorities