Environmental Management
Office of River Protection

Public Meeting
FY 2016 President’s Budget
FY 2017 Estimated Requirements

Jonathan (JD) Dowell, Deputy Manager
April 28, 2015
Hanford Cleanup Work – Office of River Protection (ORP)

- Manage 56 million gallons of waste in single-shell and double-shell tanks
- Construct Waste Treatment and Immobilization Plant (WTP)
- Treat tank waste for disposition

C-102 Single Shell Tank
2015 Key Cleanup Priorities – Safety First!

- Safe Nuclear Operations and Base Operations
- Low Activity Waste Facility, Balance of Facilities, Analytical Laboratory
- Direct-Feed Low Activity Waste
- Tank Waste Retrievals
- Effluent Treatment Facility Transfer
- WTP High-Level Waste Technical Issues Resolution
- WTP Pretreatment Technical Issues Resolution
Key Regulatory Cleanup Drivers

- Consent Decree (State of Washington v. DOE, No. 08-5085-FVS (E.D. Washington.), signed in 2010)
Prime Contracts – Office of River Protection

Bechtel National, Inc.

**Waste Treatment and Immobilization Plant (WTP)**

- Design, Construction, and Commissioning of the Hanford WTP
- Awarded in 2000
- Total Current Contract Value: $11.3B
- Cost-plus, award-fee

**Tank Operations Contract (TOC)**

- Monitor and manage the 177 underground storage tanks at Hanford, prepare for and provide waste feed delivery to the WTP.
- Awarded in 2008 for 5 years with 3 and 2 year options
- Total Contract Value: $5.6B
- Cost-plus, award-fee
- Option period one exercised
### Office of River Protection Profile

($ in Thousands)

<table>
<thead>
<tr>
<th>PBS</th>
<th>Project Baseline Summary (PBS) Title</th>
<th>FY 2015 Appropriation</th>
<th>FY 2016 President Budget</th>
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<tbody>
<tr>
<td>ORP-0014</td>
<td>Radioactive Liquid Tank Waste Stabilization and Disposition</td>
<td>$ 522,000</td>
<td>$ 649,000</td>
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<tr>
<td>ORP-0014</td>
<td>15-D-409, Low Activity Waste Pre-Treatment System</td>
<td>$ 23,000</td>
<td>$  75,000</td>
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<td>Subtotal</td>
<td>Radioactive Liquid Tank Waste Stabilization and Disposition</td>
<td>$ 545,000</td>
<td>$ 724,000</td>
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<td>ORP-0060</td>
<td>WTP – Subprojects A-D</td>
<td>$ 563,000</td>
<td>$ 595,000</td>
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<td>ORP-0060</td>
<td>WTP – Subproject E</td>
<td>$ 104,000</td>
<td>$  95,000</td>
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<td>Subtotal</td>
<td>Major construction – Waste Treatment and Immobilization Plant (WTP)</td>
<td>$ 667,000</td>
<td>$ 690,000</td>
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<td>Total – ORP</td>
<td>Office of River Protection Funding Summary</td>
<td>$1,212,000</td>
<td>$1,414,000</td>
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Project Work

OFFICE OF RIVER PROTECTION OVERVIEW
Tank Farms – ORP-0014

Planned Activities FY 2016

- Maintain Tank Farms in a safe and compliant manner
- Conduct 222-S Laboratory operations
- Conduct 242-A Evaporator campaigns
- Conduct Effluent Treatment Facility Operations
- Continue single-shell/double-shell tank integrity assessments
- Continue activities necessary to commence A/AX Tank Farm single-shell tank retrievals
- Initiate final design and long-lead procurements for Low Activity Waste Pretreatment System (LAWPS) project

*Inside of C-110 after 2nd Retrieval Technology Completed*
FY 2017 Planned Activities

- Maintain Tank Farms in a safe and compliant manner
- Conduct 222-S Laboratory operations and upgrades
- Conduct 242-A Evaporator campaigns and upgrades
- Conduct Effluent Treatment Facility operations and upgrades
- Continue single-shell and double-shell tank integrity activities
- Continue design of LAWPS project
- Continue activities necessary to commence A/AX Tank Farm retrievals
- Continue double-shell tank AY-102 actions
- Initiate system planning update activities
- Modification to Tank Farm for feed to LAWPS
Planned Activities through FY 2016

Low Activity Waste Facility, Analytical Laboratory, High Level Waste Facility, and Balance of Facilities

- Complete Low Activity Waste (LAW) Facility Thermal Catalytic Oxidizer installation
- Complete LAW Facility Melters 1 and 2 installation
- System start-up begins for LAW Facility and Analytical Laboratory (LAB)
- Complete LAB temporary control room
- Methods development initiated for direct feed low activity waste
- Continue High-Level Waste (HLW) Facility technical issue resolution
- Continue HLW Facility construction of walls and slabs at +58’ elevation
- Activities to support the annual updates to the HLW Facility Preliminary Documented Safety Analysis (PDSA)
- HLW long lead procurement items supporting construction
Planned Activities through FY 2016

Pretreatment Facility

- Continue resolution of technical issues
Waste Treatment and Immobilization Plant – ORP-0060

FY 2017 Planned Activities

Low Activity Waste Facility, Analytical Laboratory, High Level Waste Facility, and Balance of Facilities

- Completion of LAW Facility Design Calculation Verification
- LAW Facility construction complete
- HLW Facility civil build out of +58’ elevation
- Receive RLD-VSL-00007 (Acid Waste Vessel) and RLD-VSL-00008 (Plant Wash Vessel)
- HLW Facility Design and Operability studies in accordance with the action plan
- HLW Facility closure packages in support of full Authorization to Proceed
- Support HLW Facility long lead procurement items
- LAW, Balance of Facilities and LAB commissioning activities
Waste Treatment and Immobilization Plant – ORP-0060

**FY 2017 Planned Activities**

**Pretreatment Facility**

- Continue resolution of technical issues
## Tri-Party Agreement Milestones (FY 2016)

<table>
<thead>
<tr>
<th>Number</th>
<th>Milestone</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>M-045-92N</td>
<td>Construct Barriers 1 and 2 in 241-SX Farm</td>
<td>10/31/2015</td>
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<tr>
<td>M-062-01AF</td>
<td>Submit Semi-Annual Project Compliance Report</td>
<td>01/31/2016</td>
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<tr>
<td>M-047-07</td>
<td>Submit Critical Decision (CD)-1 for Secondary Liquid Waste Treatment and Change Request for CD-2 to Ecology</td>
<td>03/31/2016</td>
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<td>M-090-13</td>
<td>CD-1 for Interim Hanford Storage Project and Change Request for CD-2 to Ecology</td>
<td>03/31/2016</td>
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<td>M-045-92Q</td>
<td>Submit Barrier 4 Design/Monitoring Plan</td>
<td>06/30/2016</td>
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<tr>
<td>M-062-01AG</td>
<td>Submit Semi-Annual Project Compliance Report</td>
<td>07/31/2016</td>
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<tr>
<td>M-045-56L</td>
<td>Ecology, EPA and DOE agree, at a minimum to meet yearly (by July)</td>
<td>07/31/2016</td>
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</table>
Working Together for a Shared Vision

- We are committed to maintaining worker and public safety and protecting the environment
- ORP is committed to continued progress at the Hanford Site
- ORP has a strategy, vision and plan, and will continue to work together with EPA, Ecology and our Stakeholders to ensure continued success
- We appreciate and desire your continued input