

**FINAL**

Office of River Protection  
Consent Decree 08-5085-FVS  
Monthly Summary Report  
April 2014

**Office of River Protection**

**Consent Decree 08-5085-FVS  
Monthly Summary Report**

**April 2014 (Monthly Summary Report/Project Earned Value Management System reflects  
February 2014 information)**

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Milestone	Title	Due Date	Completion Date	Status
<b>Fiscal Year 2013</b>				
D-00A-05	LAB Construction Substantially Complete	12/31/2012	12/31/2012	Completed
D-00A-12	Steam Plant Construction Complete	12/31/2012	12/31/2012	Completed
D-00A-21	Complete Construction of Structural Steel to elevation of 37 feet in HLW Fac.	12/31/2012	10/24/2012	Completed
<b>Fiscal Year 2014</b>				
D-00B-01	Complete Retrieval of Tank Waste from 10 SSTs in WMA-C	09/30/2014		Ongoing*
D-00B-02	Advise Ecology of the 9 SSTs Waste Will be Retrieved by 2022	09/30/2014	08/24/2011	Completed
<b>Fiscal Year 2015</b>				
D-00A-07	LAW Facility Construction Substantially Complete	12/31/2014		Ongoing*
D-00A-19	Complete elevation 98 feet Concrete Floor Slab Placements in PT Facility	12/31/2014		Ongoing*

DOE = U.S. Department of Energy.  
 Ecology = Washington State Department of Ecology.  
 Fac. = facility.  
 HLW = high-level waste.  
 LAB = Analytical Laboratory.  
 LAW = low-activity waste.  
 PT = pretreatment.  
 SST = single-shell tank.  
 WMA-C = C-Farm Waste Management Area.

\*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone.

### Consent Decree Reports/Reviews

**D-00C-01 series, Submit to State of Washington and State of Oregon Semi-Annual Report,** Due: Semi-annually – January 31 and July 31 of each year, Status: On-going.

**D-00C-02 series, Submit to State of Washington and State of Oregon Monthly Summary Reports,** Due: End of each month, Status: On-going.

**D-006-00-A, Meet Approximately Every Three Years after Entry of Decree to review requirements of the Consent Decree,** Held: December 10, 2013, Status: Completed.

**D-006-00-A1, Provide State of Oregon notice of meetings in D-006-00-A, etc. no less than 30 days before they are scheduled,** Sent: November 8, 2013, Status: Completed.

## Single-Shell Tank Retrieval Program

**D-00B-01, Complete Retrieval of Tank Wastes from 10 Remaining Single-Shell Tanks (SST) in C-Farm Waste Management Area (WMA-C),** Due: September 30, 2014, Status: Ongoing.\* Please see issues.

**D-00B-01A thru J, Submit Tank Retrieval Complete Certification,** Due: To be determined, pursuant to Section IV-B-5 of the Consent Decree, U.S. Department of Energy (DOE) must submit to the Washington State Department of Ecology (Ecology) a written certification that DOE has completed retrieval of a tank in accordance with the requirements of Appendix C, Part 1, of the Consent Decree. Completed for SST C-104 on March 21, 2013, via DOE Office of River Protection (ORP) letter 13-TF-0018. Completed for SST C-108 on May 1, 2013, via ORP letter 13-TF-0025. Completed for SST C-109 on June 4, 2013, via ORP letter 13-TF-0037. Completed for SST C-110 on January 29, 2014 via ORP letter 14-TF-0007.

**D-00B-02, Advise Ecology of the Nine SSTs from which Waste Will Be Retrieved by 2022,** Due: September 30, 2014, Status: Completed on August 24, 2011.

**D-00B-03, Initiate Startup of Retrieval in At Least five of nine SSTs in D-00B-02,** Due: December 31, 2017, Status: On-going.

**D-00B-04, Complete Retrieval of Tank Wastes from the nine SSTs in D-00B-02,** Due: September 30, 2022, Status: On-going.

**D-00B-04A thru D-00B-04I, Submit Tank Retrieval Complete Certification,** Due: To be determined.

### Significant Past Accomplishments:

- Ramped up efforts regarding readiness activities for C-102 Modified Sluicing startup.
- Continued testing of equipment for the Mobile Arm Retrieval System-Vacuum (MARS-V) at C-105. All major equipment has been installed, continued Construction Acceptance Testing (CAT) of the installed system.
- Continued C-107 Mobile Arm Retrieval System operation, utilizing high pressure water operations for hard heel removal.
- Continued construction activities for installation of equipment for hard heel removal system at C-111, continued with CAT testing.
- ORP provided the request to forego a 3<sup>rd</sup> retrieval technology in tank 241-C-101 to Ecology for their review on 02/18/2014 via ORP letter 14-TF-0012.

### Significant Planned Activities in the Next 6 Months:

- Complete readiness of the modified sluicing system in C-102, startup retrieval of C-102.
- Complete readiness of the MARS-V in C-105, startup of the MARS-V for C-105.
- Begin startup of hard heel retrieval in C-111 using high pressure water, with caustic/water dissolution available.

**Issues:**

\*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone.

**Tank Waste Retrieval Work Plan Status**

Tank	TWRWP	Expected Revisions	Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 8	Complete	Modified Sluicing with ERSS	High-Pressure Water with ERSS	-
C-102	RPP-22393, Rev. 7	In Process	Modified Sluicing with ERSS	High-Pressure Water with ERSS	-
C-104	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Dissolution, retrieval complete per 13-TF-0018	-
C-105	RPP-22520, Rev. 8	Complete	MARS-V	MARS-V-High Pressure Water	-
C-107	RPP-22393, Rev. 7	Complete	MARS-S	MARS-S -High Pressure Water	-
C-108	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Dissolution, retrieval complete per 13-TF-0025	-
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Dissolution, retrieval complete per 13-TF-0037	-
C-110	RPP-33116, Rev. 3	In process	Modified Sluicing	Mechanical Waste Conditioning	High Pressure Water
C-111	RPP-37739, Rev. 2	Complete	Modified Sluicing	High pressure water with ERSS	Chemical Dissolution with ERSS
C-112	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Dissolution	-

ERSS = Extended Reach Sluicing System.

MARS = Mobile Arm Retrieval System.

S = sluicing.

TWRWP = Tank Waste Retrieval Work Plan.

V = vacuum.

**Significant Past Accomplishments:**

RPP-22520 was revised and released 03/18/2014 incorporating all outstanding modification notices.

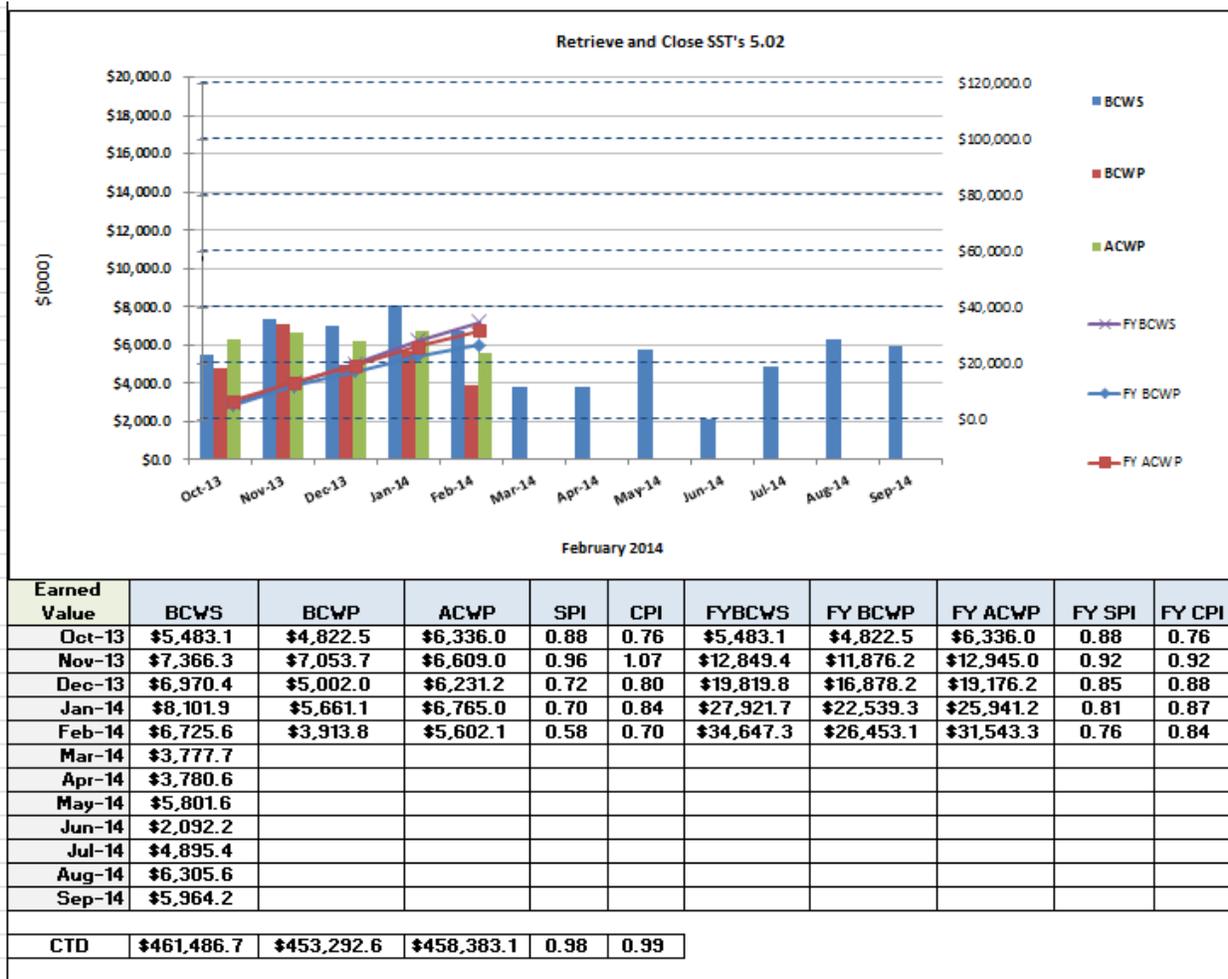
**Significant Planned Activities in the Next 6 Months:**

Modify Tank Waste Retrieval Work Plan RPP-22393, Rev. 7 to provide a discussion of a 3<sup>rd</sup> retrieval technology, hot water dissolution, for tank C-107.

**Issues:**

No major issues at this time.

### Single-Shell Tank Retrieval Monthly and Fiscal Year Earned Value Management System Data



#### Retrieval and Close Single-Shell Tanks

The current month unfavorable schedule variance (SV) of **(\$2,811.8K)** is due to:

- Delay of retrieval activities at Single-Shell Tank C-105 due to prioritizing Single-Shell Tank C-107 retrieval operations over the MARS-V testing and readiness activities
- Delays at Single-Shell Tank C-111 due to delays in equipment installation and testing of the High Pressure Water Skid.

The current month unfavorable cost variance (SV) of **(\$1,688.3K)** is due to:

- Additional costs need for Single-Shell Tank C-107 for crane, rigging and labor support required for installation and testing of the new slurry pump and disposal of the failed slurry pump
- Additional costs for Single-Shell Tank C-105 materials and engineering support required to complete design of the Automated Temperature Monitoring system
- Completion of shielding on transfer lines for Single-Shell Tank C-105 being performed on overtime.

## Waste Treatment and Immobilization Plant Project

Number	Title	Due Date	Status
D-00A-06	Complete Methods Validations	12/31/2017	Ongoing*
D-00A-17	Hot Start of Waste Treatment Plant	12/31/2019	Ongoing*
D-00A-01	Achieve Initial Plant Operations for WTP	12/31/2022	Ongoing*

The Waste Treatment and Immobilization Plant (WTP) Project currently employs approximately 2,255 full-time equivalent contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 613 craft, 373 nonmanual, and 168 subcontractor full-time equivalent personnel working at the WTP construction site (all facilities).

As of February 2014, the combined Low-Activity Waste (LAW) Facility, Analytical Laboratory (LAB), and Balance of Facilities (BOF) (collectively LBL) were 67-percent complete, design and engineering was 81-percent complete, procurement was 84-percent complete, construction was 77-percent complete, and startup and commissioning was 12-percent complete.

In September 2012, the baseline change proposal that implemented the LAW, LAB, and BOF replan was incorporated into the project over-target baseline, resulting in increases/decreases to the LBL Facility budgets, which correspondingly increased/decreased the facility/function to-date, percent-complete values. In October 2012, the Pretreatment (PT) and High-Level Waste (HLW) Facilities 2-Year Interim Work Plan was incorporated into the project over-target baseline and the percent-complete values for PT and HLW Facilities were frozen at the September 2012 rate. The WTP Project continues to progress in accordance with the LBL replan and PT/HLW 2-Year Interim Work Plan.

In February 2014, the cumulative to-date WTP Project schedule variance was a negative \$81.1 million, and the cumulative to-date WTP Project cost variance was a negative \$12.6 million. The major contribution to the cumulative to-date cost and schedule variance is based on the progress of the LBL replan and PT/HLW 2-Year Interim Work Plan.

The following is the status of project matters through the end of February.

### Significant Past Accomplishments:

- Issued PT Full Scale Vessel Testing Strategy to support design verification (PT)
- Issued PT Facility Sampling Execution Plan to support sampling validation (PT)
- Completed 2 concrete placements (HLW)
- Completed hydrostatic testing of 3,950 linear feet of piping (LAW)
- Installed 1,060 linear feet of electrical conduit and pulled 21,740 linear feet of cable (LAW)
- Issued letter to BNI to provide 2-year work plan for FY 2015 and FY 2016 for implementing in September. (PT, HLW)

**Significant Planned Actions in the Next 6 Months:**

- Develop HLW-specific safety design strategy (HLW)
- Complete installation of autosampling system (LAW)
- Complete construction of the Glass Former Storage Facility (BOF)
- Complete repairs, retest, and recertify RLD vessels (LAB)
- BNI is developing a 2 year work plan for FY 2015 and FY 2016. (PT, HLW)

**Issues:**

\*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues relevant to the PT and HLW Facilities include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, and waste feed issues.

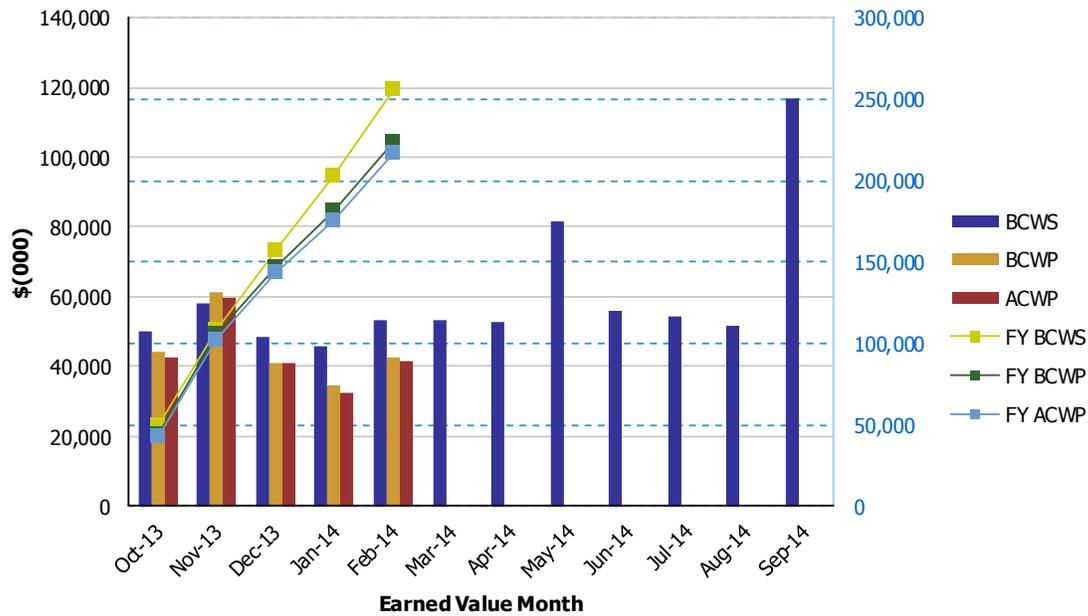
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: February 2014

**River Protection Project  
Waste Treatment Plant (WTP) Project**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2013	\$49,959	\$43,981	\$42,448	0.88	1.04	\$49,959	\$43,981	\$42,448	0.88	1.04
Nov 2013	\$58,047	\$61,276	\$59,935	1.06	1.02	\$108,006	\$105,257	\$102,383	0.97	1.03
Dec 2013	\$48,739	\$41,149	\$40,881	0.84	1.01	\$156,745	\$146,406	\$143,264	0.93	1.02
Jan 2014	\$45,633	\$34,448	\$32,185	0.75	1.07	\$202,378	\$180,854	\$175,449	0.89	1.03
Feb 2014	\$53,315	\$42,491	\$41,349	0.80	1.03	\$255,693	\$223,345	\$216,798	0.87	1.03
Mar 2014	\$53,046									
Apr 2014	\$52,930									
May 2014	\$81,726									
Jun 2014	\$56,083									
Jul 2014	\$54,292									
Aug 2014	\$51,488									
Sep 2014	\$116,961									
PTD	\$8,045,905	\$7,964,820	\$7,977,407	0.99	1.00					

## Pretreatment Facility

Number	Title	Due Date	Status
D-00A-19	Complete Elevation 98' Concrete Floor Slab in PT Facility	12/31/2014	Ongoing *
D-00A-13	Complete Installation of Pretreatment Feed Separation Vessels	12/31/2015	Ongoing *
D-00A-14	PT Facility Construction Substantially Complete	12/31/2017	Ongoing *
D-00A-15	Start PT Facility Cold Commissioning	12/31/2018	Ongoing *
D-00A-16	PT Facility Hot Commissioning Complete	12/31/2019	Ongoing *

The PT Facility will separate radioactive tank waste into HLW and LAW fractions and transfer each waste type to the respective vitrification facility for immobilization. As of September 2012, the PT Facility was 56-percent complete overall, with engineering design 85-percent complete, procurement 56-percent complete, construction 43-percent complete, and startup and commissioning 3-percent complete. Construction, procurement, and production engineering activities remain on hold, resulting in no change to the percent-complete status since September 2012. BNI and DOE continue to focus on resolving technical issues, performing hazard analyses, and completing safety evaluations for process systems in accordance with the PT/HLW 2-Year Interim Work Plan.

Technical review teams continue to evaluate open PT technical issues. Construction of the mixing test platform continues in preparation for full-scale testing. BNI is incorporating information provided by the National laboratories into test plans, simulant composition, and instrumentation requirements. Evaluation is ongoing relative to a standardized design for high solids vessels within the PT facility.

### Significant Past Accomplishments:

- Initiated PT resumption planning
- Continued construction at Full-Scale Test Facility with lifting of the pipe bridge into position
- Continued jet impingement testing for erosion
- Issued U.S. Department of Energy Approach for Resolution of Pulse-Jet- Mixed Vessel Technical Issues in the Waste Treatment and Immobilization Plan to support design verification
- Issued PT Facility Sampling Execution Plan to support sampling validation

### Significant Planned Actions in the Next 6 Months:

- Evaluate potential savings relative to storing procured commodities at site compared to storing at vendor facilities during suspensions of procurements
- Award sensitivity tests for erosion in vessels and piping and start slurry pot testing for erosion
- Update basis of design for safety classification regarding seismic analysis of vessels

- Finalize test plan, simulant composition, and test instrument list for full-scale vessel mixing tests
- Define standardized vessel selection criteria in support of vessel mixing resolution
- Issue PT Vessel Structural Technical Decision Plan to support a standardized vessel
- Receive BNI plan for resolution of criticality and hydrogen generation in vessels
- Complete construction at Full Scale Vessel Testing Facility

**Issues:**

\*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues relevant to the PT and HLW Facilities include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, and waste feed specification.

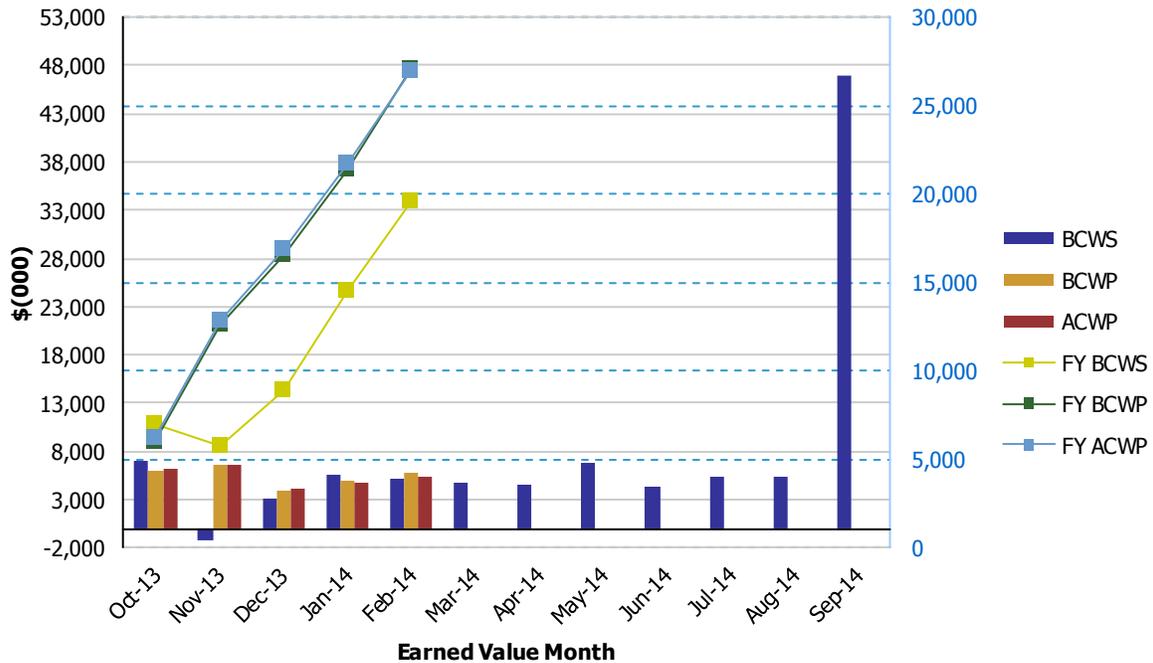
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: February 2014

**River Protection Project  
Pretreatment Facility**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2013	\$6,954	\$5,927	\$6,224	0.85	0.95	\$6,954	\$5,927	\$6,224	0.85	0.95
Nov 2013	(\$1,213)	\$6,673	\$6,646	-5.50	1.00	\$5,741	\$12,600	\$12,870	2.19	0.98
Dec 2013	\$3,109	\$3,957	\$4,053	1.27	0.98	\$8,850	\$16,557	\$16,923	1.87	0.98
Jan 2014	\$5,616	\$4,856	\$4,809	0.86	1.01	\$14,466	\$21,413	\$21,732	1.48	0.99
Feb 2014	\$5,155	\$5,673	\$5,261	1.10	1.08	\$19,621	\$27,086	\$26,993	1.38	1.00
Mar 2014	\$4,695									
Apr 2014	\$4,526									
May 2014	\$6,845									
Jun 2014	\$4,421									
Jul 2014	\$5,437									
Aug 2014	\$5,459									
Sep 2014	\$46,949									

PTD	\$1,546,910	\$1,537,096	\$1,534,737	0.99	1.00
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## High-Level Waste Facility

Number	Title	Due Date	Status
D-00A-21	Complete Construction of Structural Steel to 37' in HLW Facility	12/31/2012	Complete
D-00A-02	HLW Facility Construction Substantially Complete	12/31/2016	Ongoing *
D-00A-03	Start HLW Facility Cold Commissioning	6/30/2018	Ongoing *
D-00A-04	HLW Facility Hot Commissioning Complete	12/31/2019	Ongoing *

The HLW Facility will receive the separated HLW concentrate from the PT Facility. This concentrate will be blended with glass formers and converted into molten glass in one of the two HLW melters and then poured into cylindrical stainless steel canisters. After cooling, the canisters will be sealed and decontaminated before shipment to interim storage.

As of September 2012, the HLW Facility was 62-percent complete overall, with engineering design 89-percent complete, procurement 81-percent complete, construction 43-percent complete, and startup and commissioning 4-percent complete. Construction, procurement, and production engineering activities have significantly slowed down, resulting in minimal change to the percent completion status since September. BNI and DOE continue to focus on resolving technical issues, performing hazard analyses, and completing safety evaluations for process systems in accordance with the PT/HLW 2-Year Interim Work Plan.

Construction activities include the placement of walls at the 37-ft elevation, installation of structural steel at the 58-ft and 77-ft elevation, and installation of cable tray supports and ventilation ducts at the 14-ft elevation. Engineering efforts are focused on resolution of Priority Level 1 findings. The Environmental and Nuclear Safety Group is in the process of developing the safety design strategy as part of the initiative to resume design, procurement, and construction.

Technical review teams completed evaluation of open technical issues to support the resumption of HLW construction. The path forward to ramp up HLW engineering, procurement and construction is ongoing and includes three actions: Conduct engineering studies to resolve technical safety issues; perform risk assessment for the issues noted in Priority Level 1 findings, reliability validation process, project issues evaluation reporting, etc.; and perform assessment of BNI process improvement for the readiness to proceed. Currently, the conditional approval (Decision 1) of the authorization to proceed with engineering, procurement, and construction is awaiting completion of the Safety Design Strategy (SDS) for HLW. However, DOE approved “Limited Production Engineering” activities to facilitate completion of outstanding corrective actions and resolution of existing design issues.

**Significant Past Accomplishments:**

- Completed 2 concrete placements
- HLW Facility efforts focused on supporting the conditional approval (Decision 1) of the authorization to proceed decision, and included the following activities:
  - Continued supporting DOE System Review Teams and developing resolution plan
  - Finalizing Safety Design Strategy for submittal to DOE
  - Implementing the updated Engineering and Environmental & Nuclear Safety processes and procedures

**Significant Planned Actions in the Next 6 Months:**

- Develop HLW-specific safety design strategy
- Develop plan to close technical issues and other issues (e.g., safety basis compliance, quality assurance issues, and design defensibility) of HLW
- Complete draft analysis of single-point failures in support of failure mode analysis
- Perform HEPA filter qualification testing at Mississippi State University.

**Issues:**

\*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues relevant to the PT and HLW Facilities include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, and waste feed specification.

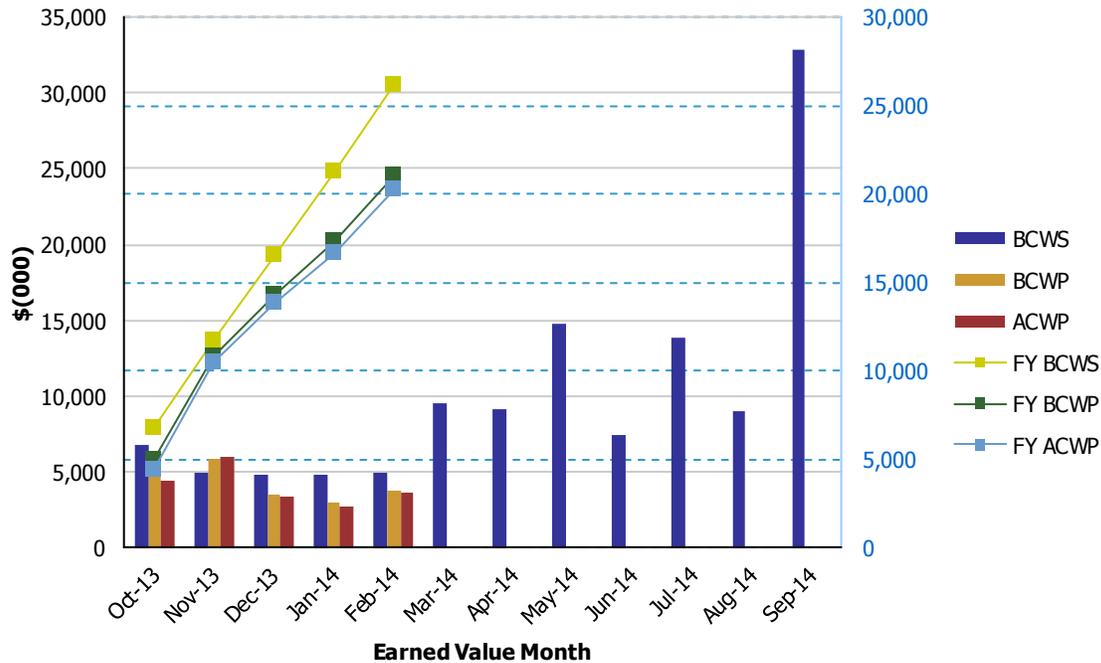
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: February 2014

**River Protection Project  
High-Level Waste Facility**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2013	\$6,818	\$4,914	\$4,390	0.72	1.12	\$6,818	\$4,914	\$4,390	0.72	1.12
Nov 2013	\$4,892	\$5,842	\$6,055	1.19	0.96	\$11,710	\$10,756	\$10,445	0.92	1.03
Dec 2013	\$4,811	\$3,559	\$3,420	0.74	1.04	\$16,521	\$14,315	\$13,865	0.87	1.03
Jan 2014	\$4,778	\$2,998	\$2,760	0.63	1.09	\$21,299	\$17,313	\$16,625	0.81	1.04
Feb 2014	\$4,927	\$3,736	\$3,647	0.76	1.02	\$26,226	\$21,049	\$20,272	0.80	1.04
Mar 2014	\$9,502									
Apr 2014	\$9,106									
May 2014	\$14,818									
Jun 2014	\$7,379									
Jul 2014	\$13,796									
Aug 2014	\$9,052									
Sep 2014	\$32,827									

PTD	\$1,013,028	\$1,010,229	\$1,003,142	1.00	1.01
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## Low-Activity Waste Facility

Number	Title	Due Date	Status
D-00A-07	LAW Facility Construction Substantially Complete	12/31/2014	Ongoing*
D-00A-08	Start LAW Facility Cold Commissioning	12/31/2018	Ongoing*
D-00A-09	LAW Facility Hot Commissioning Complete	12/31/2019	Ongoing*

The LAW Facility will process LAW that will be mixed with glass formers, vitrified into glass at a design capacity of 30 metric tons per day, and placed in stainless steel containers that are anticipated to be disposed of on the Hanford Site in the Integrated Disposal Facility. As of February 2014, the LAW Facility was 68-percent complete overall, with engineering design 81-percent complete, procurement 87-percent complete, construction 72-percent complete, and startup and commissioning 6-percent complete. On February 24, 2014, the Department of Energy requested that BNI develop a contract modification proposal for: 1) completing the LAW Facility, BOF and Analytical Laboratory work scope in the current contract through hot commissioning, and 2) completing initial planning and design for incorporating a permanent capability to accommodate a direct feed LAW (DFLAW) option in the WTP project.

### Significant Past Accomplishments:

- Received the HEPA pre-heaters
- Received wet electrostatic precipitator (WESP) electrodes
- Continual installation of melter offgas piping on +48' elevation
- Continual installation of melter refractory
- Completed hydrostatic testing of 3,950 linear feet of piping
- Installed 1,060 linear feet of electrical conduit and pulled 21,740 linear feet of cable
- Completed hazard analysis meetings for the melter and off-gas

### Significant Planned Actions in the Next 6 Months:

- Complete installation of autosampling system
- Continue refractory brick installation in the melters

### Issues:

\*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone.

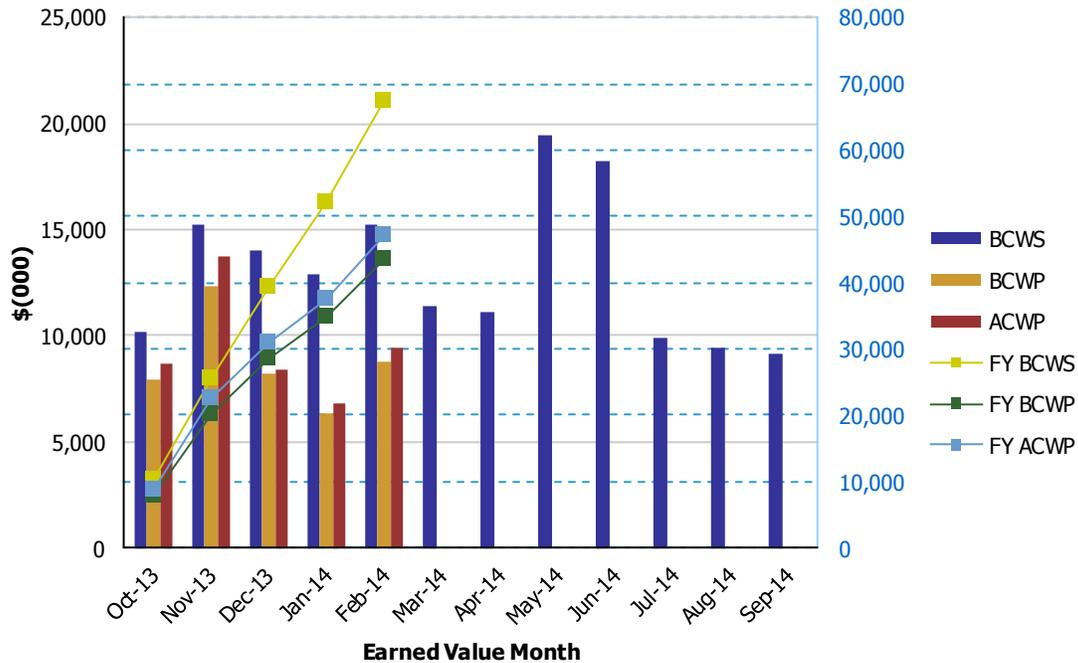
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: February 2014

**River Protection Project  
Low-Activity Waste Facility**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2013	\$10,160	\$7,952	\$8,677	0.78	0.92	\$10,160	\$7,952	\$8,677	0.78	0.92
Nov 2013	\$15,237	\$12,339	\$13,732	0.81	0.90	\$25,397	\$20,291	\$22,409	0.80	0.91
Dec 2013	\$14,003	\$8,214	\$8,389	0.59	0.98	\$39,400	\$28,505	\$30,798	0.72	0.93
Jan 2014	\$12,919	\$6,382	\$6,795	0.49	0.94	\$52,319	\$34,887	\$37,593	0.67	0.93
Feb 2014	\$15,254	\$8,750	\$9,433	0.57	0.93	\$67,573	\$43,637	\$47,026	0.65	0.93
Mar 2014	\$11,388									
Apr 2014	\$11,129									
May 2014	\$19,428									
Jun 2014	\$18,226									
Jul 2014	\$9,943									
Aug 2014	\$9,406									
Sep 2014	\$9,120									

PTD	\$872,071	\$833,126	\$890,306	0.96	0.94
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## Balance of Facilities

Number	Title	Due Date	Status
D-00A-12	Steam Plant Construction Complete	12/31/2012	Complete

The BOF will provide services and utilities to support operation of the main production facilities: PT, HLW, LAW, and LAB. As of February 2014, BOF was 61-percent complete overall, with engineering design 82-percent complete, procurement 71-percent complete, construction 80-percent complete, and startup and commissioning 14-percent complete.

Commercial grade dedication activities in support of the emergency turbine generator procurement are the primary focus for the quality, design engineering, and procurement organizations. Construction and startup efforts are focused on completion of the Glass Former Facility, construction of the Standby Diesel Generator (SDG) Facility, and turnover of the nonradioactive liquid waste disposal system from construction to startup. The foundation for the SDG facility has been placed and backfill activities are in progress.

### Significant Past Accomplishments:

- Continued branch connections for underground pipe systems
- Continued meter and relay testing/calibration in BOF Switchgear Building #91
- Completed 865 linear feet of cable pulling and 44 terminations in the glass former facility

### Significant Planned Actions in the Next 6 Months:

- Complete independent review of commercial grade dedication for emergency turbine generator
- Complete construction of the Glass Former Storage Facility
- Turnover the nonradioactive liquid waste disposal system from construction to startup
- Complete component testing of the low-voltage, medium-voltage, and fire detection systems for switchgear Buildings 87 and 91.

### Issues:

No major issues at this time.

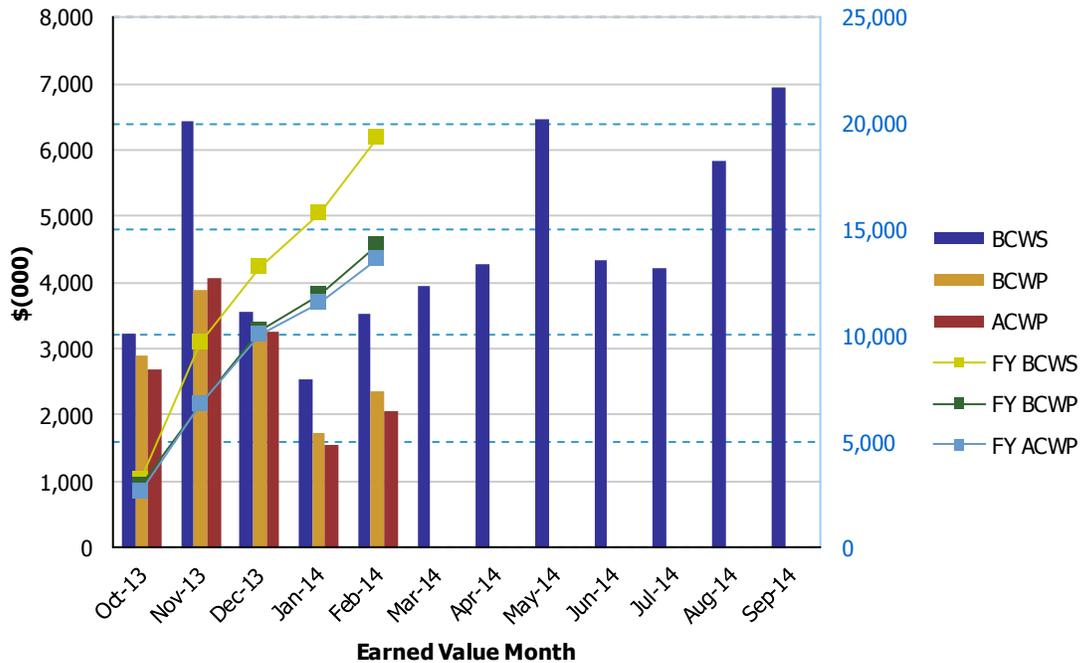
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: February 2014

**River Protection Project  
Balance of Facilities**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2013	\$3,218	\$2,901	\$2,679	0.90	1.08	\$3,218	\$2,901	\$2,679	0.90	1.08
Nov 2013	\$6,431	\$3,886	\$4,067	0.60	0.96	\$9,649	\$6,787	\$6,746	0.70	1.01
Dec 2013	\$3,547	\$3,395	\$3,267	0.96	1.04	\$13,196	\$10,182	\$10,013	0.77	1.02
Jan 2014	\$2,538	\$1,737	\$1,562	0.68	1.11	\$15,734	\$11,919	\$11,575	0.76	1.03
Feb 2014	\$3,528	\$2,356	\$2,047	0.67	1.15	\$19,262	\$14,275	\$13,622	0.74	1.05
Mar 2014	\$3,957									
Apr 2014	\$4,277									
May 2014	\$6,468									
Jun 2014	\$4,329									
Jul 2014	\$4,212									
Aug 2014	\$5,827									
Sep 2014	\$6,945									

PTD	\$345,975	\$331,925	\$324,992	0.96	1.02
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## Analytical Laboratory

Number	Title	Due Date	Status
D-00A-05	LAB Construction Substantially Complete	12/31/2012	Complete

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. As of February 2014, the LAB was 73-percent complete overall, with engineering design 81-percent complete, procurement 86-percent complete, construction 89-percent complete, and startup and commissioning 24-percent complete.

Engineering efforts are focused on supporting RLD vessel repairs and finalizing the electrical engineering portions of the LAB design. Construction efforts are focused on installation of instrument tubing and electrical commodities to support the completion of LAB construction.

### **Significant Past Accomplishments:**

- Began fabrication and installation of the stack discharge monitoring mega-hangers
- Continued installation of penetration seals
- Installed 920 linear feet of instrument tubing, pulled 3,250 linear feet of cable and completed 1,330 terminations

### **Significant Planned Actions in the Next 6 Months:**

- Complete fabrication of stack discharge monitoring panels
- Complete repairs to RLD vessel 164 and recertify RLD vessels 163, 164 and 165

### **Issues:**

No major issues at this time.

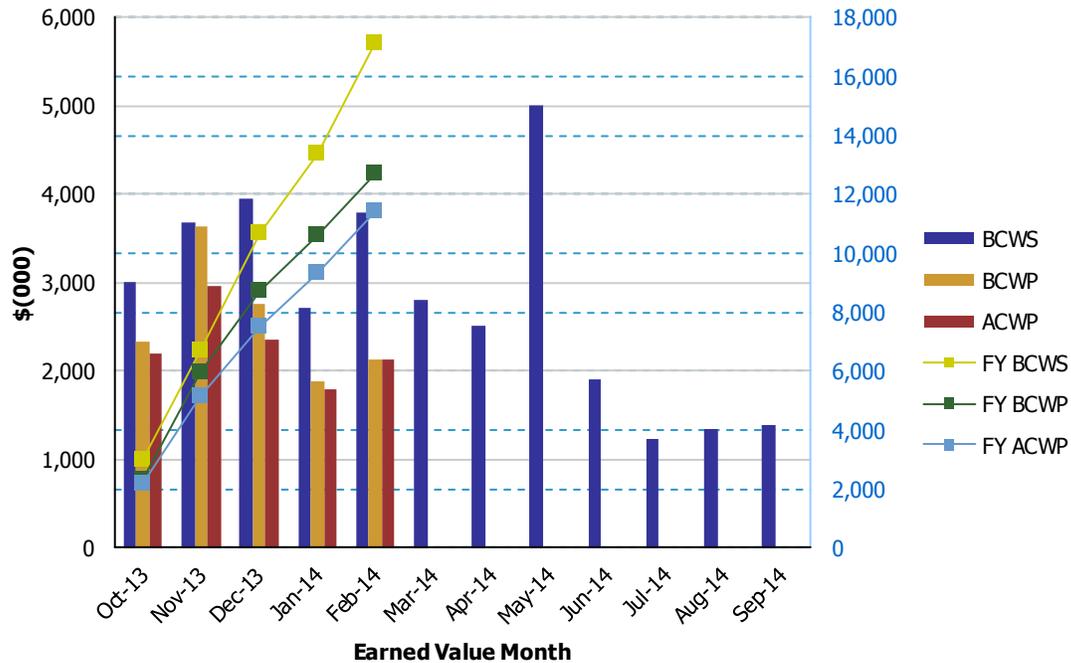
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: February 2014

**River Protection Project  
Analytical Laboratory**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2013	\$3,008	\$2,328	\$2,196	0.77	1.06	\$3,008	\$2,328	\$2,196	0.77	1.06
Nov 2013	\$3,689	\$3,629	\$2,959	0.98	1.23	\$6,697	\$5,957	\$5,155	0.89	1.16
Dec 2013	\$3,943	\$2,750	\$2,350	0.70	1.17	\$10,640	\$8,707	\$7,505	0.82	1.16
Jan 2014	\$2,705	\$1,875	\$1,788	0.69	1.05	\$13,345	\$10,582	\$9,293	0.79	1.14
Feb 2014	\$3,783	\$2,130	\$2,126	0.56	1.00	\$17,128	\$12,712	\$11,419	0.74	1.11
Mar 2014	\$2,802									
Apr 2014	\$2,501									
May 2014	\$4,999									
Jun 2014	\$1,894									
Jul 2014	\$1,234									
Aug 2014	\$1,351									
Sep 2014	\$1,381									
PTD	\$254,167	\$245,795	\$263,923	0.97	0.93					

Waste Treatment Plant Project - (LBL) Percent Complete Status Through February 2014															
(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Plant Operations Unallocated Dollars		
	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete
Facilities															
Low-Activity Waste	1,228.5	833.1	68%	320.7	258.6	81%	263.1	229.4	87%	466.6	334.4	72%	178.0	10.7	6%
Analytical Lab	335.8	245.8	73%	72.6	59.0	81%	55.5	47.9	86%	138.5	122.6	89%	69.1	16.3	24%
Balance of Facilities	548.6	331.9	61%	95.0	78.2	82%	74.5	53.2	71%	224.0	178.8	80%	155.1	21.6	14%
<b>Total LBL</b>	<b>2,112.8</b>	<b>1,410.3</b>	<b>67%</b>	<b>488.3</b>	<b>395.8</b>	<b>81%</b>	<b>393.1</b>	<b>330.5</b>	<b>84%</b>	<b>829.1</b>	<b>635.9</b>	<b>77%</b>	<b>402.2</b>	<b>48.6</b>	<b>12%</b>
<b>PT/HLW/SS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)</b>															
High-Level Waste	1,478.6	922.1	62%	364.4	325.2	89%	433.9	349.4	81%	561.1	243.2	43%	119.2	4.4	4%
Pretreatment	2,517.3	1,410.5	56%	761.7	645.8	85%	679.9	380.4	56%	890.0	378.6	43%	185.8	5.6	3%
Shared Services	4,726.9	3,632.6	77%	1,047.0	977.9	93%	451.7	395.0	87%	1,436.5	1,143.0	80%	453.5	133.2	29%
<b>Total HLW/PT/SS</b>	<b>8,722.8</b>	<b>5,965.2</b>	<b>68%</b>	<b>2,173.1</b>	<b>1,948.9</b>	<b>90%</b>	<b>1,565.5</b>	<b>1,124.8</b>	<b>72%</b>	<b>2,887.6</b>	<b>1,764.8</b>	<b>61%</b>	<b>758.5</b>	<b>143.2</b>	<b>19%</b>
Undistributed Budget	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Total WTP</b>	<b>10,835.6</b>	<b>7,376.0</b>	<b>68%</b>	<b>2,661.4</b>	<b>2,344.7</b>	<b>88%</b>	<b>1,958.6</b>	<b>1,455.3</b>	<b>74%</b>	<b>3,716.7</b>	<b>2,400.7</b>	<b>65%</b>	<b>1,160.7</b>	<b>191.8</b>	<b>17%</b>

Source: Preliminary WTP Contract Performance Report - Format 1, Data for February 2014

Note: In September 2012, the LBL Replan was incorporated into the project OTB baseline resulting in increases/decreases to the LBL facility budgets, which correspondingly increased/decreased the facility/function to-date percent complete values. In October 2012, the PT/HLW/SS Interim Work Plan was incorporated into the project OTB baseline resulting in decreases to the PT/HLW/SS facility budgets, this was due to a work scope shift from the Distributed budget to UB. Percent Complete Values shown for PT, HLW and SS have been frozen with the September 2012 values due to the Interim Work Plan and budgets being moved into UB. UB value for the project for PT/HLW/SS is \$2,014M. The percent complete values for the Total WTP are the current total LBL BCWP added to the frozen HLW/PT/SS BCWP values.