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FINAL

Office of River Protection
Consent Decree 08-5085-FVS

Monthly Summary Report

November 2014



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

**November 2014 (Monthly Summary Report/Project Earned Value Management System
reflects September 2014 information)**

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22	Analytical Laboratory <ul style="list-style-type: none"> • D-00A-005 	

CD Milestone Statistics/Status

Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2014				
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
Fiscal Year 2015				
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 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.

DOE	= U.S. Department of Energy.	PT	= Pretreatment.
Ecology	= Washington State Department of Ecology.	SST	= single-shell tank.
LAW	= Low-Activity Waste.	WMA-C	= C-Farm Waste Management Area.

Consent Decree Reports/Reviews

D-00C-01 series, Submit to State of Washington and State of Oregon Semi-Annual Report, Due: Semiannually – January 31 and July 31 of each year, Status: Ongoing. The July 2014 Semiannual Report was issued on July 31, 2014, via U.S. Department of Energy (DOE), Office of River Protection Letter 14-ECD-0040.

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

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

Milestone	Title	Due Date	Status
D-00B-01	Complete Retrieval of Tank Wastes from 10 Remaining SSTs in WMA-C	September 30, 2014	Ongoing*
D-00B-01A through D-00B-01J	Submit Tank Retrieval Complete Certification	One year following each retrieved tank retrieval completion report ^a	Ongoing
D-00B-02	Advise Ecology of the Nine SSTs from which Waste Will Be Retrieved by 2022	September 30, 2014	Completed
D-00B-03	Initiate Startup of Retrieval in At Least 5 of 9 SSTs in D-00B-02	December 31, 2017	Ongoing
D-00B-04	Complete Retrieval of Tank Wastes from the nine SSTs in D-00B-02	September 30, 2022	Ongoing
D-00B-04A through D-00B-04I	Submit Tank Retrieval Complete Certification	TBD	TBD

- a. 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 Single-Shell Tank (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. Completed for SST C-107 on September 30, 2014, via ORP letter 14-TF-0114. Completed for SST C-112 on September 30, 2014, via ORP letter 14-TF-0115.

TBD = to be determined.
WMA-C = C-Farm Waste Management Area.

Significant Past Accomplishments:

- C-102 installed new replacement sluicer in Riser 7, sluicing expected to restart the week of November 10, 2014.
- Procured and planned work packages for the replacement of the plugged slurry distributor at AN-106.
- Finished the evaluation of C-111 enhanced reach sluicer failure, and started fabrication of new hydraulic line hose materials into two replacement sluicers.

Significant Planned Activities in the Next 6 Months:

- Complete retrieval of C-102 using modified sluicing
- Finish a C-105 Systems Engineering Evaluation of the current retrieval method; will potentially need a revised Tank Waste Retrieval Work Plan
- Continue retrieval of C-105 using Mobile Arm Retrieval System – Vacuum
- 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	First Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 8	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-102	RPP-22393, Rev. 7	In Process	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-104	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0018	-
C-105	RPP-22520, Rev. 8	Complete	MARS-V	MARS-V-High Pressure Water Spray	-
C-107	RPP-22393, Rev. 7	Complete	MARS-S	MARS-S-High Pressure Water Spray	Water Dissolution
C-108	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0025	-
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0037	-
C-110	RPP-33116, Rev. 3	Complete	Modified Sluicing	Mechanical Waste Conditioning with an In-Tank Vehicle	High Pressure Water
C-111	RPP-37739, Rev. 2	Complete	Modified Sluicing	High pressure water using the ERSS	Chemical Dissolution Process with ERSS
C-112	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process	-

ERSS = Extended Reach Sluicing System.

MARS = Mobile Arm Retrieval System.

S = sluicing.

TWRWP = Tank Waste Retrieval Work Plan.

V = vacuum.

Significant Accomplishments:

None.

Significant Planned Activities in the Next 6 Months:

None.

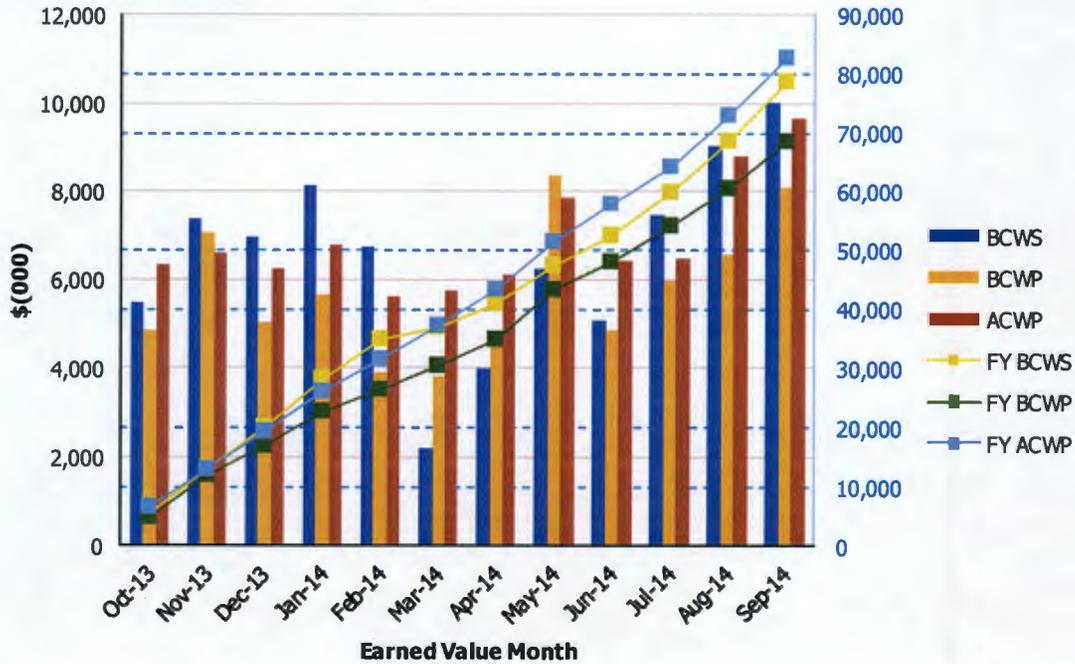
Issues:

None.

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

Tank Farms ORP-0014
Retrieve and Close SST's 5.02

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	\$5,483	\$4,823	\$6,336	0.88	0.76	\$5,483	\$4,823	\$6,336	0.88	0.76
Nov 2013	\$7,366	\$7,054	\$6,609	0.96	1.07	\$12,849	\$11,876	\$12,945	0.92	0.92
Dec 2013	\$6,970	\$5,002	\$6,231	0.72	0.80	\$19,820	\$16,878	\$19,176	0.85	0.88
Jan 2014	\$8,102	\$5,661	\$6,765	0.70	0.84	\$27,922	\$22,539	\$25,941	0.81	0.87
Feb 2014	\$6,726	\$3,914	\$5,602	0.58	0.70	\$34,647	\$26,453	\$31,543	0.76	0.84
Mar 2014	\$2,201	\$3,805	\$5,729	1.73	0.66	\$36,849	\$30,258	\$37,273	0.82	0.81
Apr 2014	\$4,000	\$4,558	\$6,079	1.14	0.75	\$40,848	\$34,816	\$43,352	0.85	0.80
May 2014	\$6,255	\$8,331	\$7,855	1.33	1.06	\$47,103	\$43,146	\$51,207	0.92	0.84
Jun 2014	\$5,055	\$4,826	\$6,413	0.95	0.75	\$52,158	\$47,972	\$57,621	0.92	0.83
Jul 2014	\$7,437	\$5,954	\$6,461	0.80	0.92	\$59,595	\$53,926	\$64,082	0.90	0.84
Aug 2014	\$9,039	\$6,563	\$8,792	0.73	0.75	\$68,634	\$60,489	\$72,874	0.88	0.83
Sep 2014	\$10,026	\$8,089	\$9,631	0.81	0.84	\$78,660	\$68,578	\$82,504	0.87	0.83
CTD	\$505,499	\$495,418	\$509,343	0.98	0.97					

Retrieve and Close Single-Shell Tanks

The current month unfavorable schedule variance (SV) of **(\$1,937K)** is due to:

- Nonperformance of single-shell tank (SST) C-105 retrieval activities due to plugged slurry distributor; operational crews were reallocated to readiness and training tasks due to ineffectiveness of the retrieval system
- Nonperformance of SST C-102 retrieval activities due to failed Extended Reach Sluicer System
- Early receipt of equipment at C Farm.

The current month unfavorable cost variance (CV) of (\$1,542K) is due to:

- Nonperformance of SST C-105 retrieval activities due to the plugged slurry distributor in receiver Tank AN-106. Corrective action: Slurry distributor to be replaced mid-November.
- Early completion of retrieval activities at SST C-107.
- Early completion of replacement of the extended reach sluicer at SST C-102.

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*

WTP = Waste Treatment and Immobilization Plant.

The Waste Treatment and Immobilization Plant (WTP) Project currently employs approximately 2,553 full-time equivalent contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 632 craft, 384 nonmanual, and 175 subcontractor full-time equivalent personnel working at the WTP construction site (all facilities).

As of September 2014, the combined Low-Activity Waste (LAW) Facility, Analytical Laboratory (LAB), and Balance of Facilities (BOF) (collectively LBL) were 71 percent complete, design and engineering was 84 percent complete, procurement was 86 percent complete, construction was 83 percent complete, and startup and commissioning was 17 percent complete.

In September 2012, the baseline change proposal that implemented the LBL 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 September 2014, the cumulative to-date WTP Project schedule variance was a negative \$187.1 million, and the cumulative to-date WTP Project cost variance was a negative \$8.8 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 project status through the end of September 2014.

Significant Past Accomplishments:

- Installed the four pulse jet mixer (PJM) array at the 8 foot test facility (PT)
- Completed the gap analysis to identify misalignments with the current Preliminary Documented Safety Analysis (PDSA) and identified safety analyses necessary to incorporate the safety design strategy (SDS) into the PDSA (HLW)
- Completed installation of secondary steel members to seismic braces in the Breathing Service Air System room (LAW)
- Completed heat trace and insulation on the Chiller Compressor Building process service water and domestic (potable) water system piping (BOF)
- Completed pipe closure welds and pipe support post installation vessel repairs (LAB).

Significant Planned Actions in the Next 6 Months:

- Complete modification at Full-Scale Vessel Testing (FSVT) Facility to support Phase 2 testing for the PJM controls (PT)
- DOE approval of PT Resumption Plan to support DOE authorization to proceed with production engineering (PT)
- Complete the LAW Facility design and operability review (LAW)
- Complete construction of the Analytical Laboratory (LAB)
- Complete construction of the Glass Former Storage Facility (BOF).

Issues:

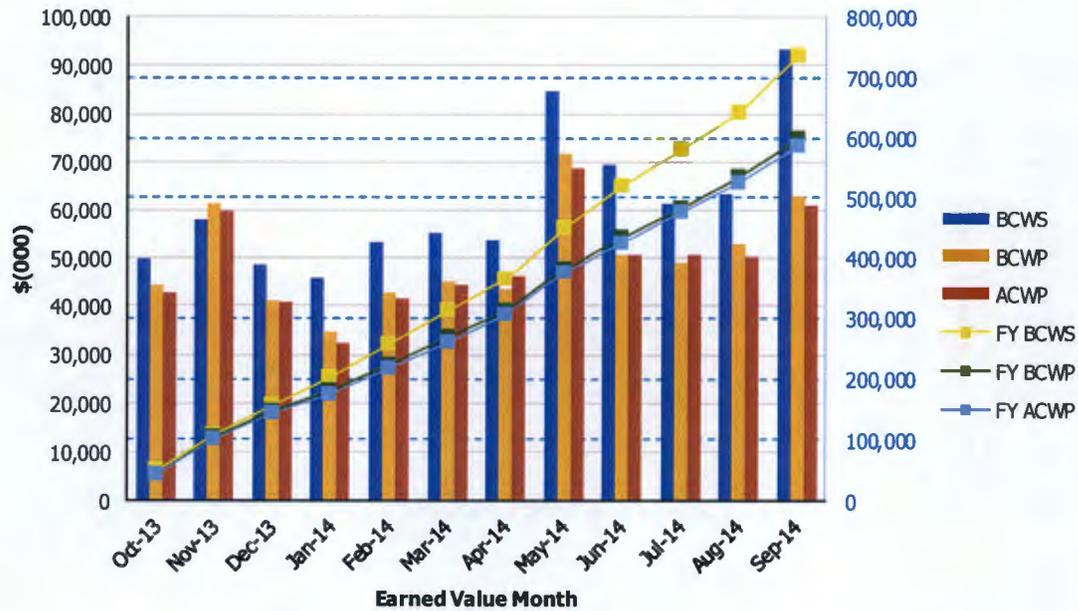
*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues related to WTP include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

Data Set: FY 2014 Earned Value Data

Data as of: September 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	\$55,327	\$44,937	\$44,053	0.81	1.02	\$311,020	\$268,282	\$260,851	0.86	1.03
Apr 2014	\$53,695	\$43,232	\$46,086	0.81	0.94	\$364,715	\$311,514	\$306,937	0.85	1.01
May 2014	\$84,691	\$71,474	\$68,633	0.84	1.04	\$449,406	\$382,988	\$375,570	0.85	1.02
Jun 2014	\$69,440	\$50,571	\$50,680	0.73	1.00	\$518,846	\$433,559	\$426,250	0.84	1.02
Jul 2014	\$61,232	\$49,176	\$50,487	0.80	0.97	\$580,078	\$482,735	\$476,737	0.83	1.01
Aug 2014	\$63,198	\$52,764	\$50,376	0.83	1.05	\$643,276	\$535,499	\$527,113	0.83	1.02
Sep 2014	\$93,517	\$62,939	\$61,084	0.67	1.03	\$736,793	\$598,438	\$588,197	0.81	1.02
PTD	\$8,527,006	\$8,339,912	\$8,348,807	0.98	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*

PT = pretreatment.

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.

Phase 1 of the FSVT is continuing for the PJM controls utilizing the RLD-8T vessel. Technical review teams continue to evaluate open PT Facility technical issues. An evaluation is ongoing relative to a standardized design for high-solids vessels within the PT Facility. BNI has submitted resolution plans for eight technical issues, which are undergoing DOE review. The eight technical issues are the T1, Hydrogen in Vessels; T2, Criticality; T3, HPAV; T4, Mixing; T5, Erosion Corrosion; T6, PTF Optimization; T7, Vessel Analysis; and T8, Ventilation.

BNI has implemented fiscal year (FY) 2015–FY 2016 two-year work plan. BNI has transmitted the Pretreatment SDS Plan to DOE for review.

Significant Past Accomplishments:

- DOE received the Pretreatment SDS Plan for review
- Installed the four PJM array at the 8 foot test facility
- Continued testing of PJM controls at the FSVT Facility
- DOE issued contract modification 334 to better define scope related to the FSVT Facility
- Continued conceptual design for a standardized high-solids vessel.

Significant Planned Actions in the Next 6 Months:

- DOE approval of the Pretreatment Resumption Plan to support the authorization to proceed with production engineering
- Complete modification at FSVT Facility to support Phase 2 testing for the PJM controls
- Finalize technical team strategic plans (T1, T4, and T8 are remaining of the eight plans)

- 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
- Start informational testing in 8-ft test vessel for down selection of features pertaining to standardized high-solids vessel design.

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 related to WTP include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

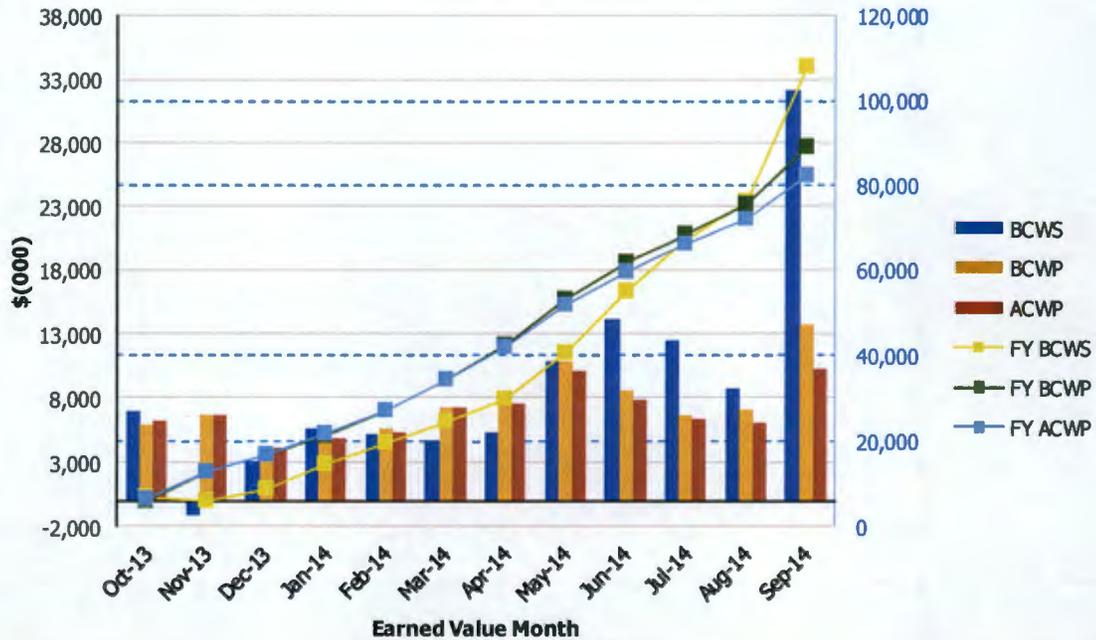
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: September 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	\$4,751	\$7,210	\$7,173	1.52	1.01	\$24,372	\$34,296	\$34,166	1.41	1.00
Apr 2014	\$5,329	\$7,957	\$7,521	1.49	1.06	\$29,701	\$42,253	\$41,687	1.42	1.01
May 2014	\$10,845	\$10,888	\$10,039	1.00	1.08	\$40,546	\$53,141	\$51,726	1.31	1.03
Jun 2014	\$14,207	\$8,532	\$7,915	0.60	1.08	\$54,753	\$61,673	\$59,641	1.13	1.03
Jul 2014	\$12,442	\$6,706	\$6,415	0.54	1.05	\$67,195	\$68,379	\$66,056	1.02	1.04
Aug 2014	\$8,704	\$7,042	\$6,112	0.81	1.15	\$75,899	\$75,421	\$72,168	0.99	1.05
Sep 2014	\$32,045	\$13,630	\$10,257	0.43	1.33	\$107,944	\$89,051	\$82,425	0.82	1.08

PTD	\$1,635,234	\$1,599,060	\$1,590,170	0.98	1.01
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Mon - SV	Mon - CV
(\$18,415)	\$3,373
(\$36,174)	\$8,890

FY - SV	FY - CV
(\$18,893)	\$6,626

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*

HLW = high-level waste.

The HLW Facility will receive the separated HLW concentrate from the PT Facility. This concentrate will be blended with glass formers, 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 been significantly slowed down, resulting in minimal change to the percent completion status since September.

Construction is continuing on concrete placements, and installation of support steel and crane rails in the canister handling cave. Testing of high-efficiency particulate air (HEPA) filters at Mississippi State University (MSU) is continuing to select the filters that would meet the design and operations requirements.

Office of River Protection authorized BNI to resume all engineering work necessary to finalize the design of the HLW Facility on August 19, 2014. BNI has implemented the FY 2015 and FY 2016 two-year work plan.

BNI is focused on the implementation of the newly developed 2-year work plan: the gap analysis between the recently developed SDS and the PDSA; radioactive liquid waste disposal (RLD) system redesign and hazards analysis; engineering studies to develop path forwards for resolution of issues regarding heating, ventilation, and air-conditioning (HVAC) system; melter and other solid waste handling system; and development of facility design description and system design descriptions, as required by the newly implemented Systems Engineering Management Plan.

Significant Past Accomplishments:

- One concrete placement was made (wall 3102)
- Continued testing on HEPA filter at MSU
- Installed 5 tons of structural steel – mostly steel to support slabs 4019 and 4020 over the canister handling cave
- Continued installation of the crane rails in canister handling cave
- Completed three studies in response to the design and operability review related to HVAC and secondary waste handling operability issues

- Conducted evaluation of mold noticed on the liner plates in PT and HLW Facilities
- Completed the gap analysis to identify misalignments with the current PDSA and to identify safety analyses necessary to incorporate the SDS into the PDSA.

Significant Planned Actions in the Next 6 Months:

- Issue request for proposal for vendor design of RLD-8 vessel
- Complete glove box 29 and 42 assembly/fabrication for auto samplers
- Complete draft analysis of single-point failures in support of failure mode analysis
- Perform HEPA filter qualification testing at MSU
- Continue activities to support the RLD system redesign.

Issues:

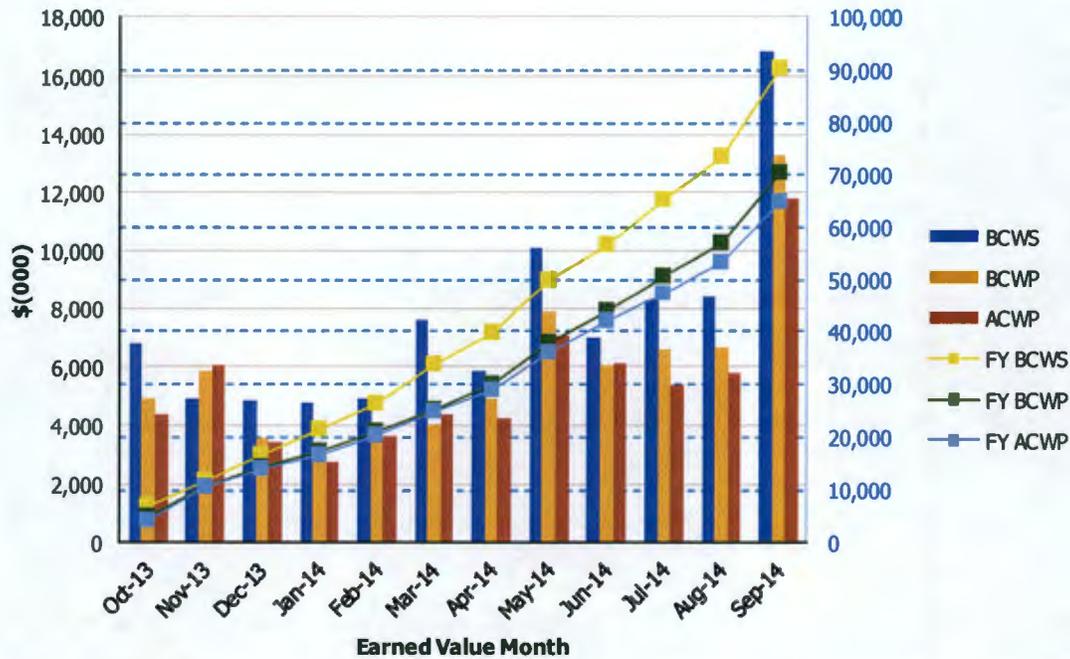
*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues related to the WTP include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

Data Set: FY 2014 Earned Value Data

Data as of: September 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	\$7,612	\$4,010	\$4,391	0.53	0.91	\$33,838	\$25,059	\$24,663	0.74	1.02
Apr 2014	\$5,867	\$4,921	\$4,203	0.84	1.17	\$39,705	\$29,980	\$28,866	0.76	1.04
May 2014	\$10,121	\$7,861	\$7,079	0.78	1.11	\$49,826	\$37,841	\$35,945	0.76	1.05
Jun 2014	\$6,975	\$6,073	\$6,097	0.87	1.00	\$56,801	\$43,914	\$42,042	0.77	1.04
Jul 2014	\$8,292	\$6,589	\$5,379	0.79	1.22	\$65,093	\$50,503	\$47,421	0.78	1.06
Aug 2014	\$8,413	\$6,664	\$5,752	0.79	1.16	\$73,506	\$57,167	\$53,173	0.78	1.08
Sep 2014	\$16,860	\$13,234	\$11,797	0.78	1.12	\$90,366	\$70,401	\$64,970	0.78	1.08
PTD	\$1,077,170	\$1,059,580	\$1,047,840	0.98	1.01					

Mon - SV	Mon - CV
(\$3,626)	\$1,437
(\$17,590)	\$11,740

FY - SV	FY - CV
(\$19,965)	\$5,431

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*

LAW = low-activity waste.

The LAW Facility will process the Low Activity Waste 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 anticipated to be disposed of on the Hanford Site in the Integrated Disposal Facility. As of September 2014, the LAW Facility was 72 percent complete overall, with engineering design 84 percent complete, procurement 89 percent complete, construction 79 percent complete, and startup and commissioning 8 percent complete. As requested, DOE received a BNI contract modification proposal on September 30, 2014, for the following:

- Completing the LBL work scope in the current contract through hot commissioning
- Completing initial planning and design for incorporating a permanent capability to accommodate a direct feed LAW option in the WTP Project.

Significant Past Accomplishments:

- Greencast placement is poured in Melter 1
- Placed Stage 5 Kaolite, Stage 6 Versaflow, and Stage 8 Kaolite in both melters 1 and 2 (Subcontractor Energy Solutions)
- Installed over 1,070 linear feet of conduit and pulled over 13,500 linear feet of cable
- Installed over 230 linear feet of process piping and hydro-tested 800 linear feet of facility piping
- Completed installation of secondary steel members to seismic braces in the Breathing Service Air System room (Subcontractor Patriot).

Significant Planned Actions in the Next 6 Months:

- Complete subcontractor work scope in the annex
- Award the purchase order for the active gas analyzers
- Complete the LAW Facility design and operability review
- Complete castable refractory 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.

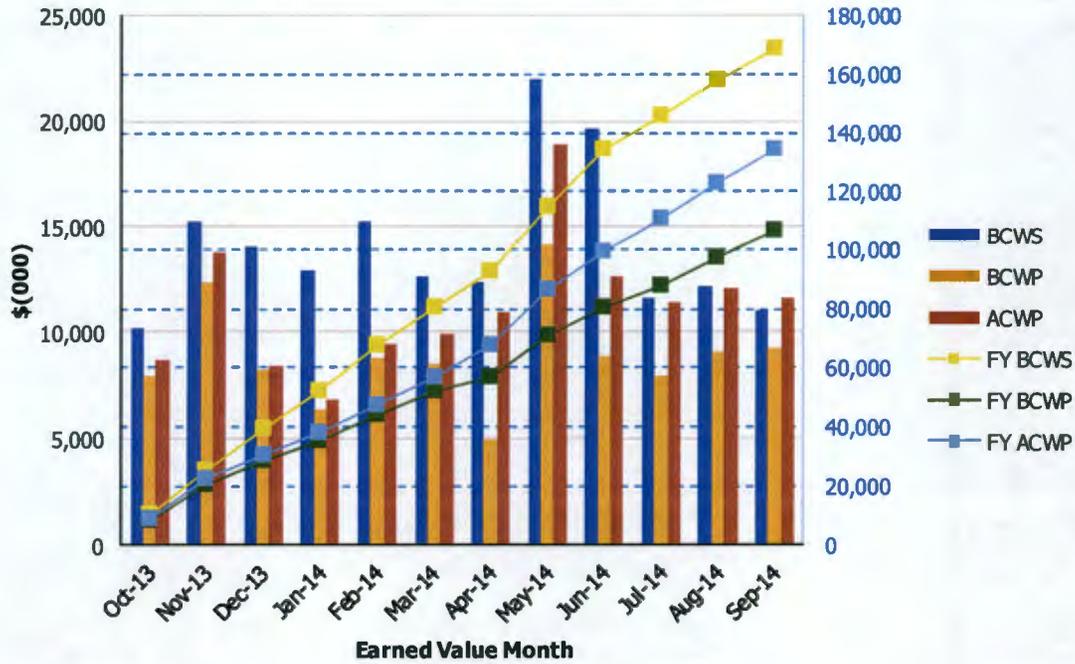
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: September 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	\$12,596	\$8,478	\$9,852	0.67	0.86	\$80,169	\$52,115	\$56,878	0.65	0.92
Apr 2014	\$12,335	\$4,958	\$10,936	0.40	0.45	\$92,504	\$57,073	\$67,814	0.62	0.84
May 2014	\$21,988	\$14,117	\$18,840	0.64	0.75	\$114,492	\$71,190	\$86,654	0.62	0.82
Jun 2014	\$19,658	\$8,885	\$12,594	0.45	0.71	\$134,150	\$80,075	\$99,248	0.60	0.81
Jul 2014	\$11,551	\$7,974	\$11,433	0.69	0.70	\$145,701	\$88,049	\$110,681	0.60	0.80
Aug 2014	\$12,107	\$9,091	\$12,097	0.75	0.75	\$157,808	\$97,140	\$122,778	0.62	0.79
Sep 2014	\$11,031	\$9,270	\$11,573	0.84	0.80	\$168,839	\$106,410	\$134,351	0.63	0.79
PTD	\$973,338	\$895,900	\$977,633	0.92	0.92					

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 September 2014, BOF was 64 percent complete overall, with engineering design 85 percent complete, procurement 73 percent complete, construction 83 percent complete, and startup and commissioning 21 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 efforts are focused on completion of the Glass Former Facility and construction of the Standby Diesel Generator Facility. The standby diesel generator has been placed along with the heat exchanger and fuel tank that support it.

Significant Past Accomplishments:

- Completed heat trace and insulation on the Chiller Compressor Building process service water and domestic (potable) water system piping (subcontractor DKB)
- Completed 1,420 linear feet of cable and 804 linear feet of conduit
- Completed coatings on the inside of the fire water tanks (subcontractor FD Thomas).

Significant Planned Actions in the Next 6 Months:

- Complete construction of the Glass Former Storage Facility
- Receive the replacement nonradioactive liquid waste disposal system motor control panel
- 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.

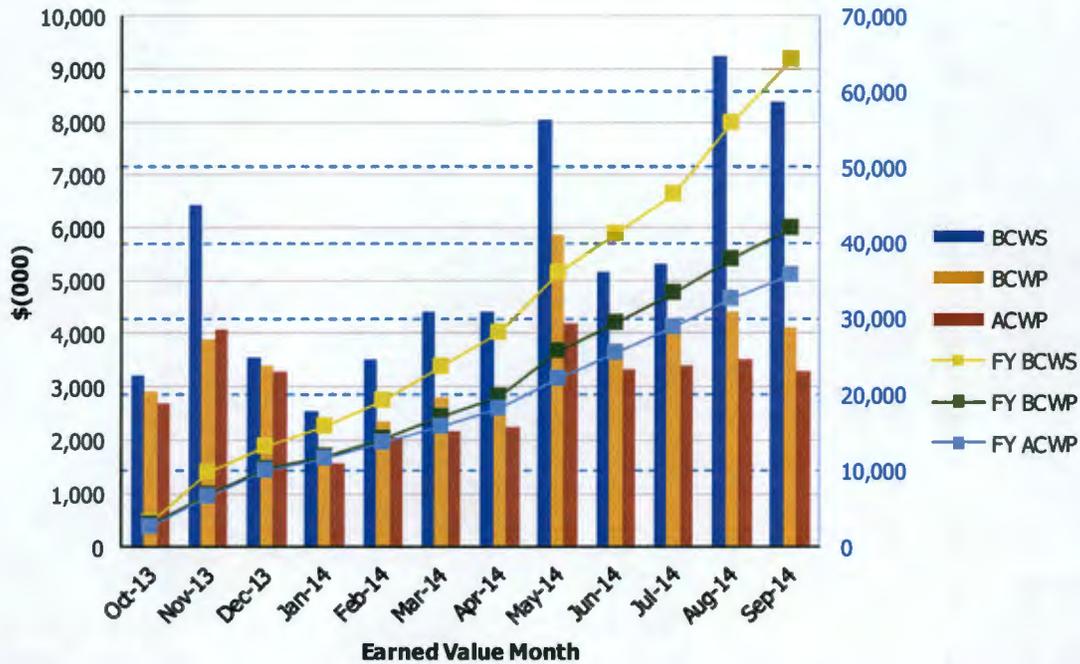
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: September 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	\$4,394	\$2,806	\$2,163	0.64	1.30	\$23,656	\$17,081	\$15,785	0.72	1.08
Apr 2014	\$4,399	\$2,724	\$2,238	0.62	1.22	\$28,055	\$19,805	\$18,023	0.71	1.10
May 2014	\$8,035	\$5,861	\$4,179	0.73	1.40	\$36,090	\$25,666	\$22,202	0.71	1.16
Jun 2014	\$5,161	\$3,711	\$3,320	0.72	1.12	\$41,251	\$29,377	\$25,522	0.71	1.15
Jul 2014	\$5,297	\$4,032	\$3,415	0.76	1.18	\$46,548	\$33,409	\$28,937	0.72	1.15
Aug 2014	\$9,233	\$4,399	\$3,499	0.48	1.26	\$55,781	\$37,808	\$32,436	0.68	1.17
Sep 2014	\$8,385	\$4,100	\$3,281	0.49	1.25	\$64,166	\$41,908	\$35,717	0.65	1.17
PTD	\$390,879	\$359,557	\$347,087	0.92	1.04					

Analytical Laboratory

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

LAB = Analytical Laboratory.

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. As of September 2014, the LAB was 77 percent complete overall, with engineering design 84 percent complete, procurement 86 percent complete, construction 95 percent complete, and startup and commissioning 27 percent complete.

Engineering efforts are focused on closure of nonconformance reports and construction deficiency reports. In addition engineering is supporting completion of construction punchlist items. Construction efforts are focused on installation of remaining electrical commodities and penetration seals to support the completion of LAB construction.

Significant Past Accomplishments:

- Continued cable pulls and terminations (930 linear feet in September – 85% complete)
- Continued installation of conduit (570 linear feet in September – 98% complete)
- Continued testing of instrumentation tubing (3,560 linear feet in September)
- Continued installation of penetration seals and fireproofing
- Completed pipe closure welds and pipe support post installation vessel repairs.

Significant Planned Actions in the Next 6 Months:

- Complete electrical commodity installation
- Complete penetration seal installation
- Initiate component level testing of select LAB systems.

Issues:

No major issues at this time.

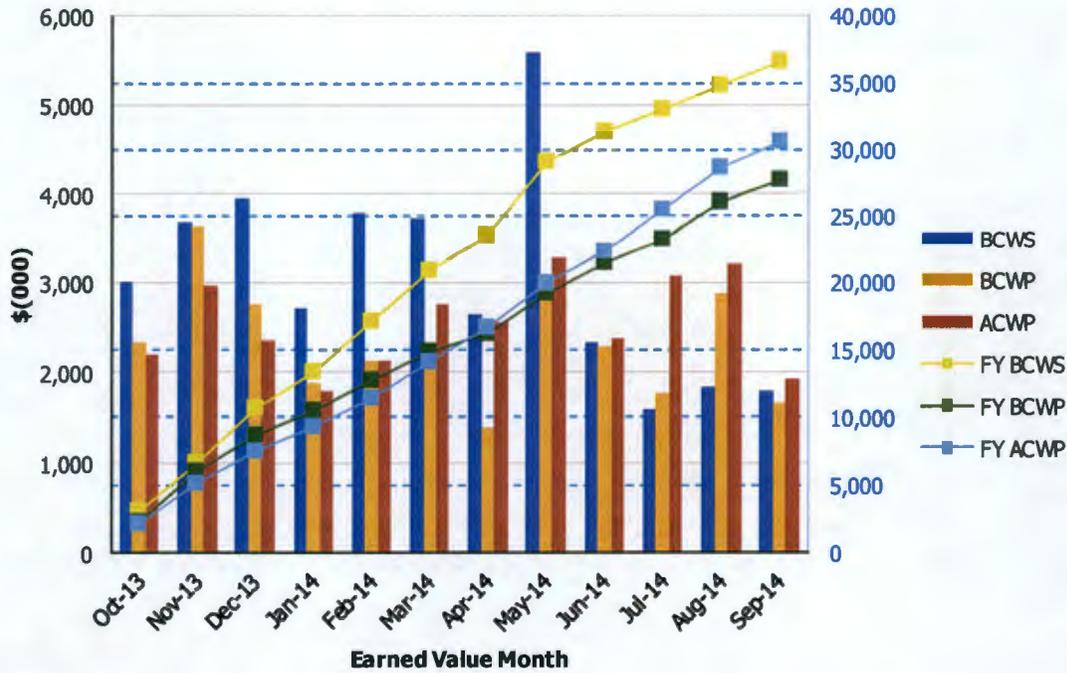
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: September 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	\$3,718	\$2,080	\$2,751	0.56	0.76	\$20,846	\$14,792	\$14,170	0.71	1.04
Apr 2014	\$2,642	\$1,382	\$2,552	0.52	0.54	\$23,488	\$16,174	\$16,722	0.69	0.97
May 2014	\$5,592	\$3,040	\$3,274	0.54	0.93	\$29,080	\$19,214	\$19,996	0.66	0.96
Jun 2014	\$2,330	\$2,291	\$2,375	0.98	0.96	\$31,410	\$21,505	\$22,371	0.68	0.96
Jul 2014	\$1,591	\$1,772	\$3,082	1.11	0.57	\$33,001	\$23,277	\$25,453	0.71	0.91
Aug 2014	\$1,847	\$2,871	\$3,202	1.55	0.90	\$34,848	\$26,148	\$28,655	0.75	0.91
Sep 2014	\$1,798	\$1,652	\$1,934	0.92	0.85	\$36,646	\$27,800	\$30,589	0.76	0.91
PTD	\$273,684	\$260,883	\$283,092	0.95	0.92					

**Waste Treatment Plant Project - (LBL) Percent Complete Status
Through September 2014**

(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Plant Operations Unallocated Dollars			Project Management & Shared Services 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	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete
Facilities																		
Low-Activity Waste	1,240.4	895.9	72%	329.7	276.7	84%	263.5	234.7	89%	464.1	367.8	79%	181.3	14.8	8%	1.9	1.9	100%
Analytical Lab	339.9	260.9	77%	73.7	61.8	84%	56.0	48.4	86%	138.5	131.1	95%	71.1	19.0	27%	0.6	0.6	100%
Balance of Facilities	562.9	359.6	64%	96.5	82.1	85%	74.7	54.3	73%	225.6	187.4	83%	165.5	35.1	21%	0.6	0.6	100%
Total LBL	2,143.3	1,516.3	71%	499.9	420.6	84%	394.2	337.4	86%	828.1	686.3	83%	418.0	69.0	17%	3.0	3.0	100%
PT/HLW/SS Percent Complete Status is invalid due to ~\$2B in Undistributed Budget, project is currently in a rebaseline effort these values will be updated once that effort is complete																		
High-Level Waste	1,078.4	1,059.6	98%	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
Pretreatment	1,635.2	1,599.1	98%	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
Shared Services	4,176.7	4,164.9	100%	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
Total HLW/PT/SS	6,890.3	6,823.6	99%	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
Undistributed Budget	2,078.3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a									
Total WTP	11,111.9	8,339.9	75%	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

Source: Preliminary WTP Contract Performance Report - Formil 1, Data for September 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. The percent complete values for the Total WTP are the current total LBL BCWP added to the current HLW/PT/SS BCWP values, then added to the UB value of remaining workscope for PT/HLW/SS. In March 2014, Project Controls and Project Management work scope was moved out of Shared Services control accounts into the facilities with new control accounts being set up in the facilities. These will now be seen under Project Management/Shared Services by facility.