
FINAL

Office of River Protection
Consent Decree 08-5085-FVS

Monthly Summary Report

October 2012

Office of River Protection
 Consent Decree 08-5085-FVS
 Monthly Summary Report
 October 2012

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Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2012				
D-00C-02L	Submit to Ecology and Oregon Monthly Summary Reports	10/31/11	10/25/11	Completed
D-00C-02M	Submit to Ecology and Oregon Monthly Summary Reports	11/30/11	11/21/11	Completed
D-00C-02N	Submit to Ecology and Oregon Monthly Summary Reports	12/31/11	12/27/11	Completed
D-00C-02O	Submit to Ecology and Oregon Monthly Summary Reports	01/31/12	01/25/12	Completed
D-00C-01D	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	01/31/12	01/27/12	Completed
D-00C-02P	Submit to Ecology and Oregon Monthly Summary Reports	02/29/12	02/22/12	Completed
D-00C-02Q	Submit to Ecology and Oregon Monthly Summary Reports	03/31/12	03/31/12	Completed
D-00C-02R	Submit to Ecology and Oregon Monthly Summary Reports	04/30/12	04/26/12	Completed
D-00C-02S	Submit to Ecology and Oregon Monthly Summary Reports	05/31/12	05/29/12	Completed
D-00C-02T	Submit to Ecology and Oregon Monthly Summary Reports	06/30/12	06/29/12	Completed
D-00C-02U	Submit to Ecology and Oregon Monthly Summary Reports	07/31/12	07/26/12	Completed
D-00C-01E	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	07/31/12	07/27/12	Completed
D-00C-02V	Submit to Ecology and Oregon Monthly Summary Reports	08/31/12	08/22/12	Completed
D-00C-02W	Submit to Ecology and Oregon Monthly Summary Reports	09/30/12	09/29/12	Completed
Fiscal Year 2013				
D-00C-02X	Submit to Ecology & State of Oregon Monthly Summary Report	10/31/2012		On-going
**D-00C-02Y	Submit to Ecology & State of Oregon Monthly Summary Report	11/30/2012		On-going
** Future Monthly Reports will be added as necessary to maintain a two-months ahead activity.				
D-00A-05	LAB Construction Substantially Complete	12/31/2012		On-going
D-00A-12	Steam Plant Construction Complete	12/31/2012		On-going
D-00A-21	Complete Construction of Structural Steel to EL. 37' in HLW Fac.	12/31/2012		On-going

Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2013 Continued				
D-00C-01F	Submit to Ecology & State of Oregon Semi-Annual Report	01/31/2013		On-going
D-00C-01G	Submit to Ecology & State of Oregon Semi-Annual Report	07/31/2013		On-going
D-006-00-A1	Provide State of Oregon Notice of Meetings	09/25/2013		On-going

Reports

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

D-00C-02 series, Submit to Ecology & State of Oregon Monthly Summary Report Documenting Progress During Previous Month, Due: End of Each Month, Status: On-going

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, Due: 9/25/2013, Status: On-going

D-006-00-A, Meet Approximately Every Three Years After Entry of Decree to review requirements of the Consent Decree, Due: 10/25/2013, Status: On-going

SST Retrieval Program

D-00B-01, Complete Retrieval of Tank Wastes from 10 Remaining SSTs in WMA-C, Due: 9/30/2014, Status: On-going

D-00B-01A thru J, Submit Tank Retrieval Complete Certification, Due: TBD

Pursuant to the requirement in Section IV-B-5 of the Consent Decree (CD) DOE must submit to Ecology a written certification that DOE has completed retrieval of a tank in accordance with the requirements of Appendix "C", Part 1, of the CD.

D-00B-02, Advise Ecology of the 9 SSTs from which Waste Will Be Retrieved by 2022, Due: 9/30/2014, Status: Completed on 08/24/2011.

D-00B-03, Initiate Startup of Retrieval in At Least 5 of 9 SSTs in D-00B-02, Due: 12/31/2017, Status: On-going

D-00B-04, Complete Retrieval of Tank Wastes from the 9 SSTs in D-00B-02, Due: 9/30/2022, Status: On-going

D-00B-04A thru I, Submit Tank Retrieval Complete Certification, Due: TBD

Significant Past Accomplishments:

1. Completed removal of legacy (long length) equipment in C-102.
2. Completed installation of the Modified Sluicing retrieval equipment including, slurry pumps and Extended Reach Sluicing Systems (ERSS) at both C-101 and C-102.
3. Continued construction activities for removal of equipment at C-105 to support large riser installation.
4. Completed hard heel retrieval of waste at C-109.
5. Completed installation of new HIHTLs between AN06A pit and POR014 valve box.

Significant Planned Activities in the Next Six Months:

1. Complete start up of the modified sluicing system in C-101.
2. Complete start up of the modified sluicing system in C-102.
3. Complete removal of equipment/pit at C-105.
4. Complete installation of the large riser in C-105.
5. Complete C-107 hard heel retrieval.
6. Submit retrieval certificates of completion for C-104, C-108, and C-109 to Ecology.

Issues:

None.

Tank Waste Retrieval Work Plan (TWRWP) Status

Tank	TWRWP	Expected Revisions	Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 7	In process	MRS (per 10/7/10 agreement, to be Modified Sluicing)	Chemical Dissolution	-
C-102	RPP-22393, Rev. 6A	Complete	Modified Sluicing	Chemical Dissolution	-
C-104	RPP-22393, Rev. 6A	Complete	Modified Sluicing	Chemical Dissolution	-
C-105	RPP-22520, Rev. 7	In process	MARS-V	High pressure water spray/M A RS platform	-
C-107	RPP-22393, Rev. 6A	Complete	MARS-S	MARS-High Pressure	-
C-108	RPP-22393, Rev. 6A	Complete	Modified Sluicing	Chemical Dissolution	-
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Dissolution	-
C-110	RPP-33116, Rev. 2	In process	Modified Sluicing	None (to be revised to In-Tank Vehicle)	-
C-111	RPP-37739, Rev. 1	In process	Modified Sluicing	None (to be revised to In-Tank Vehicle)	-
C-112	RPP-22393, Rev. 6A	In process	Modified Sluicing	Chemical Dissolution	-

Significant Accomplishments

None.

Significant Planned Activities in the Next 6 Months:

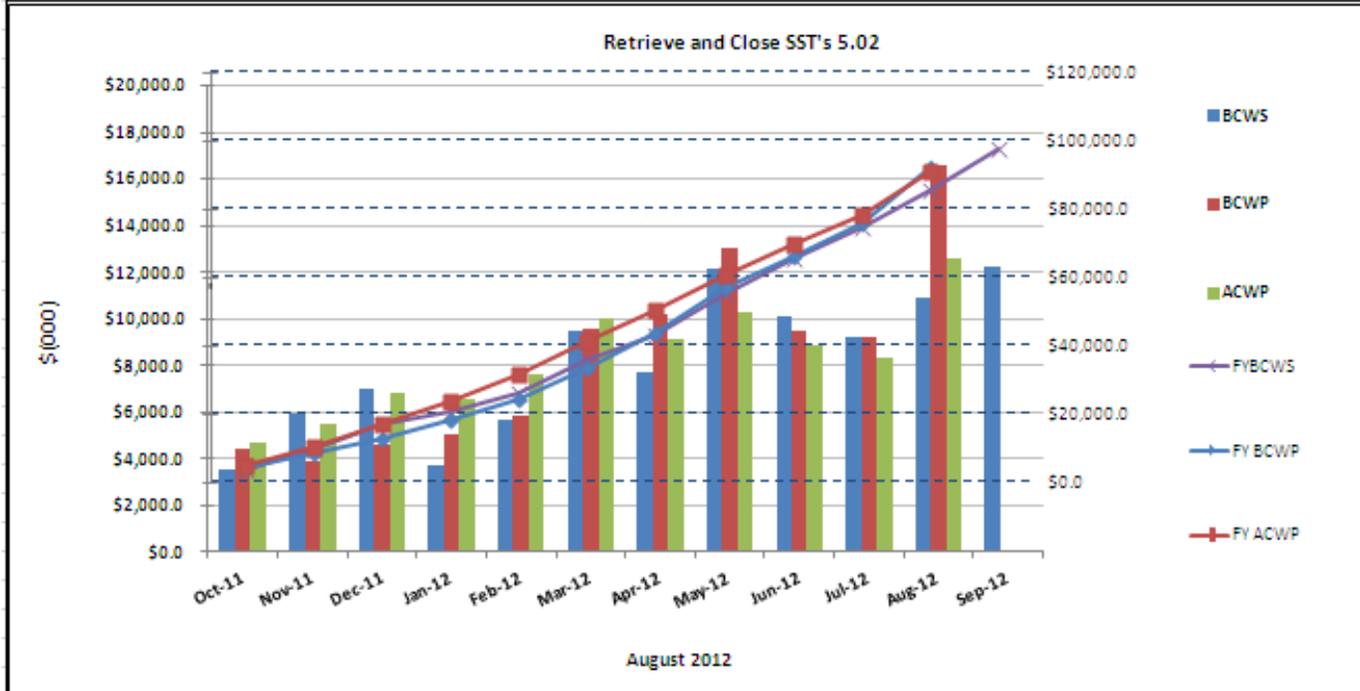
Work with Ecology on updates to TWRWPs RPP-22520, RPP-22393, RPP-33116, and RPP-37739 for tanks C-101, C-105, C-110, C-111, and C-112.

Issues:

None.

SST Retrieval Monthly and Fiscal Year EVMS Data

Office of River Protection (ORP-0014) Fiscal Year 2012 - Monthly Project Performance



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-11	\$3,580.0	\$4,402.2	\$4,709.1	1.23	0.93	\$3,580.0	\$4,402.2	\$4,709.1	1.23	0.93
Nov-11	\$5,940.2	\$3,864.7	\$5,462.1	0.65	0.71	\$9,520.2	\$8,266.9	\$10,171.2	0.87	0.81
Dec-11	\$7,038.0	\$4,650.9	\$6,844.4	0.66	0.68	\$16,558.2	\$12,917.8	\$17,015.6	0.78	0.76
Jan-12	\$3,732.7	\$5,070.3	\$6,601.7	1.36	0.77	\$20,290.9	\$17,988.1	\$23,617.3	0.89	0.76
Feb-12	\$5,629.0	\$5,885.6	\$7,633.1	1.05	0.77	\$25,919.9	\$23,873.7	\$31,250.4	0.92	0.76
Mar-12	\$9,484.6	\$9,596.9	\$9,999.9	1.01	0.96	\$35,404.5	\$33,470.6	\$41,250.3	0.95	0.81
Apr-12	\$7,717.2	\$10,237.2	\$9,151.0	1.33	1.12	\$43,121.7	\$43,707.8	\$50,401.3	1.01	0.87
May-12	\$12,189.8	\$13,026.7	\$10,318.8	1.07	1.26	\$55,311.5	\$56,734.5	\$60,720.1	1.03	0.93
Jun-12	\$10,070.2	\$9,493.6	\$8,872.0	0.94	1.07	\$65,381.7	\$66,228.1	\$69,592.1	1.01	0.95
Jul-12	\$9,234.0	\$9,191.1	\$8,374.3	1.00	1.10	\$74,615.7	\$75,419.2	\$77,966.4	1.01	0.97
Aug-12	\$10,876.4	\$16,566.2	\$12,596.6	1.52	1.32	\$85,492.1	\$91,985.4	\$90,563.0	1.08	1.02
Sep-12	\$12,201.8	\$0.0	\$0.0	0.00	0.00	\$97,693.9			0.00	0.00
CTD	\$339,699.0	\$340,909.1	\$333,995.8	1.00	1.02					

Single-Shell Tanks

Cost Variance 2,014.2K:

The favorable cost variance is primarily due to:

- Efficiencies achieved in C-107 operations using the new MARS and performance earned for completing this activity early
 - Efficiencies achieved in C-104 hard heel removal activities.
 - Efficiencies and progress earned for completing several activities (i.e., installation of transfer pump, two ERSS containment boxes, and splitter box)
- The favorable CV was partially offset by:

- Increased attention given to the AN-101 pump replacement has driven increased engineering reviews

Schedule Variance (\$1,238.6K):

The unfavorable schedule variance is primarily due to:

- Delay of the C-105 Retrieval System Installation

Waste Treatment and Immobilization Plant (WTP) Project

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

The WTP Project currently employs approximately 2391 Full-Time Equivalent (FTE) contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel, including 594 craft, 431 non-manual, and 118 subcontractor personnel FTEs working at the WTP construction site (all facilities). As of August 2012, the project was 66 percent complete overall, design and engineering was 87 percent complete, procurement was 71 percent complete, construction was 63 percent complete, and startup and commissioning was 16 percent complete.

The overall WTP Project schedule variance in August was a negative \$110 M; the cost variance was a negative \$55.5 M. The schedule variance was primarily related to Engineering Design, Plant Equipment; and the cost variance was primarily related to Engineering Design, Construction Crafts, Engineering Equipment and Bulk Material.

The following is the status of project matters through the end of August:

Significant Past Accomplishments:

- Released the initial long lead procurements for the UFP-2 array, 14' test vessel & steel heads and structural steel test stand/skid. (PT)
- Bechtel completed the Consent Decree Milestone (D-00A-21) "Complete Construction of Structural Steel to 37' in HLW Facility." (HLW)
- Issued mechanical handling conduit layout plan at elevation +3'. (LAW)
- Completed installation of the cathodic protection jumpers in the Steam Plant. (BOF)
- Completed RLD Vessel weld inspections (3 vessels), 2 require minor repairs, 1 requires more extensive weld repair and retest. (LAB)

Significant Planned Actions in the Next Six Months:

- Issue the final report documenting the results from the entrainment coefficient testing for the PVV system. (PT)
- Submit 37' Structural Steel milestone completion notification to Ecology. (HLW)
- Complete installation of melter power supplies. (LAW)
- Complete installation of Auto Sampling (ASX system). (LAW)
- Complete construction of the cooling tower. (BOF)
- Complete construction of the Steam Plant. (BOF)
- Complete mechanical installation of autosampling system (LAB)

Issues:

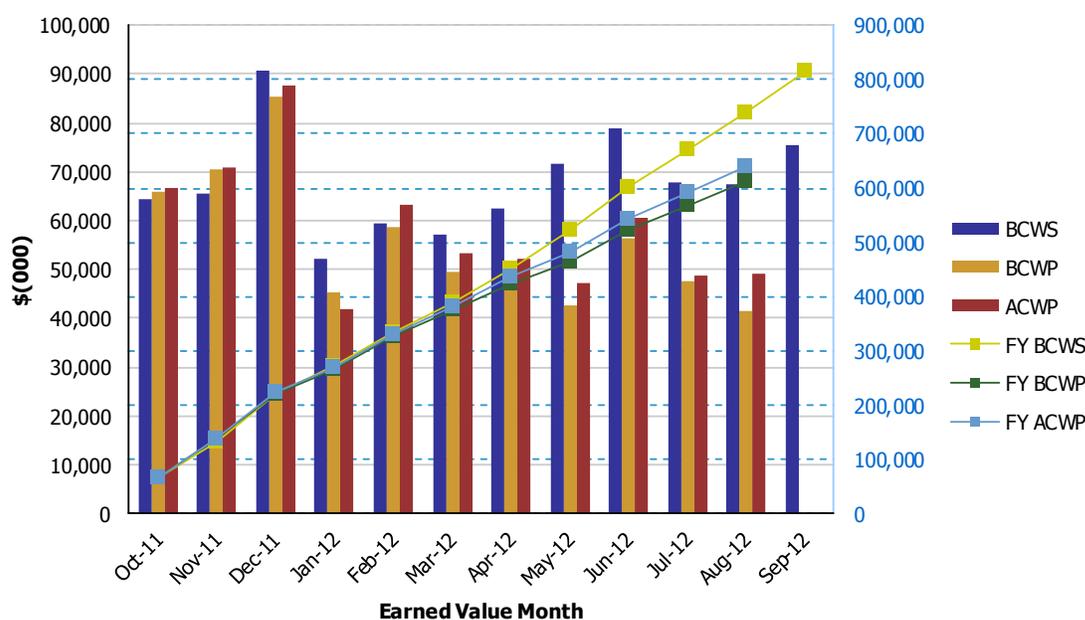
- Technical issues relevant to the PTF and HLW facilities include, among others, pulse jet mixers, corrosion/erosion in piping and vessels, hydrogen accumulation, and waste feed issues.
- Various issues may have potential impacts on the HLW schedule. This includes risks that the project has already realized and the plans for addressing the remaining risks in the HLW.
- There are no significant technical issues in LAW, LAB or BOF at this time.

Data Set: FY 2012 Earned Value Data

Data as of: August 2012

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 2011	\$64,411	\$65,869	\$66,670	1.02	0.99	\$64,411	\$65,869	\$66,670	1.02	0.99
Nov 2011	\$65,647	\$70,625	\$70,879	1.08	1.00	\$130,058	\$136,494	\$137,549	1.05	0.99
Dec 2011	\$90,699	\$85,246	\$87,845	0.94	0.97	\$220,757	\$221,740	\$225,394	1.00	0.98
Jan 2012	\$52,248	\$45,149	\$41,816	0.86	1.08	\$273,005	\$266,889	\$267,210	0.98	1.00
Feb 2012	\$59,271	\$58,579	\$63,201	0.99	0.93	\$332,276	\$325,468	\$330,411	0.98	0.99
Mar 2012	\$57,285	\$49,398	\$53,161	0.86	0.93	\$389,561	\$374,866	\$383,572	0.96	0.98
Apr 2012	\$62,378	\$47,517	\$52,149	0.76	0.91	\$451,939	\$422,383	\$435,721	0.93	0.97
May 2012	\$71,778	\$42,759	\$47,365	0.60	0.90	\$523,717	\$465,142	\$483,086	0.89	0.96
Jun 2012	\$78,891	\$56,530	\$60,446	0.72	0.94	\$602,608	\$521,672	\$543,532	0.87	0.96
Jul 2012	\$67,735	\$47,504	\$48,727	0.70	0.97	\$670,343	\$569,176	\$592,259	0.85	0.96
Aug 2012	\$67,589	\$41,568	\$48,946	0.62	0.85	\$737,932	\$610,744	\$641,205	0.83	0.95
Sep 2012	\$75,468			0.00		\$813,399			0.00	
PTD	\$7,201,680	\$7,091,698	\$7,147,230	0.98	0.99					

PRETREATMENT (PT) FACILITY

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

The Pretreatment (PT) Facility will separate radioactive tank waste into High Level Waste (HLW) and Low-Activity Waste (LAW) fractions and transfer each waste type to the respective vitrification facility for immobilization. As of August 2012, the PT Facility was 54 percent complete overall, with engineering design 81 percent complete, procurement 53 percent complete, construction 42 percent complete, and startup and commissioning 4 percent complete.

Significant Past Accomplishments:

The key on-going activities in Pretreatment are related to the resolution of the Pretreatment Vessel Vent Process (PVP) system design, Hydrogen in Piping and Ancillary Vessels (HPAV), erosion/corrosion and vessel mixing technical issues.

The medium scale testing for the Process Vessel Vent (PVV) system design entrainment coefficient was completed and the report documenting the results was issued in September 2012. The preliminary results for both the small scale and medium scale tests resulted in an entrainment coefficient smaller than expected, which supports less extensive modification to the PVV system design. Dismantling of the test facility has begun.

The Hydrogen Generation Rate (HGR) calculations for HLP-17, HLP-12, HLP-09 and HFP-06 have been completed and will be issued after validation and verification (V&V) of the software. The remaining calculations in support of resolving the HPAV issue are currently planned to be completed in November 2012.

The implementation plan for the Preliminary Design Safety Analysis (PDSA) update, which will integrate the nuclear safety activities with the vessel design confirmation activities, is scheduled to be issued in September 2012.

The initial long lead procurements for the UFP-2 array, 14' test vessel & steel heads and structural steel test stand/skid have been released in support of the construction of the facility for the 14 foot vessel testing.

A revision to the 2010-2 Implementation Plan (IP) is in progress and will address the changes in strategy, approach and expectations. Due to the potential for major changes, the updated 2010-2 IP is not expected to be issued to the DNFSB by December 2012 as originally planned.

The revised erosion/corrosion action plan was issued in August 2012, and a preliminary schedule to complete the items in the action plan will be issued in September 2012. A corrosion test scoping document is expected to be issued in December 2012 to address the material selection issue.

The NQA-1 Computational Fluid Dynamics (CFD) Verification and Validation (V&V) tests will start after the resolution of DOE/NETL comments on the test plan. DOE and BNI have met with the NETL team and have established bi-weekly calls to review comments. Cloud height informational testing has been completed and user defined function (UDF) informational testing has been initiated.

Significant Planned Actions in the Next Six Months:

- Issue the final report documenting the results from the entrainment coefficient testing for the PVV system
- Complete Hazards and Operability Analysis (HAZOP) for (PVP) system
- Issue the implementation plan for the PDSA update
- Complete the HPAV HGR rate calculations
- Issue the technical scaling selection basis document
- Submit the 2010-2 Implementation Plan revision
- Issue the corrosion test scoping document

Issues:

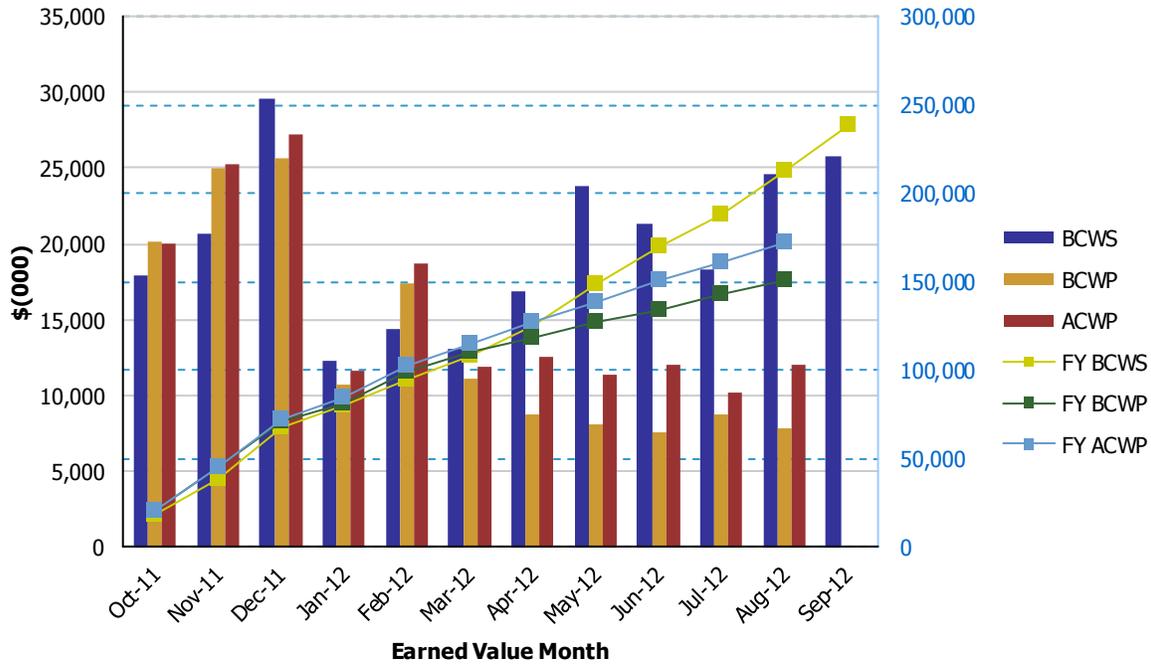
* Technical issues relevant to the PTF and HLW facilities include, among others, pulse jet mixers, corrosion/erosion in piping and vessels, hydrogen accumulation, and waste feed issues.

Data Set: FY 2012 Earned Value Data

Data as of: August 2012

**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 2011	\$17,935	\$20,110	\$20,000	1.12	1.01	\$17,935	\$20,110	\$20,000	1.12	1.01
Nov 2011	\$20,616	\$24,945	\$25,222	1.21	0.99	\$38,551	\$45,055	\$45,222	1.17	1.00
Dec 2011	\$29,580	\$25,673	\$27,175	0.87	0.94	\$68,131	\$70,728	\$72,397	1.04	0.98
Jan 2012	\$12,292	\$10,751	\$11,583	0.87	0.93	\$80,423	\$81,479	\$83,980	1.01	0.97
Feb 2012	\$14,371	\$17,367	\$18,675	1.21	0.93	\$94,794	\$98,846	\$102,655	1.04	0.96
Mar 2012	\$13,101	\$11,054	\$11,874	0.84	0.93	\$107,895	\$109,900	\$114,529	1.02	0.96
Apr 2012	\$16,877	\$8,730	\$12,488	0.52	0.70	\$124,772	\$118,630	\$127,017	0.95	0.93
May 2012	\$23,773	\$8,080	\$11,320	0.34	0.71	\$148,545	\$126,710	\$138,337	0.85	0.92
Jun 2012	\$21,271	\$7,567	\$12,061	0.36	0.63	\$169,816	\$134,277	\$150,398	0.79	0.89
Jul 2012	\$18,275	\$8,767	\$10,178	0.48	0.86	\$188,091	\$143,044	\$160,576	0.76	0.89
Aug 2012	\$24,563	\$7,773	\$12,063	0.32	0.64	\$212,654	\$150,817	\$172,639	0.71	0.87
Sep 2012	\$25,838			0.00		\$238,491			0.00	
PTD	\$1,455,827	\$1,400,315	\$1,393,252	0.96	1.01					

HIGH-LEVEL WASTE (HLW) FACILITY

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

The High Level Waste (HLW) Facility will receive the separated high-level waste concentrate from the Pretreatment (PT) Facility. This concentrate will be blended with glass formers and converted into molten glass in one of the two HLW melter and then poured into cylindrical stainless steel canisters. After cooling, the canisters will be sealed and decontaminated prior to shipment to interim storage. As of August 2012, the HLW Facility is 60 percent complete overall, with engineering design 87 percent complete, procurement 77 percent complete, construction 43 percent complete, and startup and commissioning is 4 percent complete.

Significant Past Accomplishments:

Bechtel has completed the Consent Decree Milestone (D-00A-21) "Complete Construction of Structural Steel to 37' in HLW Facility." They are currently compiling the required documentation. The consent decree compliance date is December 31, 2012. ORP is currently conducting a surveillance to ensure that the milestone is complete and will submit a formal notification to Ecology when complete.

Testing was performed to determine the performance of the radial HEPA filter media when exposed to combined conditions of filter loading, temperature and humidity. The testing showed failure under combined conditions. A strategy for resolving the HEPA filter requirements has been developed. Bechtel is working with potential vendors to gain interest in producing prototype filters that will meet operating conditions. Once the vendors are selected, the redesigned filters will be tested and the best option selected. The selected design will go through qualifying testing for use in WTP.

75% of the concrete has been poured in the facility with 58ft elevation walls continuing and a majority of the 37ft slabs complete. Two walls and one slab were placed in August.

Fabrication of Plant Wash and Drain Vessel (RLD-VSL-08) in England was completed, and it was delivered to the Mid-Columbia Engineering Facility in April. Further inspection by Bechtel noted a number of weld deficiencies. Bechtel and DOE met to discuss a path forward and Bechtel and the vendor are working to develop a detailed repair plan.

Bechtel is performing a Reliability Validation Process (RVP) to address the DOE level 1 finding on Systemic Integrated Management Performance Concerns. During the RVP, Bechtel will be conducting in-depth system reviews on critical systems. The systems under review for HLW are Radioactive Liquid Waste Disposal (RLD), Melter Offgas Treatment Process (HOP), and Melter Feed Process (HFP). Most work is on hold for these systems. The project completed factory

acceptance testing on Thermal Catalytic Oxidizers (TCO) which are being fabricated in Colorado and are scheduled for delivery to the site in April 2013. Delivery is delayed due to the RVP review of the HOP system.

Significant Planned Actions in the Next Six Months:

- Submit 37' Structural Steel milestone completion notification to Ecology
- Review supplier prequalification packages to determine bidder list for HEPA filter redesign
- Award contract(s) for prototype design/fabrication for HEPA filter redesign
- Complete RVP reviews
- Complete the first of the two Authorization Basis Amendment Requests (ABARs) to support Preliminary Documented Safety Analysis (PDSA) upgrade – focus of the first ABAR is to incorporate changes in the facility and control descriptions.

Issues:

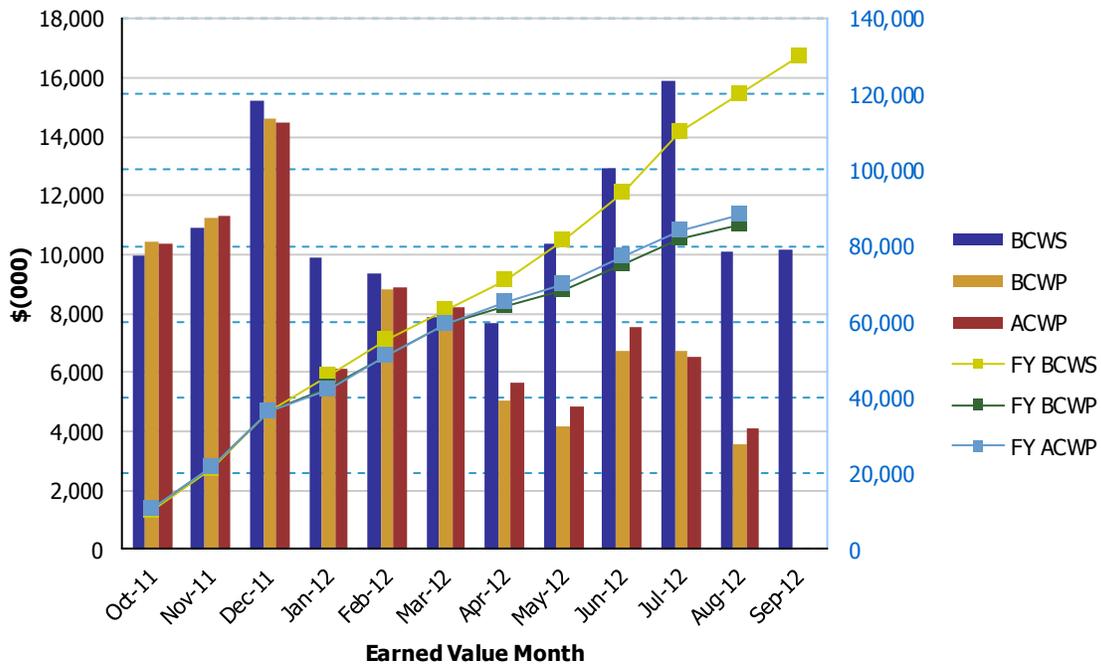
* Various issues may have potential impacts on the HLW schedule. This includes risks that the project has already realized and the plans for addressing the remaining risks in the HLW.

Data Set: FY 2012 Earned Value Data

Data as of: August 2012

**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 2011	\$9,953	\$10,437	\$10,368	1.05	1.01	\$9,953	\$10,437	\$10,368	1.05	1.01
Nov 2011	\$10,920	\$11,224	\$11,295	1.03	0.99	\$20,873	\$21,661	\$21,663	1.04	1.00
Dec 2011	\$15,209	\$14,578	\$14,472	0.96	1.01	\$36,082	\$36,239	\$36,135	1.00	1.00
Jan 2012	\$9,878	\$6,187	\$6,142	0.63	1.01	\$45,960	\$42,426	\$42,277	0.92	1.00
Feb 2012	\$9,383	\$8,807	\$8,891	0.94	0.99	\$55,343	\$51,233	\$51,168	0.93	1.00
Mar 2012	\$7,900	\$7,901	\$8,221	1.00	0.96	\$63,243	\$59,134	\$59,389	0.94	1.00
Apr 2012	\$7,652	\$5,055	\$5,676	0.66	0.89	\$70,895	\$64,189	\$65,065	0.91	0.99
May 2012	\$10,364	\$4,150	\$4,849	0.40	0.86	\$81,259	\$68,339	\$69,914	0.84	0.98
Jun 2012	\$12,929	\$6,691	\$7,502	0.52	0.89	\$94,188	\$75,030	\$77,416	0.80	0.97
Jul 2012	\$15,888	\$6,709	\$6,541	0.42	1.03	\$110,076	\$81,739	\$83,957	0.74	0.97
Aug 2012	\$10,113	\$3,578	\$4,092	0.35	0.87	\$120,189	\$85,317	\$88,049	0.71	0.97
Sep 2012	\$10,133			0.00		\$130,321			0.00	
PTD	\$949,681	\$916,943	\$913,107	0.97	1.00					

LOW-ACTIVITY WASTE (LAW) FACILITY

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

The Low-Activity Waste (LAW) Facility will vitrify LAW from the Pretreatment (PT) Facility. Waste 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 on the Hanford Site in the Integrated Disposal Facility. As of August 2012, the LAW Facility is 70 percent complete overall, with engineering design 85 percent complete, procurement 89 percent complete, construction 73 percent complete, and startup and commissioning is 5 percent complete.

Significant Past Accomplishments:

Electrical systems design continues in support of all equipment, controls, and lighting throughout the facility. The system design document and system software acceptance test for the Autosampling (ASX), Low-Pressure Steam (LPS), High-Pressure Steam (HPS) and Steam Condensate Water (SCW), C1 Ventilation (C1V), C2 Ventilation (C2V) and C5 Ventilation (C5V) systems were issued.

Updated system design documents for the LAW Container Export Handling (LEH) and LAW Container Pour Handling (LPH) were issued. New configuration data indices were issued for the LPS and Process Service Water (PSW) systems. Confirmed calculation was issued for the Erosion/Corrosion Evaluation for High and Low Pressure LAW Steam Lines. Piping isometric drawings for the LAW Melter Feed Process (LFP) system, LAW Secondary Offgas/Vessel Vent Process System (LVP) system, the ASX system, and the Radioactive Liquid Waste Disposal (RLD) system were issued. Piping support drawings were issued for the Plant Service Air (PSA), RLD system, the Plant Cooling Water (PCW) systems and the LVP system.

Procurement activities for the LAW facility are currently focused on the LVP system components. Engineering review of vendor calculations and vendor interactions continued as a major emphasis during the ongoing procurement of LVP system components. The first of two shipments for the utility crane was received which will be used to support upcoming refractory installations. Temperature transmitter for the LPS system and fabricated pipe stools were received.

The primary areas of construction focus continued to be LAW facility partition wall installation and equipment installation for the Container Finishing Handling (LFH) system. Installation of the decontamination manipulators, finishing line dual-rail hoists, and the trolley/bogie cars for the LFH system continued.

Construction activities were initiated to install instrument tubing at elevation -21' for the Atmospheric Reference Ventilation (AVR) system and subcontractor crews began applying coatings to Chilled Water (CHW) system piping at elevation -21'. Installed duct to Multiple Overblow (MOB) units to support environmental control for upcoming melter refractory

installations. Other on-going construction activities included installation of instrument tubing, scheduled conduit in various planning areas along with unscheduled lighting conduit at elevation +48'. Electrical work activities continued on LAW Container Pour Handling (LPH) system crane in the buffer storage room and LAW Container Finishing Handling (LFH) system hoist at elevation +28'.

Installation activities were completed for sealing melter bay #3 floor openings leading to elevation -21' with steel plate shielding and framing structural steel in the fire riser room.

Issued mechanical handling conduit layout plan at elevation +3'.

Received 18 tons of structural steel.

Comments were resolved for software functional requirements for the following systems:

- LRH – LAW Container Receipt Handling System
- LVP – LAW Secondary Offgas/Vessel Vent Process System
- MHJ – Mechanical Handling Control System

Comments were resolved for safety software functional requirements for the following system:

- LVP – LAW Secondary Offgas/Vessel Vent Process System

Significant Planned Actions in the Next Six Months:

- Complete installation of melter power supplies
- Complete installation of Auto Sampling (ASX) system
- Receive HEPA Pre-heaters for LVP system
- Receive HEPA Housings for LVP system
- Receive Thermal Catalytic Oxidizer (TCO) for LVP system

Issues:

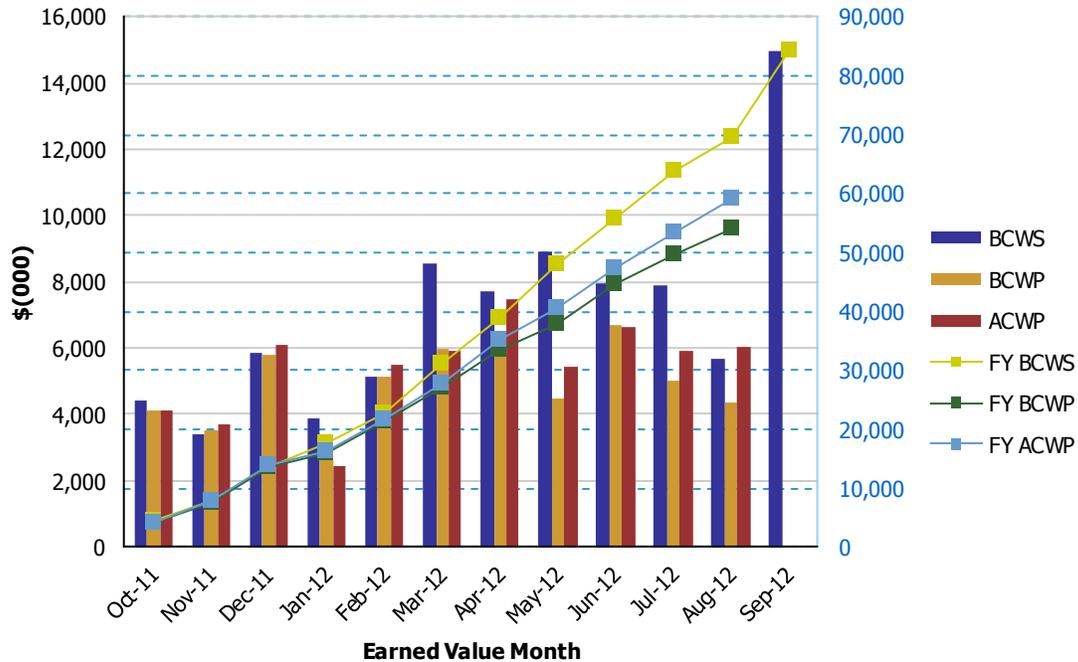
No major issues at this time.

Data Set: FY 2012 Earned Value Data

Data as of: August 2012

**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 2011	\$4,415	\$4,115	\$4,104	0.93	1.00	\$4,415	\$4,115	\$4,104	0.93	1.00
Nov 2011	\$3,404	\$3,510	\$3,704	1.03	0.95	\$7,819	\$7,625	\$7,808	0.98	0.98
Dec 2011	\$5,827	\$5,807	\$6,123	1.00	0.95	\$13,646	\$13,432	\$13,931	0.98	0.96
Jan 2012	\$3,886	\$2,617	\$2,412	0.67	1.08	\$17,532	\$16,049	\$16,343	0.92	0.98
Feb 2012	\$5,140	\$5,117	\$5,472	1.00	0.94	\$22,672	\$21,166	\$21,815	0.93	0.97
Mar 2012	\$8,531	\$5,960	\$5,900	0.70	1.01	\$31,203	\$27,126	\$27,715	0.87	0.98
Apr 2012	\$7,735	\$6,351	\$7,469	0.82	0.85	\$38,938	\$33,477	\$35,184	0.86	0.95
May 2012	\$8,906	\$4,481	\$5,425	0.50	0.83	\$47,844	\$37,958	\$40,609	0.79	0.93
Jun 2012	\$7,945	\$6,685	\$6,619	0.84	1.01	\$55,789	\$44,643	\$47,228	0.80	0.95
Jul 2012	\$7,905	\$5,017	\$5,930	0.63	0.85	\$63,694	\$49,660	\$53,158	0.78	0.93
Aug 2012	\$5,690	\$4,374	\$6,017	0.77	0.73	\$69,384	\$54,034	\$59,175	0.78	0.91
Sep 2012	\$14,932			0.00		\$84,317			0.00	
PTD	\$705,968	\$691,295	\$741,711	0.98	0.93					

BALANCE OF FACILITIES (BOF)

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

The Balance of Facilities (BOF) provides services and utilities to support operation of the main production facilities – PT, HLW, LAW, and LAB. As of August 2012, the BOF is 51 percent complete overall, with engineering design 74 percent complete, procurement 52 percent complete, construction 65 percent complete, and startup and commissioning is 10 percent complete.

Significant Past Accomplishments:

Oversight efforts are focused on facility completion and turnover to the startup organization. As necessary to support facility completion, the WTP contractor initiates a weekly or bi-weekly meeting approximately 12 months prior to the scheduled turnover date. The meetings focus on schedule reviews and punch list development for the remaining construction activities. Regular meetings are currently being held for the WTP site switchgear buildings (87 and 91) and the Chiller Compressor Plant (CCP).

Recent accomplishments for the BOF team are:

- Began excavation for electrical conduit between WTP switchgear building 87 and the LAB
- Continued installing pipe for the Plant Wash and Disposal (PWD) system south of the PTF
- Completed installation of the cathodic protection jumpers in the Steam Plant
- Continued installing piping and hangers in the Glass Former Storage Facility
- Issued new start-up functional test procedure for Building 87 Water Supply Flush Functional Test

Significant Planned Actions in the Next Six Months:

- Complete construction of the Steam Plant
- Complete construction of Cooling Tower
- Complete Construction of the Chiller Compressor Plant
- Complete construction of BOF switchgear building 91
- Turnover WTP Switchgear Building 87 from construction to the startup organization

Issues:

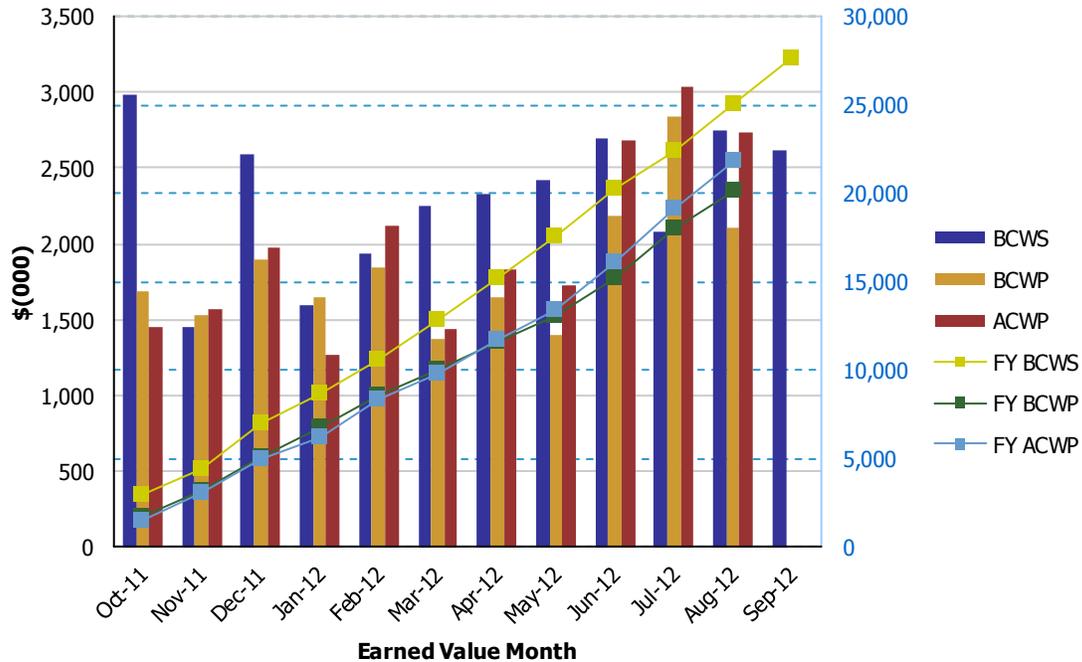
No major issues.

Data Set: FY 2012 Earned Value Data

Data as of: August 2012

**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 2011	\$2,980	\$1,685	\$1,454	0.57	1.16	\$2,980	\$1,685	\$1,454	0.57	1.16
Nov 2011	\$1,455	\$1,524	\$1,564	1.05	0.97	\$4,435	\$3,209	\$3,018	0.72	1.06
Dec 2011	\$2,594	\$1,895	\$1,981	0.73	0.96	\$7,029	\$5,104	\$4,999	0.73	1.02
Jan 2012	\$1,597	\$1,652	\$1,262	1.03	1.31	\$8,626	\$6,756	\$6,261	0.78	1.08
Feb 2012	\$1,939	\$1,841	\$2,123	0.95	0.87	\$10,565	\$8,597	\$8,384	0.81	1.03
Mar 2012	\$2,248	\$1,376	\$1,444	0.61	0.95	\$12,813	\$9,973	\$9,828	0.78	1.01
Apr 2012	\$2,331	\$1,651	\$1,835	0.71	0.90	\$15,144	\$11,624	\$11,663	0.77	1.00
May 2012	\$2,421	\$1,399	\$1,725	0.58	0.81	\$17,565	\$13,023	\$13,388	0.74	0.97
Jun 2012	\$2,698	\$2,188	\$2,685	0.81	0.81	\$20,263	\$15,211	\$16,073	0.75	0.95
Jul 2012	\$2,075	\$2,838	\$3,040	1.37	0.93	\$22,338	\$18,049	\$19,113	0.81	0.94
Aug 2012	\$2,755	\$2,106	\$2,730	0.76	0.77	\$25,093	\$20,155	\$21,843	0.80	0.92
Sep 2012	\$2,615			0.00		\$27,708			0.00	
PTD	\$278,936	\$272,267	\$270,900	0.98	1.01					

ANALYTICAL LABORATORY

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

The Analytical Laboratory (LAB) will support WTP operations by analyzing feed, vitrified waste, and effluent streams. As of August 2012, the LAB is 56 percent complete overall, with engineering design 83 percent complete, procurement 78 percent complete, construction 88 percent complete, and startup and commissioning is 10 percent complete.

Significant Past Accomplishments:

The project team continues to focus on the LAB Construction Substantially Complete milestone. Daily meetings are held to evaluate construction progress and challenges that arise. Major structures of the building are in place, including the interior partition walls which segregate the various analytical stations for LAW sample analysis. Within the individual analytical areas, detail/finishing work continues with emphasis on the installation of commodities to support laboratory cabinets and analytical equipment. Key areas of focus for the LAB team are listed below:

- Completed RLD Vessel weld inspections (3 vessels), 2 require minor repairs, 1 requires more extensive weld repair and retest.
- During BNI review of Intermech Design for Seismic Story Drift, 21 locations were identified as requiring flex joints and possibly some hanger/support modifications.
- Replacement of damaged valve internals has been completed.
- Installing crane #13 electrical for control panels and festoon cables in the south end of the hot cell

Significant Planned Actions in the Next Six Months:

- Complete mechanical installation of Autosampling System
- Install Hot Cell import/export motors
- Progress Analytical Laboratory Construction to “Substantially Complete”

Issues:

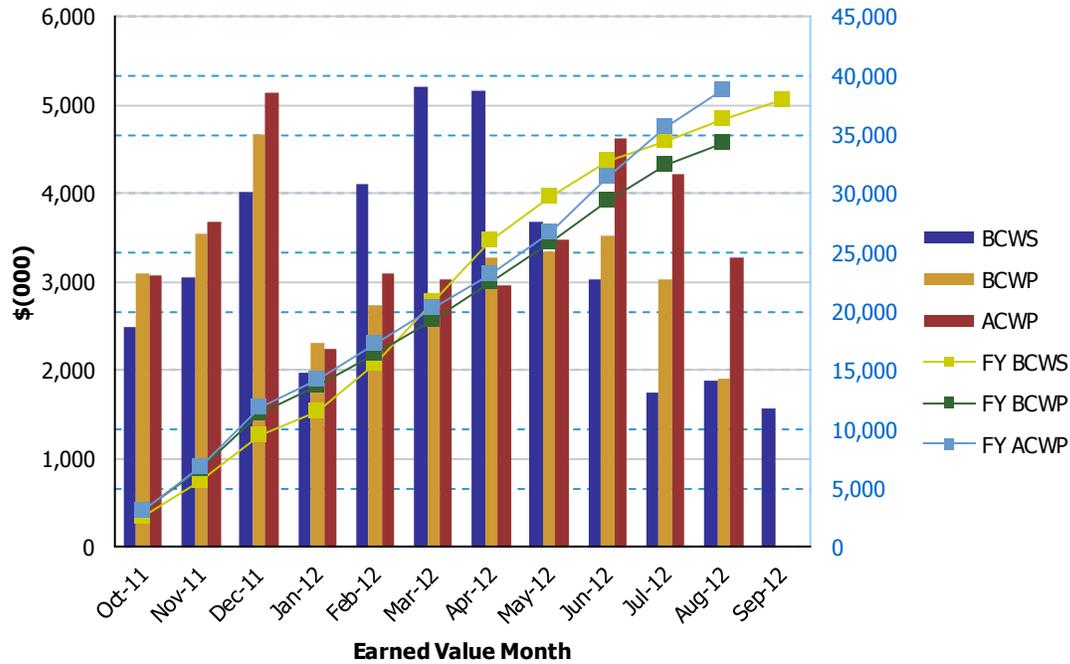
No issues to report.

Data Set: FY 2012 Earned Value Data

Data as of: August 2012

**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 2011	\$2,489	\$3,092	\$3,063	1.24	1.01	\$2,489	\$3,092	\$3,063	1.24	1.01
Nov 2011	\$3,040	\$3,551	\$3,680	1.17	0.96	\$5,529	\$6,643	\$6,743	1.20	0.99
Dec 2011	\$4,005	\$4,676	\$5,128	1.17	0.91	\$9,534	\$11,319	\$11,871	1.19	0.95
Jan 2012	\$1,970	\$2,318	\$2,242	1.18	1.03	\$11,504	\$13,637	\$14,113	1.19	0.97
Feb 2012	\$4,113	\$2,725	\$3,091	0.66	0.88	\$15,617	\$16,362	\$17,204	1.05	0.95
Mar 2012	\$5,203	\$2,860	\$3,036	0.55	0.94	\$20,820	\$19,222	\$20,240	0.92	0.95
Apr 2012	\$5,167	\$3,265	\$2,954	0.63	1.11	\$25,987	\$22,487	\$23,194	0.87	0.97
May 2012	\$3,685	\$3,349	\$3,486	0.91	0.96	\$29,672	\$25,836	\$26,680	0.87	0.97
Jun 2012	\$3,020	\$3,531	\$4,627	1.17	0.76	\$32,692	\$29,367	\$31,307	0.90	0.94
Jul 2012	\$1,756	\$3,035	\$4,227	1.73	0.72	\$34,448	\$32,402	\$35,534	0.94	0.91
Aug 2012	\$1,887	\$1,915	\$3,278	1.01	0.58	\$36,335	\$34,317	\$38,812	0.94	0.88
Sep 2012	\$1,572			0.00		\$37,906			0.00	
PTD	\$206,137	\$202,786	\$219,581	0.98	0.92					

Waste Treatment Plant Project - Percent Complete Status
Through August 2012

(Dollars - Millions)	Overall Facility Percent Complete			Design/Engineering			Procurement			Construction			Startup & Plant Operations		
	Unallocated Dollars	Performance Measurement Baseline (PMB)	% Complete	Unallocated Dollars	Performance Measurement Baseline (PMB)	% Complete	Unallocated Dollars	Performance Measurement Baseline (PMB)	% Complete	Unallocated Dollars	Performance Measurement Baseline (PMB)	% Complete	Unallocated Dollars	Performance Measurement Baseline (PMB)	% Complete
Facilities	Budgeted Cost of Work Performed (BCWP)	Budgeted Cost of Work Performed (BCWP)	% Complete	Budgeted Cost of Work Performed (BCWP)	Budgeted Cost of Work Performed (BCWP)	% Complete	Budgeted Cost of Work Performed (BCWP)	Budgeted Cost of Work Performed (BCWP)	% Complete	Budgeted Cost of Work Performed (BCWP)	Budgeted Cost of Work Performed (BCWP)	% Complete	Budgeted Cost of Work Performed (BCWP)	Budgeted Cost of Work Performed (BCWP)	% Complete
Low-Activity Waste	993.7	691.3	70%	250.8	214.4	85%	242.1	214.2	89%	350.5	255.7	73%	150.3	7.0	5%
Analytical Lab	360.6	202.8	56%	57.9	48.0	83%	56.2	44.1	78%	109.9	96.4	88%	136.6	14.3	10%
Balance of Facilities	538.9	272.3	51%	89.0	66.1	74%	81.4	42.0	52%	231.8	151.0	65%	136.7	13.2	10%
High-Level Waste	1,516.3	916.9	60%	355.9	310.9	87%	458.2	353.4	77%	582.3	247.8	43%	120.0	4.8	4%
Pretreatment	2,588.5	1,400.3	54%	774.0	627.0	81%	713.5	377.6	53%	914.6	388.6	42%	186.4	7.1	4%
Shared Services	4,720.2	3,608.1	76%	1,005.1	925.7	92%	471.7	411.0	87%	1,432.9	1,139.0	79%	455.9	140.4	31%
Total WTP w/o UB	10,718.2	7,091.7	66%	2,532.6	2,192.1	87%	2,023.2	1,442.3	71%	3,621.9	2,278.6	63%	1,185.8	186.7	16%
Undistributed Budget	0.3	n/a	n/a	n/a	n/a	n/a									
Total WTP	10,718.5	7,091.7	66%	2,532.6	2,192.1	87%	2,023.2	1,442.3	71%	3,621.9	2,278.6	63%	1,185.8	186.7	16%

Source: Preliminary WTP Contract Performance Report - Format 1, Data for August 2012

Note: Starting with the June 2009 report, facility construction percent complete values decreased significantly, and a couple of Design/Engineering facility percent complete values went down as well. The decrease in values was tied to Phase I of BWS elimination of WBS 1.08, Plant Wide EPC; scope from WBS 1.08 was moved to facilities as appropriate or to WBS 1.90, Shared Services. This resulted in an increase in the facility construction budgets, which has correspondingly reduced the to-date percent complete values. In July 2010 the allocation of 1.90 to the facilities was removed to show true facility percent complete. This report does not show the LOE budgets that are not associated with a specific EPC function, these include, Finance, Project Management, etc, but are included in the total Overall Facility Percent Complete for Shared Service.