

**FINAL**

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

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Milestone	Title	Due Date	Completion Date	Status
<b>Fiscal Year 2012</b>				
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-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		On-going
**D-00C-02T	Submit to Ecology and Oregon Monthly Summary Reports	05/31/12		On-going
** Future Monthly Summary Reports will be added as necessary to maintain a two-months ahead activity.				
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-01E	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	07/31/12		On-going
<b>Fiscal Year 2013</b>				
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
D-00C-01F	Submit to Ecology & State of Oregon Semi-Annual Report	1/31/2013		On-going
D-00C-01G	Submit to Ecology & State of Oregon Semi-Annual Report	7/31/2013		On-going

Milestone	Title	Due Date	Completion Date	Status
D-006-00-A1	Provide State of Oregon Notice of Meetings	9/25/2013		On-going

## Reports

**D-00C-01 series, Submit to Ecology & State of Oregon Semi-Annual Report, Due:** Semi-Annually – January 31<sup>st</sup> and July 31<sup>st</sup> 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. Tanks currently in retrieval status are C-107, C-108, C-109, C-110, C-104, C-111, and C-112.

**D-00B-02, Advise Ecology of the 9 SST's from which Waste Will Be Retrieved by 2022, Due:** 9/30/2014, Status: Complete. ORP and Ecology began meeting in December 2010 to discuss the selection of the next nine tanks from which waste will be retrieved and why ORP believes those nine tanks should be in A/AX Farms. The last meeting was held on August 24, 2011. At this meeting, Ecology provided ORP with the guidance that Ecology believes the requirements of Project B-2 of the Consent Decree have been met.

**D-00B-03, Initiate Startup 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. Continued design and procurement for C-101 & 102 bulk retrieval systems.
2. Continued field activities for installation of ventilation system and removal of legacy equipment in C-101 and C-102.
3. Completed removal of thermocouple from C-104 and installed the sampling sleeve.
4. Completed procurement for C-104 Hard Heel Removal equipment.
5. Continued construction activities for removal of equipment at C-105, to support Large Riser installation.
6. Installed equipment for C-109 Hard Heel Removal equipment.
7. Completed installation and testing of AN-106 pump replacement.
8. Completed sampling (data gathering) efforts on C-111 using a Ramon Spectrometer, as a prototype.
9. Completed C-112 bulk retrieval operations.

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

1. Complete construction/installation of the modified sluicing system in C-101.
2. Complete installation of the C-102 ventilation system and removal of legacy equipment.
3. Initiate start up of Hard Heel Removal system for C-104.
4. Complete installation of the C-105 ventilation system and removal of equipment.
5. Complete installation of the Large Riser in C-105.

6. Restart the C-107 retrieval system, complete C-107 bulk retrieval.
7. Initiate hard heel retrieval of C-109.
8. Complete discussions with Ecology on the retrieval certificate of completion.

**Issues:**

None.

**Tank Waste Retrieval Work Plan (TWRWP) Status**

<b>Tank</b>	<b>TWRWP</b>	<b>Expected Revisions</b>	<b>Retrieval Technology</b>	<b>Second Technology</b>	<b>Third Technology</b>
C-101	RPP-22520	Complete	MRS (per 10/7/10 agreement, to be Modified Sluicing)	Chemical Dissolution	-
C-102	RPP-22393	Complete	Modified Sluicing	Chemical Dissolution	-
C-104	RPP-22393	In Process	Modified Sluicing	Chemical Dissolution	-
C-105	RPP-22520	Early Spring 2012	MARS-V	-	-
C-107	RPP-22393	In Process	MARS-S	MARS-High Pressure	-
C-108	RPP-22393	In Process	Modified Sluicing	Chemical Dissolution	-
C-109	RPP-21895	After evaluation of C-108 hard heel retrieval	Modified Sluicing	MS-ITV, to be revised to chemical dissolution	-
C-110	RPP-33116	After evaluation of C-108 hard heel retrieval	Modified Sluicing	To be revised to chemical dissolution	-
C-111	RPP-37739	After evaluation of C-108 hard heel retrieval	Modified Sluicing	To be revised to include water soaking and chemical dissolution for the hard crust on the surface of the waste	-
C-112	RPP-22393	In Process	Modified Sluicing	Chemical Dissolution	-

**Significant Accomplishments**

None.

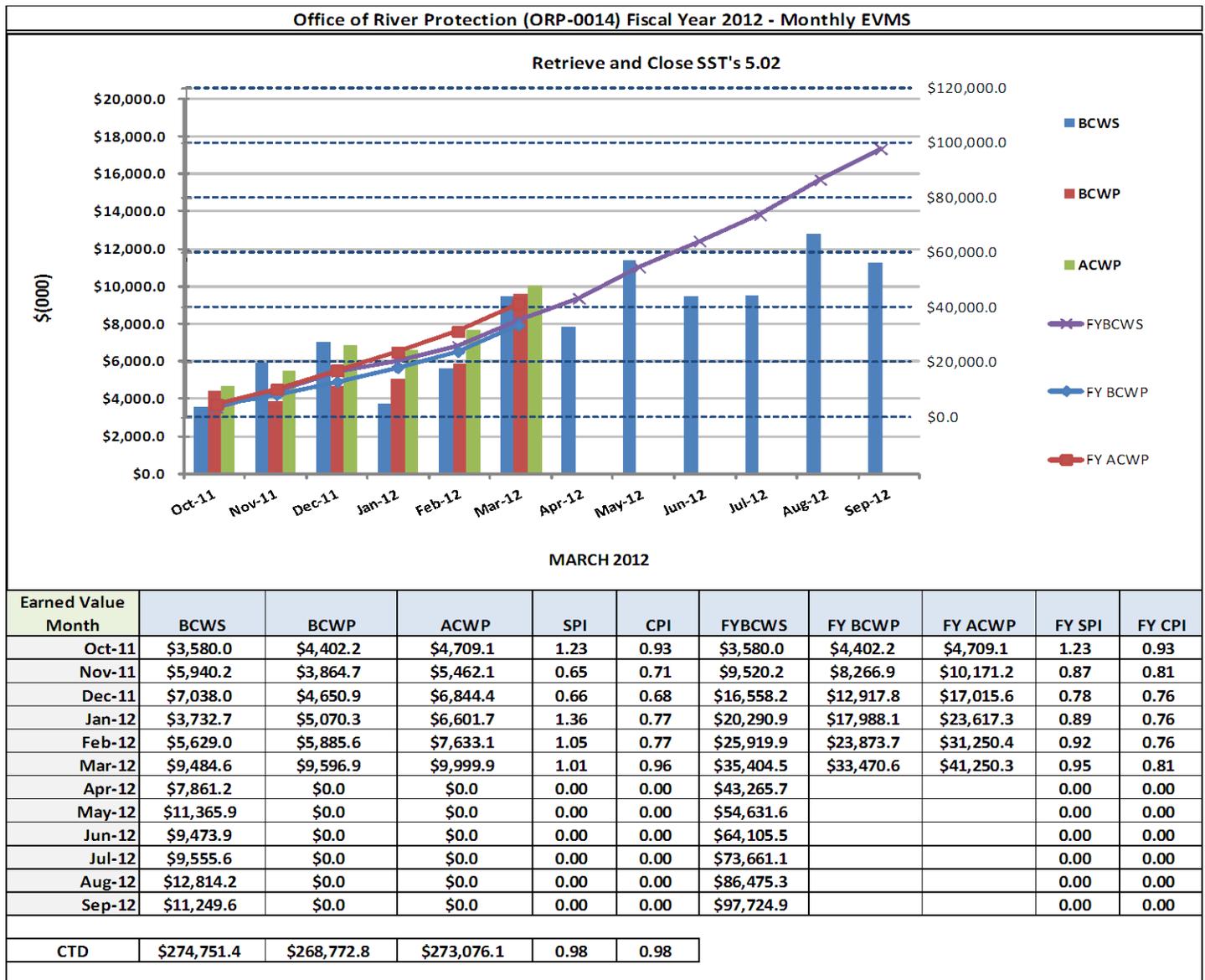
**Significant Planned Activities in the Next 6 Months:**

Work with Ecology on RPP-22520, Rev 7, 241-C-101 and 241-C-105 Tanks Waste Retrieval Work Plan.

**Issues:**

None.

## SST Retrieval Monthly and Fiscal Year EVMS Data



### Single-Shell Tanks

#### Cost Variance (-\$403K):

The unfavorable cost variance is primarily due to:

- C-112: Extended retrieval sluicing operations and associated crew costs necessitated by the hard waste surface and waste composition. In-tank camera and exhauster repairs have also impacted costs.
- C-108: Hard heel removal operation and costs associated with extended operations for recirculation/caustic dissolution and associated crew costs, additional sampling, and additional water additions. Retrieval operations were completed in March.
- C-107: Failed supernate pump at receiver tank AN-106.
- C-104: Additional hard heel removal scope including design, fabrication, and installation of new equipment to address requirements from the justification for continued operation related to

winterization and solids accumulation, calculations to demonstrate compliance with the safety basis, and ventilation/leak detection modifications.

The offsetting favorable cost variance is due to:

- C-105: Cost efficiencies on retrieval system installation activities including removal of abandoned equipment around the central pit to accommodate installation of the new large riser. Efficiencies resulted from the use of a dedicated construction crew with experience from C-107 retrieval and additional soil analysis that allowed for the removal of a greater amount of soil resulting in one instead of multiple excavations.

**WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP) PROJECT**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
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 about 3,030 Full-Time Equivalent (FTE) contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel, including 583 craft, 557 non-manual, and about 149 subcontractor personnel FTEs working at the WTP construction site (all facilities). As of March 2012, the project was 64 percent complete overall, design and engineering was 85 percent complete, procurement was 69 percent complete, construction was 61 percent complete, and startup and commissioning was 15 percent complete.

The overall WTP Project schedule variance in March was a positive \$2.5M; the cost variance was a negative \$33.8M. The cost variance was primarily related to Engineering Design, Construction Crafts, and Construction Subcontracts; and the schedule variance was primarily related to Plant Equipment, Bulk Materials, and Plant Materials.

Following is the status through the end of March for current project issues.

**Significant Past Accomplishments:**

- Completed aerosol testing to determine realistic entrainment coefficient for the Process Vessel Vent Exhaust (PVV) for Pretreatment (PT)
- Completed the water run tests in support of the Verification and Validation (V&V) testing for Computational Fluid Dynamics (CFD) for PT
- Completed installation of the remote-operated dampers in the filter cave and the structural steel, which supports the 14ft steel deck, for High Level Waste (HLW)
- Completed 75% of the concrete in HLW with 58ft elevation walls continuing and a majority of the 37ft slabs complete
- Completed the concrete slab above the Container Transfer Room for the Low-Activity Waste (LAW) facility
- Installed Chill Water system expansion joints for Balance of Facilities (BOF)
- Completed Hydrostatic testing for the Chill Water and Plant Service Water systems in the Chiller Compressor Plant BOF
- Completed installation of a high-purity gas helium rack in the exterior Hotcell area in the Analytical Lab (LAB).
- Attended DNFSB 2010-2 Public Meeting on March 22, 2012

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

- Perform Large Scale Integrated Testing (LSIT) in 4ft and 8ft vessels for the V&V of CFD program for PT
- Receive Plant Wash and Drains vessel for HLW (RLD-VSL-8)
- Complete 37' structural steel in HLW

- Complete installation of LAW melter power supplies
- Complete installation of the LAW autosampler (ASX system)
- Complete installation of the Analytical Lab (LAB) autosampler System
- Complete construction of the BOF cooling tower
- Complete construction of BOF switchgear building

**Issues:**

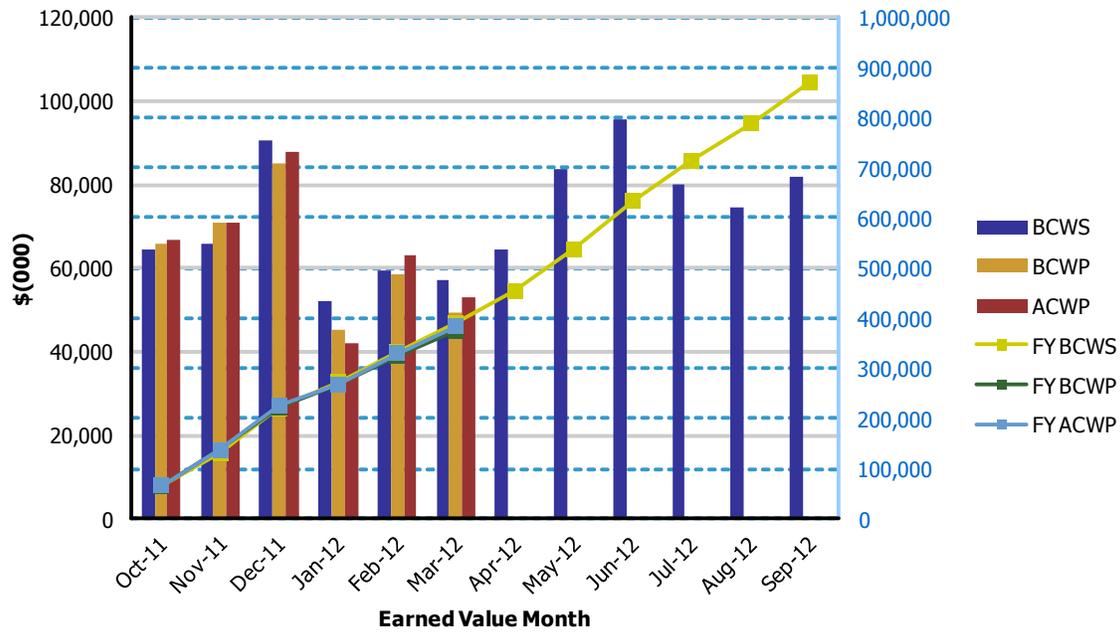
- PT and HLW Facilities: Other issues have potential impacts on the PTF and HLW schedule. This includes risks that the project has already realized and the plans for addressing the remaining risks in the PTF and HLW.
- No significant technical issues in LAW, LAB or BOF at this time.

Data Set: FY 2012 Earned Value Data

Data as of: March 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	\$64,587			0.00		\$454,148			0.00	
May 2012	\$83,766			0.00		\$537,914			0.00	
Jun 2012	\$95,717			0.00		\$633,631			0.00	
Jul 2012	\$80,199			0.00		\$713,830			0.00	
Aug 2012	\$74,342			0.00		\$788,172			0.00	
Sep 2012	\$81,928			0.00		\$870,099			0.00	
PTD	\$6,853,309	\$6,855,821	\$6,889,597	1.00	1.00					

**PRETREATMENT (PT) FACILITY**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
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. Through March 2012, the PT Facility was 53 percent complete overall, with engineering design 78 percent complete, procurement 51 percent complete, construction 42 percent complete, and startup and commissioning was 4 percent complete.

**Significant Past Accomplishments:**

On-going PT construction has been limited to installation of rebar and embedded conduit for the placement of Control Building base mat, structural steel at the 77ft elevation, Heating, Ventilation, and Air Conditioning (HVAC) duct in the hot cell and roof decking. The first two control building base mat concrete pours have been made.

Aerosol testing to determine realistic entrainment coefficient for the Process Vessel Vent Exhaust (PVV) system conducted at the Parsons Facility in Pasco has been completed. The preliminary results for both the small and medium scale tests are positive. The final report documenting the results will be completed in June 2012.

BNI is actively working to resolve issues regarding vessel material selection and mixing. The steps identified in the erosion/corrosion action plan, issued in April 2012, to address the material selection issue are being implemented. Computational Fluid Dynamics (CFD) Verification and Validation (V&V) simulant tests to address the mixing issue are forecasted to start in June 2012. Planning is ongoing for the path forward for the non-Newtonian vessels that may include additional scaling testing and/or other alternate methods which are still under development.

Prepared and submitted two DNFSB 2010-2 Implementation Plan deliverables.

The hydrogen generation rate calculations and development of the route packages in support of resolving the Hydrogen in Piping and Ancillary Vessels (HPAV) issue have started.

**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 placements for the Control Building base mat
- Complete Hazards and Operability Analysis (HAZOP) for pretreatment Vessel Vent Process (PVP) system
- Issue jumpers phase 2 frame design for hot cell areas 29, 30 and 36
- Complete resolution of the material selection issues with the vessels
- Perform Large Scale Integrated Testing (LSIT) in 4ft and 8ft vessels for the V&V of CFD program

**Issues:**

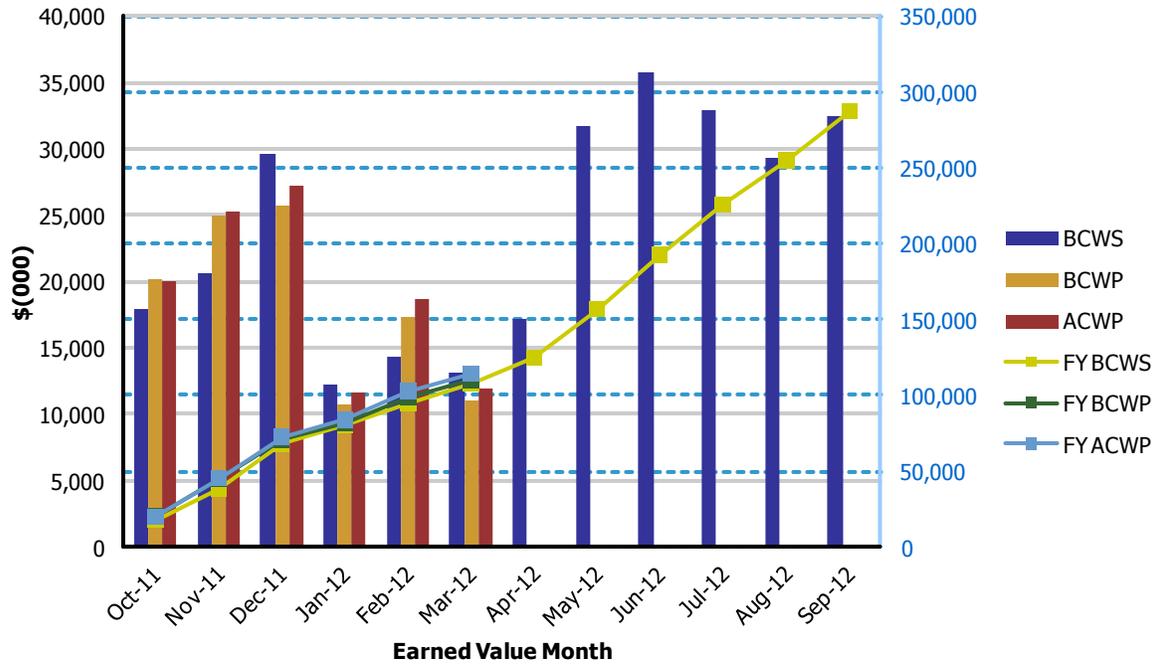
\* Other issues have potential impacts on the PT schedule. This includes risks that the project has already realized and the plans for addressing the remaining risks in the PTF.

Data Set: FY 2012 Earned Value Data

Data as of: March 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	\$17,121			0.00		\$125,016			0.00	
May 2012	\$31,749			0.00		\$156,766			0.00	
Jun 2012	\$35,807			0.00		\$192,572			0.00	
Jul 2012	\$32,977			0.00		\$225,550			0.00	
Aug 2012	\$29,294			0.00		\$254,844			0.00	
Sep 2012	\$32,525			0.00		\$287,369			0.00	

**HIGH-LEVEL WASTE (HLW) FACILITY**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
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 melters and then poured into cylindrical stainless steel canisters. After cooling, the canisters will be sealed and decontaminated prior to shipment to interim storage. The HLW Facility is 59 percent complete overall, with engineering design 86 percent complete, procurement 75 percent complete, construction 41 percent complete, and startup and commissioning is 4 percent complete.

**Significant Past Accomplishments:**

Excellent progress is being made on completion of the Consent Decree Milestone (D-00A-21) "Complete Construction of Structural Steel to 37' in HLW Facility." The current forecast finish date is early October 2012 and compliance date is December 31, 2012. All of the materials to complete the Milestone have been delivered and are on site. The remaining steel erection consists primarily of 20 beams in the Filter Cave and 4 in the Rinse Tunnel. Prior to setting this steel, work at lower elevations is proceeding in order to utilize efficiencies gained by being able to lift materials in through the roof.

The installation of the remote-operated dampers in the filter cave has been completed, and the structural steel which supports the 14ft steel deck is also completed. The steel decking installation has commenced and good progress is being made.

The seismic rails for the decontamination rinse bogie have been set. The rails will be installed following the setting of the decontamination rinse bogie for final alignment. 75% of the concrete has been poured in the facility with 58ft elevation walls continuing and a majority of the 37ft slabs complete.

The last shield door (HSH-DOOR-00003) for HLW has been received at the site in April. This completes a 9-year procurement effort in purchasing the large shield doors for HLW which are important for future worker safety.

Fabrication of Plant Wash and Drain Vessel (RLD-VSL-08) was completed; it has been shipped from its location in England and was delivered to the Mid-Columbia Engineering Facility in April for further inspection prior to being received and accepted by Bechtel. The project completed factory acceptance testing on Thermal Catalytic Oxidizers (TCO) which are being fabricated in Colorado. The TCO's are scheduled for delivery to the site in early July.

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

- Complete 37' structural steel
- Receive Thermal Catalytic Oxidizers
- Receive Plant Wash and Drains Vessel (RLD-VSL-8)
- Receive Acidic Waste Vessel (RLD-VSL-7)
- Receive Primary Off-gas Vessel HEME Vessel
- Stage Rinse Bogie with Rinse Vessel in Canister Rinse Tunnel

**Issues:**

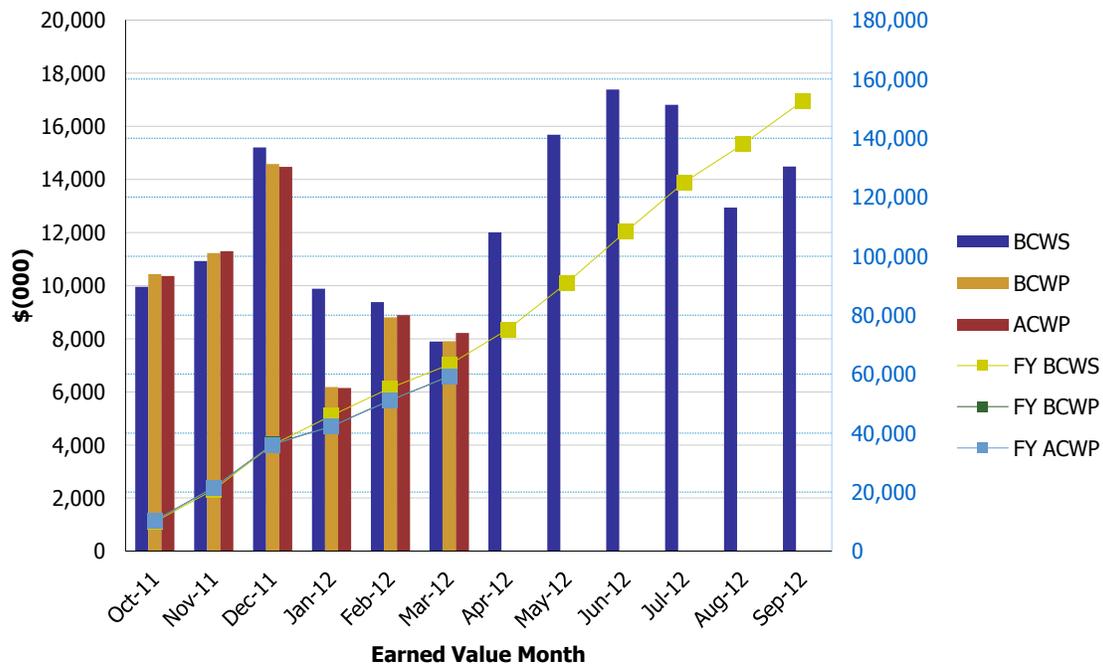
\* Various issues may have potential impacts on the HLW schedule. This includes risks that the project has already realized and the plans for addressing the remaining risks in the HLW.

Data Set: FY 2012 Earned Value Data

Data as of: March 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	\$12,000			0.00		\$75,243			0.00	
May 2012	\$15,677			0.00		\$90,920			0.00	
Jun 2012	\$17,388			0.00		\$108,308			0.00	
Jul 2012	\$16,812			0.00		\$125,119			0.00	
Aug 2012	\$12,944			0.00		\$138,063			0.00	
Sep 2012	\$14,486			0.00		\$152,549			0.00	

PTD	\$892,736	\$890,760	\$884,447	1.00	1.01
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**LOW-ACTIVITY WASTE (LAW) FACILITY**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
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. The LAW Facility is 68 percent complete overall, with engineering design 85 percent complete, procurement 87 percent complete, construction 69 percent complete, and startup and commissioning is 4 percent complete.

**Significant Past Accomplishments:**

Electrical systems design continues in support of all equipment, controls, and lighting throughout the facility. For example, control logic diagrams were updated for the LAW Melter Process (LMP), LAW Melter Feed Process (LFP), and LAW Secondary Off-Gas/Vessel Vent Process (LVP) systems. Also, control logic diagrams were issued for the LAW Container Pour Handling (LPH) and Demineralized Water (DIW) system.

Equipment qualification data sheets for LVP system preheaters were issued. Single-line diagrams were issued for the Low-Voltage Electrical (LVE) system. Piping isometric drawings for the LAW Primary Off-Gas Processing (LOP), LMP, Non-Radioactive Liquid Waste Disposal (NLD), Plant Service Air (PSA), Process Service Water (PSW), and Plant Cooling Water (PCW) systems were issued. Piping support drawings were issued for the LAW Secondary Off-Gas/Vessel Vent Process (LVP), Chilled Water (CHW), and Process Service Water (PSW) systems.

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 three exhausters were received from the vendor and staged on the +48' elevation.

The primary areas of construction focus continued to be LAW facility partition wall installation and equipment installation for the Container Finishing Handling (LFH) system. For example, installation of the decontamination manipulators, finishing line dual-rail hoists, and the trolley/bogie cars for the LFH system continued. The concrete slab above the Container Transfer Room was placed.

Construction activities were initiated to install the electrical equipment in the annex, remove the melter #2 shield/gas barrier lid, and plumbing lay out/roughing in the annex. Other on-going construction activities included installation of Low-Voltage Electrical (LVE) non-segmented bus ducts in chases. Piping was installed in the process cells and cable tray/engineered supports in the north finishing line.

Completed review of software functional requirements for the following system:

- LAW Secondary Off-Gas/Vessel Vent Process (LVP)

**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
- Begin Melter #1 Refractory Installation

**Issues:**

No major issues at this time.

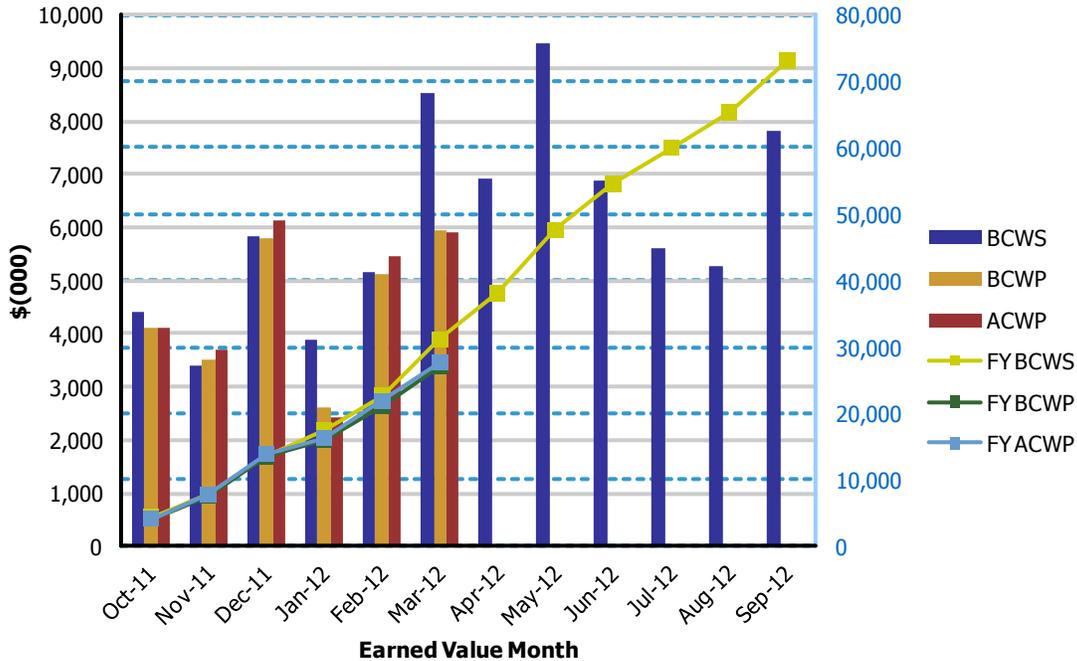
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2012 Earned Value Data

Data as of: March 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	\$6,920			0.00		\$38,123			0.00	
May 2012	\$9,462			0.00		\$47,586			0.00	
Jun 2012	\$6,892			0.00		\$54,478			0.00	
Jul 2012	\$5,606			0.00		\$60,084			0.00	
Aug 2012	\$5,257			0.00		\$65,342			0.00	
Sep 2012	\$7,821			0.00		\$73,162			0.00	

PTD	\$667,787	\$664,389	\$710,251	0.99	0.94
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**BALANCE OF FACILITIES (BOF)**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
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. The BOF is 49 percent complete overall, with engineering design 73 percent complete, procurement 48 percent complete, construction 64 percent complete, and startup and commissioning is 8 percent complete.

**Significant Past Accomplishments:**

Oversight efforts are focused on identification of the individual facility requirements within BOF to support facility completion and turnover to the startup organization. While individual BOF facilities are not subject to a formal Operational Readiness Review (ORR), each facility will be evaluated to verify the adequacy of design and readiness for operation. The first stage of this validation will occur as part of the turnover from construction to the startup organization for component level testing.

As necessary to support facility completion, the WTP contractor conducts 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 Chiller Compressor Plant (CCP). In support of WTP site energization, Interface Control Document (ICD) 11 “Interface Control Document for Electricity” has been updated.

Recent accomplishments for the BOF team are:

- Installed Chill Water system expansion joints
- Completed Hydrostatic testing for the Chill Water and Plant Service Water systems in the Chiller Compressor Plant
- Completed excavation of the Low-Voltage duct bank, north of the Glass Former Storage Facility
- Issued system software acceptance test report for the Cooling Tower Facility
- Completed installation of Non-Radioactive Liquid (NLD) waste disposal system tank instrumentation

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

- Complete construction of cooling tower
- Complete construction of BOF switchgear building
- Install structural steel for anhydrous ammonia facility
- Turnover WTP Switchgear (Bldg 87) from construction to the startup organization

**Issues:**

No major issues.

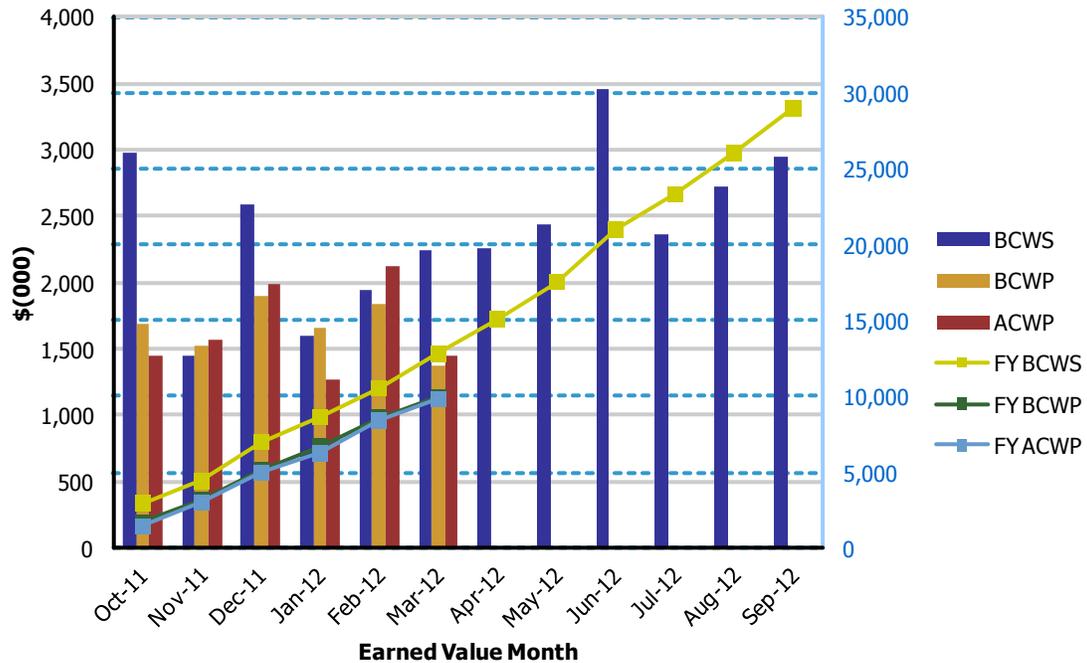
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2012 Earned Value Data

Data as of: March 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	\$2,256			0.00		\$15,069			0.00	
May 2012	\$2,444			0.00		\$17,513			0.00	
Jun 2012	\$3,461			0.00		\$20,975			0.00	
Jul 2012	\$2,356			0.00		\$23,331			0.00	
Aug 2012	\$2,727			0.00		\$26,058			0.00	
Sep 2012	\$2,946			0.00		\$29,004			0.00	

PTD	\$266,656	\$262,085	\$258,884	0.98	1.01
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**ANALYTICAL LABORATORY**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
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. The LAB is 52 percent complete overall, with engineering design 79 percent complete, procurement 75 percent complete, construction 80 percent complete, and startup and commissioning is 10 percent complete.

**Significant Past Accomplishments:**

Efforts of the LAB team continue to focus on the LAB Construction Substantially Complete milestone. Weekly 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.

Modifications to the HVAC system are on-going to support installation of test ports and relocation of electrical equipment originally destined for the WTP administrative building.

Recent accomplishments for the LAB team are listed below:

- Completed the installation of bulk piping for radiological laboratory cabinets
- Completed installation of a high-purity gas helium rack in the exterior Hotcell area
- Began installation of sprinkler heads and fire service risers in the southwest and north riser rooms
- Issued block diagrams for Chill Water system pumps
- Issued termination schedule for low voltage electric system

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

- Install Autosampler HEPA filter housings frames
- Complete installation of Autosampler System
- Set pumps in C5 pit
- Install Hot Cell import/export motors

**Issues:**

No major issues.

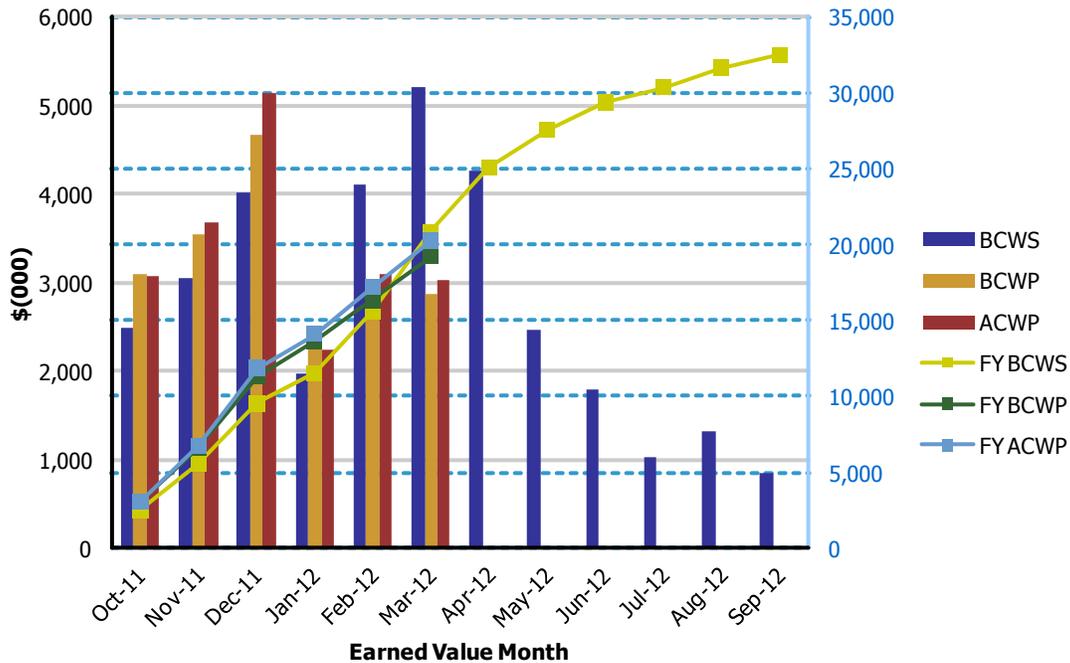
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2012 Earned Value Data

Data as of: March 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	\$4,259			0.00		\$25,079			0.00	
May 2012	\$2,468			0.00		\$27,546			0.00	
Jun 2012	\$1,798			0.00		\$29,344			0.00	
Jul 2012	\$1,024			0.00		\$30,368			0.00	
Aug 2012	\$1,309			0.00		\$31,677			0.00	
Sep 2012	\$838			0.00		\$32,515			0.00	

PTD	\$190,623	\$187,691	\$201,009	0.98	0.93
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Waste Treatment Plant Project - Percent Complete Status															
Through March 2012															
(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Commissioning 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
Low-Activity Waste	982.2	664.4	68%	244.8	207.9	85%	240.9	210.6	87%	346.4	239.4	69%	150.1	6.6	4%
Analytical Lab	358.8	187.7	52%	57.5	44.8	78%	56.2	42.2	75%	108.6	86.7	80%	136.5	13.2	10%
Balance of Facilities	537.3	262.1	49%	88.5	64.3	73%	81.4	39.1	48%	230.8	147.1	64%	136.5	11.6	8%
High-Level Waste	1,515.3	890.8	59%	355.3	304.6	86%	457.9	345.1	75%	582.1	236.2	41%	120.0	4.8	4%
Pretreatment	2,588.4	1,359.4	53%	774.0	602.6	78%	713.5	367.2	51%	914.6	382.5	42%	186.4	7.1	4%
Shared Services	4,714.8	3,491.5	74%	1,004.9	917.2	91%	471.5	393.4	83%	1,431.5	1,103.7	77%	455.8	129.1	28%
<b>Total WTP w/o UB</b>	<b>10,696.9</b>	<b>6,855.8</b>	<b>64%</b>	<b>2,524.9</b>	<b>2,141.3</b>	<b>85%</b>	<b>2,021.5</b>	<b>1,397.7</b>	<b>69%</b>	<b>3,614.1</b>	<b>2,195.7</b>	<b>61%</b>	<b>1,185.3</b>	<b>172.4</b>	<b>15%</b>
Undistributed Budget	0.0	n/a	n/a	n/a	n/a	n/a									
<b>Total WTP</b>	<b>10,696.9</b>	<b>6,855.8</b>	<b>64%</b>	<b>2,524.9</b>	<b>2,141.3</b>	<b>85%</b>	<b>2,021.5</b>	<b>1,397.7</b>	<b>69%</b>	<b>3,614.1</b>	<b>2,195.7</b>	<b>61%</b>	<b>1,185.3</b>	<b>172.4</b>	<b>15%</b>

Source: Preliminary WTP Contract Performance Report - Format 1, Data for March 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 BNI's elimination of WBS 1.08, Plant Wide EPCC; 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 EPCC function, these include, Finance, Project Management, etc, but are included in the total Overall Facility Percent Complete for Shared Services.