

FINAL

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

Office of River Protection
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 Monthly Summary Report
 February 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-02P	Submit to Ecology and Oregon Monthly Summary Reports	02/29/12		On-going
**D-00C-02Q	Submit to Ecology and Oregon Monthly Summary Reports	03/31/12		On-going
** Future Monthly 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
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
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
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 31st and July 31st of each year. Status: On Schedule

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 Schedule

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 Schedule

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 Schedule

SST Retrieval and Closure Program

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

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 Schedule

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

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. Initiated design and procurement for C-104 Hard Heel Removal equipment.
3. Continued Hard Heel Removal activities with the addition of 9,000 gallons of caustic solution in C-108.
4. Continued design and procurement for C-109 Hard Heel Removal equipment.
5. Initiated AN-106 pump replacement.
6. Continued with sampling efforts on C-111 using a Ramon Spectrometer, as a prototype.
7. Initiated C-112 retrieval operations.

Significant Planned Activities in the Next Six Months:

1. Complete the installation of the C-101 ventilation system and removal of legacy equipment.
2. Complete the installation of the C-102 ventilation system and removal of legacy equipment.
3. Complete C-101 design development for installation of Modified Sluicing System.
4. Complete C-102 design development for installation of Modified Sluicing System.
5. Initiate start up of Hard Heel Removal system for C-104.

6. Complete the installation of the C-105 ventilation system and removal of equipment.
7. Complete C-107 bulk retrieval.
8. Complete hard heel retrieval of C-108.
9. Complete C-112 bulk retrieval.
10. Complete discussions with Ecology on the retrieval certificate of completion.
11. Complete installation of the AN-106 replacement pump and restart of C-107 retrieval system.

Issues:

None.

Tank Waste Retrieval Work Plan (TWRWP) Status

Tank	TWRWP	Expected Revisions	Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520	Projected revision early fall 2012	MRS (per 10/7/10 agreement, to be Modified Sluicing)	-	-
C-102	RPP-22393	In Process	Modified Sluicing	Chemical Dissolution	-
C-103	Retrieval Completed				
C-104	RPP-22393	In Process	Modified Sluicing	Chemical Dissolution	-
C-105	RPP-22520	None	MARS-V	-	-
C-106	Retrieval Completed				
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	March 2012 after evaluation of C-108 hard heel retrieval	Modified Sluicing	MS-ITV, to be revised to chemical dissolution	-
C-110	RPP-33116	March 2012 after evaluation of C-108 hard heel retrieval	Modified Sluicing	To be revised to chemical dissolution	-
C-111	RPP-37739	March 2012 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.

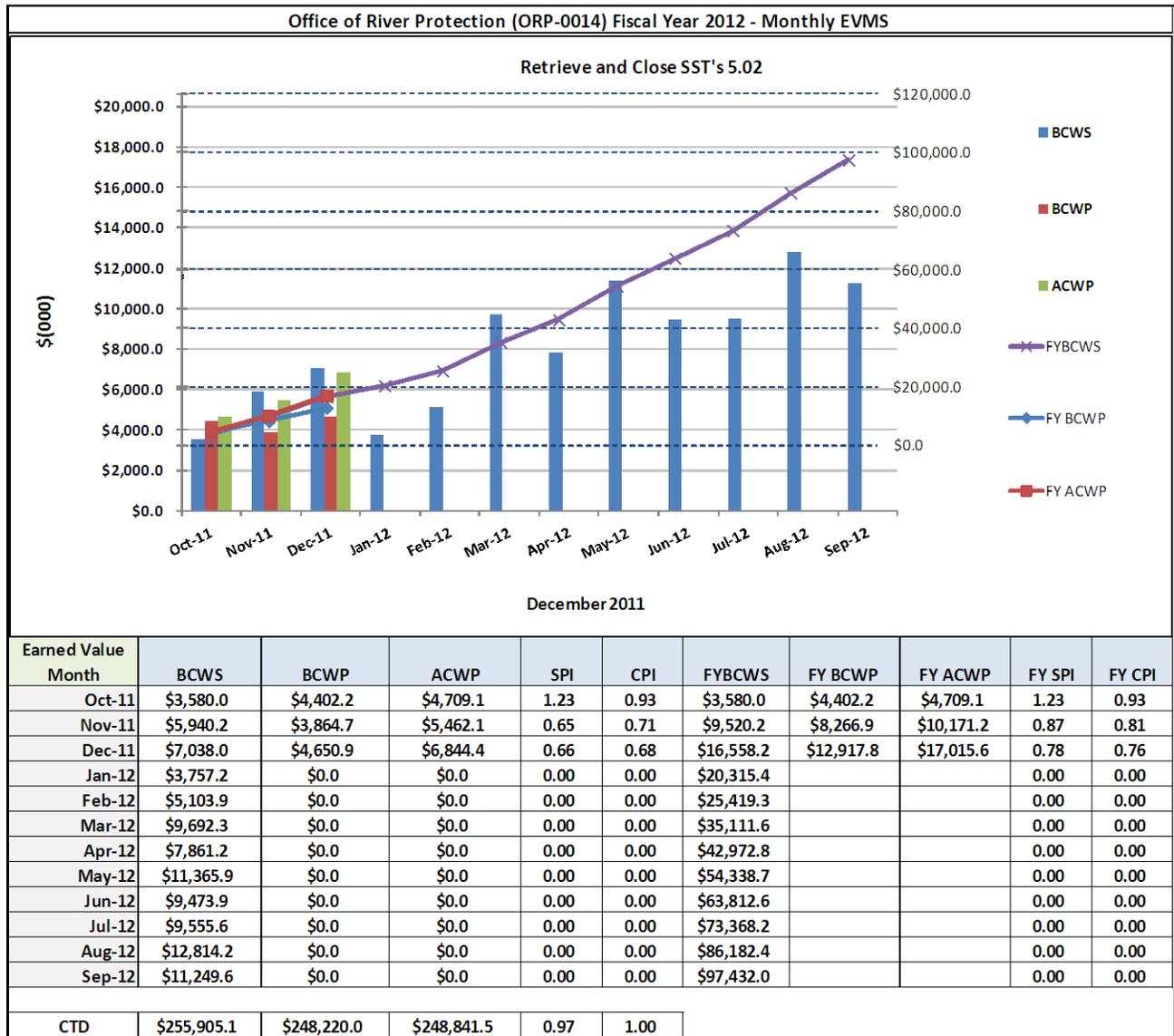
Significant Planned Activities in the Next 6 Months:

- ORP, Ecology, and WRPS met on 01/12/12 to discuss Ecology's informal comments on the C-101 TWRWP. Meetings to continue to finalize C-101 TWRWP.

Issues:

None.

SST Retrieval Monthly and Fiscal Year EVMS Data



Single-Shell Tanks EVMS Schedule and Cost Variances

Schedule Variance:

The unfavorable schedule variance is primarily due to:

- C-107 retrieval associated with issues encountered with the AN-106 supernate pump (-\$1,746k);
- C-112 due to readiness activities impacted by the JCO for potential failure of waste transfer systems due to freezing and solids participation/deposition which was resolved in December (-\$270k);
- C Farm Infrastructure due to resource prioritization for initiating Long Length Equipment Removal Demonstration activities as scheduled (-\$209k).

Cost Variance:

The unfavorable cost variance is primarily due to:

- C-112 due to additional engineering work and field resources required to complete system installation, acceptance testing and readiness declaration (-\$805k);
- C-101 due to construction subcontractor costs for equipment removal and ventilation installation (-\$558K);
- C-107 overruns associated with testing and troubleshooting of the failed supernate pump at the AN-106 Receiver Tank (-\$398k);
- C-102 overruns associated with subcontractor costs for ventilation installation (\$-334k).

WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP) PROJECT

Number	Title	Due Date	Status
D-00C-01D	Semi-Annual CD Report	01/31/2012	Completed - Report Sent 01/27/2012
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 3,908 Full-Time Equivalent (FTE) contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel, including 819 craft, 526 non-manual, and about 186 subcontractor personnel FTEs working at the WTP construction site (all facilities). As of December 2011, the project was 62 percent complete, design and engineering was 84 percent complete, procurement was 66 percent complete, construction was 59 percent complete, and startup and commissioning was 14 percent complete.

The overall WTP Project schedule variance in December was a positive \$18.2M; the cost variance was a negative \$28.7M. The cost variance was primarily related to Engineering Design, Construction Crafts, Plant Equipment, and Construction Subcontracts; and the schedule variance was primarily related to Plant Equipment, Plant Materials, and Construction Subcontracts.

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

Significant Past Accomplishments:

- Aerosol testing to determine realistic entrainment coefficient for the Process Vessel Vent Exhaust (PVV) system has been started for PT.
- Completed 50% of submerged bed scrubber and 60% of High Efficiency Mist Elimination vessels for HLW.
- Substantially completed mechanical systems design for the LAW facility.
- Revised funding profile and schedule for the Emergency Turbine Generator (ETG) procurement schedule for BOF.

Significant Planned Actions in the Next Six Months:

- Complete erection of 4th-tier structural steel in PT (77ft to 98ft elevation).
- Perform Large Scale Integrated Testing (LSIT) in 4ft and 8ft vessels for the Validation and Verification (V&V) of Computational Fluid Dynamics (CFD) program to resolve mixing issues.
- Set in-place two piping modules (PA07 upper, PA01 lower) in the PT black cells.
- Receive Plant Wash and Drains vessel for HLW (RLD-VSL-8).
- Complete installation of LAW melter power supplies
- Complete installation of the LAW autosampler (ASX system).
- Complete installation of the LAB autosampler System.
- Complete construction of the BOF cooling tower.

- Complete construction of BOF switchgear building.

Issues:

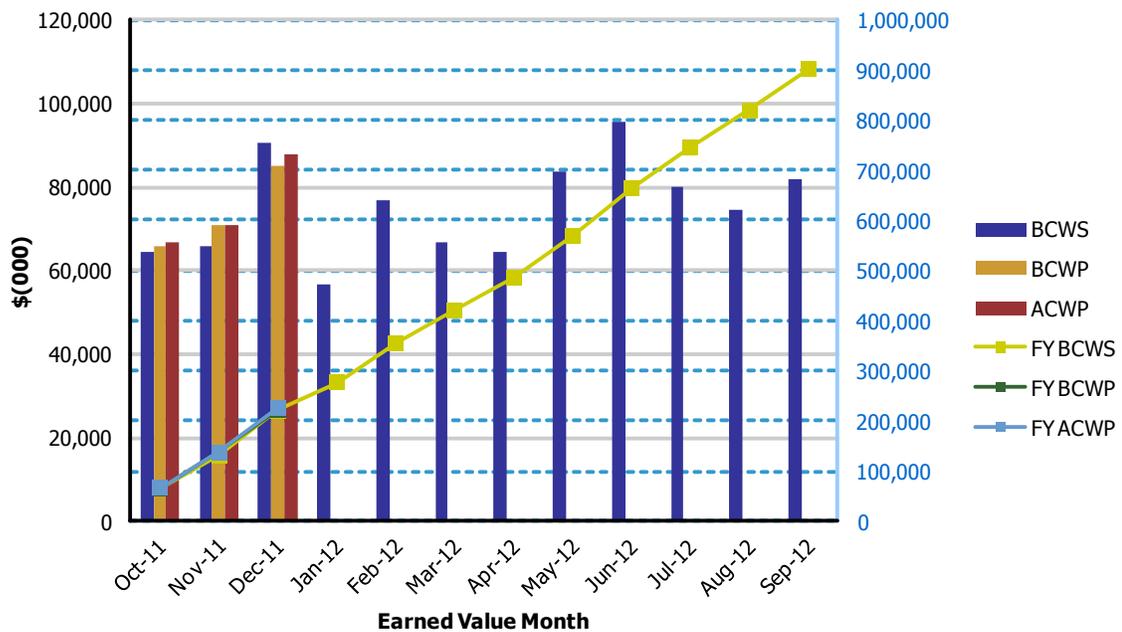
- PT and HLW Facilities: Other issues also have potential impacts on the PTF and HLW schedule. This includes risks that the project has already realized and the plans for addressing the remaining risks in the PTF and HLW.
- No significant technical issues in HLW, LAW, LAB or BOF at this time.

Data Set: FY 2012 Earned Value Data

Data as of: December 2011

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

WTP 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	\$56,800			0.00		\$277,557			0.00	
Feb 2012	\$76,818			0.00		\$354,375			0.00	
Mar 2012	\$66,635			0.00		\$421,010			0.00	
Apr 2012	\$64,587			0.00		\$485,598			0.00	
May 2012	\$83,766			0.00		\$569,363			0.00	
Jun 2012	\$95,717			0.00		\$665,080			0.00	
Jul 2012	\$80,199			0.00		\$745,279			0.00	
Aug 2012	\$74,342			0.00		\$819,621			0.00	
Sep 2012	\$81,928			0.00		\$901,549			0.00	
PTD	\$6,684,505	\$6,702,694	\$6,731,420	1.00	1.00					

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. Through December 2011, the PT Facility is 52 percent complete overall, with engineering design 78 percent complete, procurement 50 percent complete, and construction 41 percent complete.

Significant Past Accomplishments:

On-going work includes installation of rebar for the placement of Control Building basemat and 98ft elevation slabs, fabrication of piping modules, installation of drain piping, cable trays and supports, conduit, structural steel at the 77ft elevation, and roof decking.

Aerosol testing to determine realistic entrainment coefficient for the Process Vessel Vent Exhaust (PVV) system at "Small" scale is continuing at the Parsons Facility in Pasco. Close to half of the tests have been completed, showing positive results. Fabrication is progressing well for the test equipment for the "Medium" scale aerosol testing to be conducted at the same facility.

BNI is actively working to resolve issues raised by DOE regarding vessel material selection. A draft report for the localized corrosion margin evaluation has been issued, and is undergoing DOE review. BNI has set up a special team to resolve the corrosion and erosion issues in an integrated manner. Two reports, due to the DNFSB in January 2012, were completed and submitted in accordance with the Implementation Plan (IP) for the DNFSB 2010-2.

The Hazard and Operability Analysis (HAZOP) for the Cesium Ion Exchange Process (CXP) system was completed. The first two shipments of the floor penetration modules, to support on-going concrete and pipe module work, were received.

The PT critical path primarily flows through installation of the Lag Storage and Feed Blending Process vessel, HLP-22. The next critical path flows through the Pretreatment Vessel Vent Process (PVP) system design, equipment procurement, and construction. The tertiary critical path flows through the hot cell Area 34 jumper design, material procurement, and construction.

Significant Planned Actions in the Next Six Months:

- Issue re-committed system design documents for the Plant Wash and Disposal (PWD) system.
- Continue erection of 4th tier structural steel (77ft to 98ft elevation)
- Obtain Ecology approval of the permit packages to proceed with the alteration of the on-site vessels FRP -2A/B/C/D and UFP-62A/B/C
- Issue system descriptions part II with re-committed design information
- Set in-place 2 piping modules (PA07 upper, PA01 lower) in the black cells
- Complete removal of the vessel CXP-001 from the black cell, in accordance with the modified CXP system design
- Set hot cell vertical door drive mechanism replacement gearbox and switch
- Complete aerosol testing to determine entrainment coefficient for the PVV system
- Complete placements for the Control Building basemat, and make initial 98 foot elevation slab placements
- Complete fabrication of Lag Storage and Feed Blending Process (HLP) vessels-27A/B
- Complete resolution of the material selection issues with the vessels
- Perform LSIT in 4ft and 8ft vessels for the Validation and Verification (V&V) of Computational Fluid Dynamics (CFD) program to resolve mixing issues.

Issues:

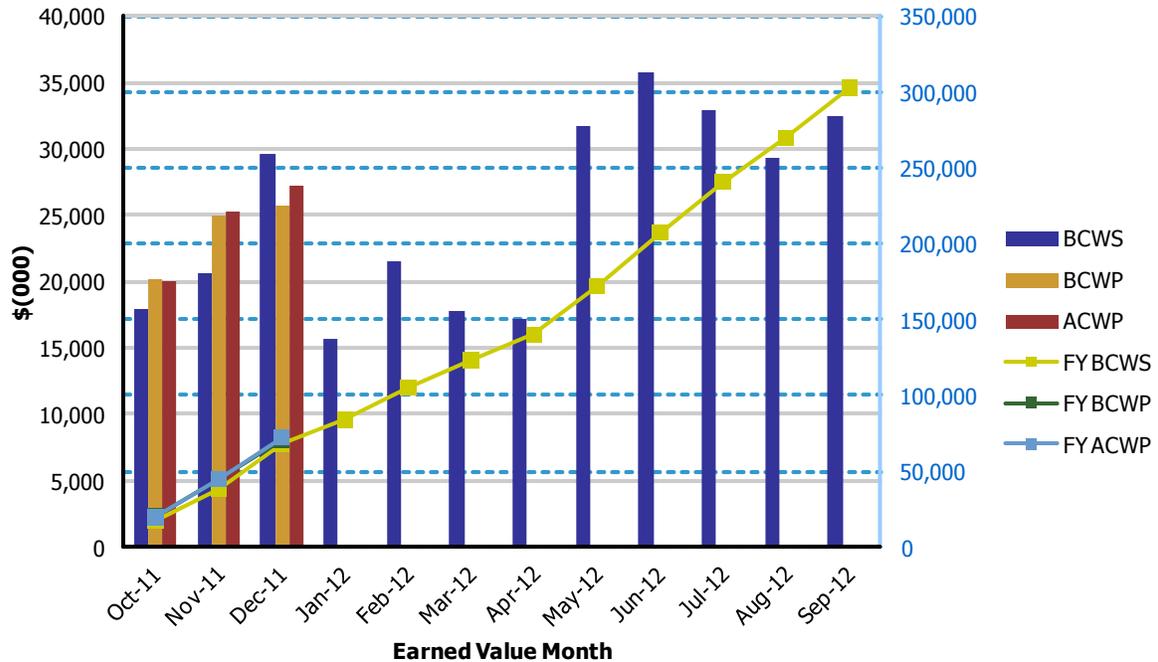
* Other issues have potential impacts on the PTF schedule. This includes risks that the project has already realized and the plans for addressing the remaining risks in the PTF.

Data Set: FY 2012 Earned Value Data

Data as of: December 2011

**River Protection Project
Pretreatment Facility**

PT 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	\$15,622			0.00		\$83,753			0.00	
Feb 2012	\$21,466			0.00		\$105,219			0.00	
Mar 2012	\$17,804			0.00		\$123,023			0.00	
Apr 2012	\$17,121			0.00		\$140,144			0.00	
May 2012	\$31,749			0.00		\$171,894			0.00	
Jun 2012	\$35,807			0.00		\$207,700			0.00	
Jul 2012	\$32,977			0.00		\$240,678			0.00	
Aug 2012	\$29,294			0.00		\$269,972			0.00	
Sep 2012	\$32,525			0.00		\$302,497			0.00	
PTD	\$1,311,304	\$1,320,225	\$1,293,011	1.01	1.02					

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 from the Pretreatment (PT) Facility. The concentrate is 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 are sealed and decontaminated prior to shipment to interim storage. The HLW Facility is 57 percent complete overall, with engineering design 86 percent complete, procurement 72 percent complete, and construction 38 percent complete.

Significant Past Accomplishments:

Following re-sequencing of the slab over the Filter Cave and the associated walls, the critical path has become the Melter Cell #2 build out. This will improve installation unit rates for commodities in the Filter Cave as it extends the use of overhead cranes for setting steel. The near term critical path activities now include two Melter Cell walls, installation of 4 wall modules, and steel liner plate and insulation on the floor. The submerged bed scrubber and High Efficiency Mist Elimination vessels are the major procurements associated with the Melter Cave build out. Current scheduled date to set vessels is May 2013. The vessels are in production and 50% and 60% complete respectively with the last to deliver in January of 2013.

The balance of rails for the decontamination rinse bogie has arrived on site, to be installed following the rinse piping. Fabrication of Plant Wash and Drains Vessel (RLD-VSL-08) has completed and has been shipped from its location in England. High-Efficiency Particulate Air (HEPA) Filter Test plan is complete with testing of the filters to begin late February. Electrical and piping commodities are progressing throughout the -21ft, 0ft and 14ft elevation, including cooling water, cable trays and supports, and fire protection piping. Sub-Contractors are also continuing with applying special coatings, installing Heating, Ventilation, and Air Conditioning (HVAC), fire protection piping, and liner plate installations. 75% of the concrete has been poured in the facility with 58ft elevation walls continuing and a majority of the 37ft slabs complete.

Significant Planned Actions in the Next Six Months:

- Complete Filter Cave Remote-Operated Dampers Installation
- Receive Plant Wash and Drains Vessel (RLD-VSL-8)
- Receive Primary Offgas Vessel HEME Vessel
- Stage Rinse Bogie with Rinse Vessel in Canister Rinse Tunnel

Issues:

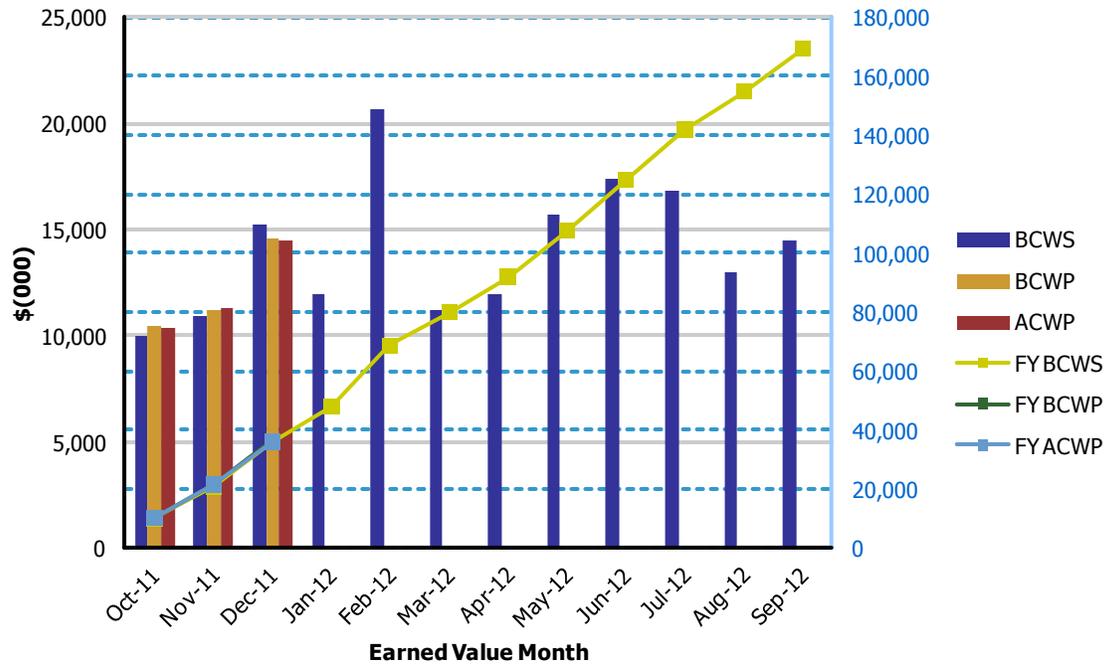
*Various issues may have potential impacts on the HLW schedule. This includes risks that the project has already realized and the plans for addressing the remaining risks in the HLW.

Data Set: FY 2012 Earned Value Data

Data as of: December 2011

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

HLW 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	\$11,984			0.00		\$48,066			0.00	
Feb 2012	\$20,661			0.00		\$68,727			0.00	
Mar 2012	\$11,228			0.00		\$79,955			0.00	
Apr 2012	\$12,000			0.00		\$91,955			0.00	
May 2012	\$15,677			0.00		\$107,632			0.00	
Jun 2012	\$17,388			0.00		\$125,019			0.00	
Jul 2012	\$16,812			0.00		\$141,831			0.00	
Aug 2012	\$12,944			0.00		\$154,775			0.00	
Sep 2012	\$14,486			0.00		\$169,261			0.00	

PTD	\$865,575	\$867,865	\$861,193	1.00	1.01
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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 will be disposed on the Hanford Site in the Integrated Disposal Facility. The LAW Facility is 67 percent complete, with engineering design 87 percent complete, procurement 86 percent complete, and construction 67 percent complete.

Significant Past Accomplishments:

Electrical systems design continues in support of all equipment, controls, and lighting throughout the facility. For example, instrument data sheets were issued for the Secondary Off-gas/Vessel Vent Process (LVP) system actuated on/off valves, Primary Off-gas Process (LOP) system actuated on/off valves, and the C2V system control valve fieldbus. Several architectural room finishing schedules were issued. A technical evaluation report was issued – Evaluation of Mixing, Sampling, and Level Uncertainties for Immobilized Low-Activity Waste (ILAW) Glass Qualification. Piping isometric drawings were issued for the LOP system and mechanical data sheets were issued for the air particulate filter for the Instrument Service Air (ISA) system and the LVP system carbon bed adsorber.

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 LVP system exhauster fans are expected to be delivered within the next month. Procurement actions to purchase, deliver, and receive process monitoring and control instruments continued in January for solenoid valves, Flow Transmitters (FT), Pressure Transmitters (PT), and Pressure Differential Transmitters (PDT).

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 and south finishing line dual-rail hoist for the LFH system continued. In addition, installation activities were initiated for the trolley bogie cars for the LFH system. Other on-going construction activities during January included installation of High-Efficiency Particulate Air (HEPA) damper and exhaust ductwork, pour cave monorail hoists for the Container Pour Handling (LPH) system, the buffer storage crane, the finishing line cranes, and Low-Voltage Electrical (LVE) equipment.

Integrated Control Network (ICN) development continued with software design and testing for the following systems:

- Melter Feed Process (LFP)
- Container Finishing Handling (LFH)
- Auto Sampling (ASX)

Software was accepted for the Secondary Off-gas/Vessel Vent Process (LVP) system.

Significant Planned Actions in the Next Six Months:

- Complete installation of melter power supplies
- Complete installation of auto sampling (ASX) system
- Receive Exhausters for LVP system
- Receive HEPA Pre-heaters for LVP system
- Receive HEPA Housings for LVP system

Issues:

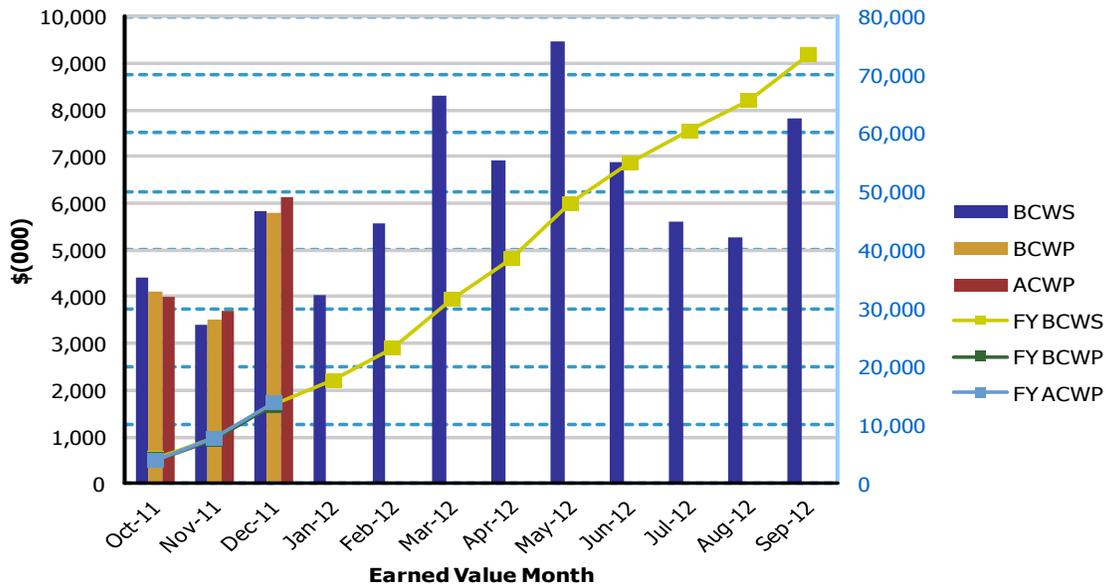
No major issues at this time.

Data Set: FY 2012 Earned Value Data

Data as of: December 2011

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

LAW 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	\$4,014	0.93	1.03	\$4,415	\$4,115	\$4,014	0.93	1.03
Nov 2011	\$3,404	\$3,510	\$3,704	1.03	0.95	\$7,819	\$7,625	\$7,718	0.98	0.99
Dec 2011	\$5,827	\$5,807	\$6,123	1.00	0.95	\$13,646	\$13,432	\$13,841	0.98	0.97
Jan 2012	\$4,017			0.00		\$17,663			0.00	
Feb 2012	\$5,573			0.00		\$23,236			0.00	
Mar 2012	\$8,317			0.00		\$31,552			0.00	
Apr 2012	\$6,920			0.00		\$38,472			0.00	
May 2012	\$9,462			0.00		\$47,935			0.00	
Jun 2012	\$6,892			0.00		\$54,827			0.00	
Jul 2012	\$5,606			0.00		\$60,434			0.00	
Aug 2012	\$5,257			0.00		\$65,691			0.00	
Sep 2012	\$7,821			0.00		\$73,512			0.00	

PTD	\$650,230	\$650,695	\$696,466	1.00	0.93
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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. The BOF is 48 percent complete overall, with engineering design 72 percent complete, procurement 47 percent complete, and construction 63 percent complete.

Significant Past Accomplishments:

The BOF team continues to focus on facility completion, turnover, and startup. Weekly meetings are being held to support planning for the energization of Building 87. In support of site energization, Interface Control Document (ICD) 11 “Interface Control Document for Electricity” is currently being revised, and all parties are preparing for energization of Building 87 via the A6 substation this calendar year.

The renewed focus on ICDs and the need to keep all parties involved is providing positive results. Regular meetings are being held to align DOE and contractor efforts and revisions/updates to the ICDs are being made as necessary.

Based on the revised funding profile, the Emergency Turbine Generator (ETG) procurement schedule is currently being revised. During this time, engineering, select procurement activities, and the development of the commercial grade dedication plans continues.

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
- Receive anhydrous ammonia system

Issues:

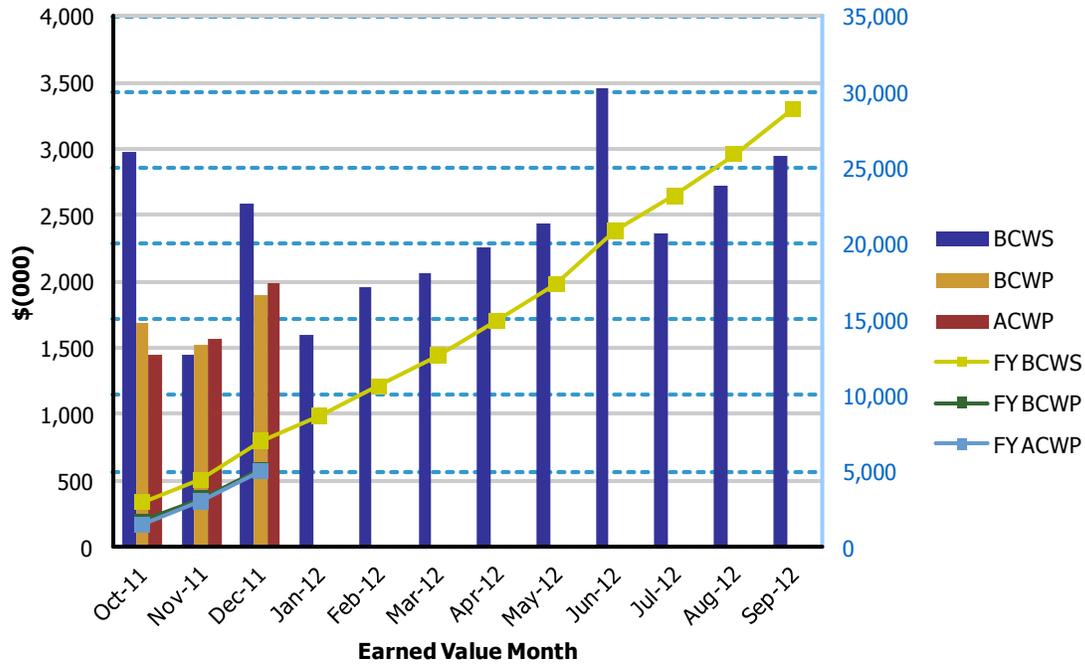
No major issues.

Data Set: FY 2012 Earned Value Data

Data as of: December 2011

**River Protection Project
Balance of Facilities**

BOF 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	\$1,598			0.00		\$8,627			0.00	
Feb 2012	\$1,964			0.00		\$10,591			0.00	
Mar 2012	\$2,060			0.00		\$12,651			0.00	
Apr 2012	\$2,256			0.00		\$14,908			0.00	
May 2012	\$2,444			0.00		\$17,352			0.00	
Jun 2012	\$3,461			0.00		\$20,813			0.00	
Jul 2012	\$2,356			0.00		\$23,169			0.00	
Aug 2012	\$2,727			0.00		\$25,896			0.00	
Sep 2012	\$2,946			0.00		\$28,842			0.00	
PTD	\$260,872	\$257,216	\$254,056	0.99	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 the Hanford Tank Waste Treatment and Immobilization (WTP) operations by analyzing feed, vitrified waste, and effluent streams. The LAB is 51 percent complete overall, with engineering design 78 percent complete, procurement 75 percent complete, and construction 76 percent complete.

Significant Past Accomplishments:

Efforts of the LAB team continue to be focused on completion of the LAB Construction Substantially Complete milestone. Major structures of the building are in place, and the detail/finishing work continues with emphasis on installation of partition walls, laboratory cabinets, and fume hoods. Installation of these interior commodities provides an opportunity to better understand the layout of individual rooms and the overall facility.

Tests were recently performed on the Autosampling System (ASX) Pneumatic Transfer (PTS) lines to validate flight tube piping installation and the use of "Morris" couplings to join spools of pipe under a vacuum condition. The test delivered results similar to the Factory Acceptance Test (FAT). In addition to the vacuum test, an obstruction test was performed to validate spool alignment. A carrier was pulled through the PTS lines via string, and traveled smoothly through the lines.

A review of hot cell equipment arrangement was performed to verify there will be adequate space for all necessary hot cell functions to be performed during operations. Conflicts that were identified appear to be manageable due to the portability of hot cell equipment. However, details concerning the actual size of some equipment will not be known until the procurement process is complete.

Significant Planned Actions in the Next Six Months:

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

Issues:

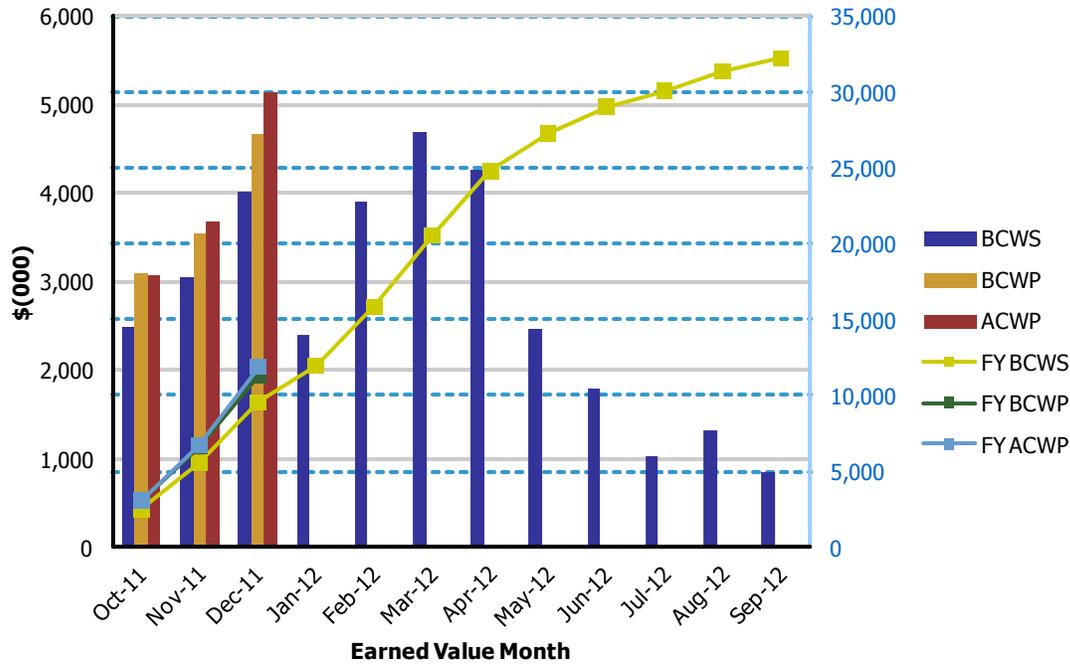
No major issues.

Data Set: FY 2012 Earned Value Data

Data as of: December 2011

**River Protection Project
Analytical Laboratory**

LAB 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	\$2,409			0.00		\$11,943			0.00	
Feb 2012	\$3,893			0.00		\$15,836			0.00	
Mar 2012	\$4,687			0.00		\$20,523			0.00	
Apr 2012	\$4,259			0.00		\$24,781			0.00	
May 2012	\$2,468			0.00		\$27,249			0.00	
Jun 2012	\$1,798			0.00		\$29,047			0.00	
Jul 2012	\$1,024			0.00		\$30,071			0.00	
Aug 2012	\$1,309			0.00		\$31,380			0.00	
Sep 2012	\$838			0.00		\$32,218			0.00	
PTD	\$179,336	\$179,788	\$192,640	1.00	0.93					

Waste Treatment Plant Project - Percent Complete Status															
Through December 2011															
(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
Facilities															
Low-Activity Waste	970.7	650.7	67%	237.4	205.4	87%	240.7	207.2	86%	343.9	231.6	67%	148.8	6.5	4%
Analytical Lab	355.5	179.8	51%	57.2	43.9	77%	56.2	42.1	75%	106.6	80.6	76%	135.5	12.7	9%
Balance of Facilities	536.4	257.2	48%	88.3	63.2	72%	81.3	38.0	47%	230.6	145.2	63%	136.1	10.9	8%
High-Level Waste	1,506.3	867.9	58%	349.4	301.0	86%	457.7	336.8	74%	581.4	225.5	39%	117.8	4.6	4%
Pretreatment	2,545.2	1,320.2	52%	743.7	580.7	78%	713.1	358.3	50%	905.7	374.4	41%	182.6	6.8	4%
Shared Services	4,732.4	3,426.9	72%	1,027.6	910.6	89%	472.1	383.4	81%	1,428.1	1,082.1	76%	455.9	124.2	27%
Total WTP w/o UB	10,646.5	6,702.7	63%	2,503.6	2,104.8	84%	2,021.2	1,365.7	68%	3,596.4	2,139.5	59%	1,176.8	165.7	14%
Undistributed Budget	0.0	n/a	n/a	n/a	n/a	n/a									
Total WTP	10,646.5	6,702.7	63%	2,503.6	2,104.8	84%	2,021.2	1,365.7	68%	3,596.4	2,139.5	59%	1,176.8	165.7	14%

Source: WTP Contract Performance Report - Format 1, Data for December 2011

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.