

FINAL

Office of River Protection
Consent Decree 08-5085-FVS

Project Summary Report

June 28, 2011

Office of River Protection

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Project Summary Report

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9:00 a.m. – 12:00 p.m.

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1	Statistics / Status	Woody Russell / Dan McDonald / Jeff Lyon
5	SST Retrieval and Closure - D-00B-01, -02, -03, -04 - TWRWP Status	Chris Kemp / Jeff Lyon
8	WTP - Immobilization Plant Project - D-00A-06, D-00A-17, D-00A-01	Wahed Abdul / Jason Young / Gary Olsen / Dan McDonald
10	WTP Pretreatment (PT) Facility - D-00A-18, -19, -13, -14, -15, 16	Wahed Abdul / Dan McDonald
14	High-Level Waste (HLW) Facility - D-00A-20, -21, 02, 03	Jason Young / Dan McDonald
17	Low-Activity Waste (LAW) Facility - D-00A-07, -08, -09	Gary Olsen / Dan McDonald
20	Analytical Laboratory (LAB) - D-00A-005	
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Fiscal Year 2011 Consent Decree Milestone Status

Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
D-00A-20	Complete Construction of Structural Steel to Elevation 14' in HLW Facility	12/31/10	01/31/10										
D-00C-01B	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	01/31/11	01/25/11										
D-00C-02D	Submit to Ecology and Oregon Monthly Summary Reports	02/28/11	2/25/11										
D-00C-02E	Submit to Ecology and Oregon Monthly Summary Reports	03/31/11	03/24/11										
D-00C-02F	Submit to Ecology and Oregon Monthly Summary Reports	04/30/11	04/29/11										
D-00C-02G	Submit to Ecology and Oregon Monthly Summary Reports	05/31/11	05/25/11										
D-00C-02H	Submit to Ecology and Oregon Monthly Summary Reports	06/30/11		X									
**D-00C-02I	Submit to Ecology and Oregon Monthly Summary Reports	07/31/11		X									

** Future Monthly Reports will be added as necessary to maintain a two-months ahead activity.

Fiscal Year 2011 Consent Decree Milestone Status

Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
D-00C-01C	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	07/31/11		X									

Fiscal Year 2012 Consent Decree Milestone Status

Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	Recoverable	To Be Missed	Missed	In Litigation	Deleted	In Program Planning	In Abeyance	Dispute Resolution
D-00C-02L	Submit to Ecology and Oregon Monthly Summary Reports	10/31/11		X									
**D-00C-02M	Submit to Ecology and Oregon Monthly Summary Reports	11/30/11		X									
** 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		X									
D-00C-01E	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	07/31/12		X									

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.

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 at 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-108, C-109, C-110, C-104, and C-111.

D-00B-02, Advise Ecology of the 9 SST's from which Waste Will Be Retrieved by 2022,

Due: 9/30/2014, Status: On Schedule. ORP and Ecology began meeting in December 2010 to discuss the selection of the next nine tanks to be retrieved and why ORP believes those nine tanks should be in A/AX Farms.

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. Completed bulk retrieval of C-104 using modified sluicing process.
2. Continued C-107 electrical upgrades and control trailer installation.
3. Continued construction activities for C-108 equipment installation for Hard Heel Removal.
4. Continued installation of the MARS arm equipment in C Farm at C-107.
5. Initiated installation of the POR107 exhauster for use at C-107 during MARS arm operation.
6. Initiated design and procurement for C-109 Hard Heel Removal equipment.
7. Continued design activities for C-112 sluicing system.
8. Continued removal of legacy equipment at C-112.
9. Continued testing of a MARS sluice educator system at Columbia Energy in Pasco.

Significant Planned Activities in the Next Six Months:

1. Complete the C-101 design, initiate long lead procurements and initiate legacy equipment removals.
2. Complete construction/installation of MARs at C-107.
3. Complete startup of C-107 MARS retrieval.
4. Start up of retrieval activities for C-108 hard heel.
5. Replace the AN-106 supernatant pump to support C-108 and C-107 retrievals.

6. Complete C-112 design, initiate long lead procurements and initiate legacy equipment removals.
7. Finish testing of the MARS with the vacuum educator.

Issues:

- D-00B-02, Discussions continue on the issue to advise Ecology of the 9 SST's from which waste will be retrieved by 2022.
- C-106 Closure Plan approval and SST radiological Categorical Notice of Construction (NOC) Phase 3 (closure) and a toxics categorical NOC application are pending completion of the Tank Closure and Waste Management Environmental Impact Statement (EIS) and associated Record of Decision (ROD); forecast completion for the final EIS ROD is in the winter of 2011.

TWRWP Status

Tank	TWRWP	Expected Revisions	Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520	Projected revision early fall	MRS (per 10/7/10 agreement, to be Modified Sluicing)	-	-
C-102	RPP-22393	In Process	Modified Sluicing	MS-ITV	-
C-103	RPP-21895	Retrieval Completed			
C-104	RPP-22393	In Process	Modified Sluicing	MS-ITV	-
C-105	RPP-22520	Projected revision early fall	MRS	-	-
C-106		Retrieval Completed			
C-107	RPP-22393	In Process	MARS-S		
C-108	RPP-22393	In Process	Modified Sluicing	Chemical Dissolution	MS-ITV
C-109	RPP-21895	Following RPP-22393	Modified Sluicing	MS-ITV	-
C-110	RPP-33116	Following RPP-22393	Modified Sluicing	-	-
C-111	RPP-37739	Following RPP-22393	Modified Sluicing	-	-
C-112	RPP-22393	In Process	Modified Sluicing	MS-ITV	-

Significant Accomplishments:

- ECY and ORP met for a TWRWPs Workshop on Selecting the Second Technology Under the CD on May 6, 2011. Goals included development of a table to identify 1st and 2nd technologies (including rationale for technology selection) and to develop proposed TWRWP language to be submitted with next revision of the TWRWP. The workshop discussions and actions are captured in meeting minutes which have been submitted as a handout in the ORP June PMM meeting for inclusion in the Administrative Record.

Issues:

- ORP wants to reopen discussion on end of retrieval discussions that include cost benefit analysis and how the finish of a retrieval decision occurs.

Hanford Waste Treatment and Immobilization Plant (WTP) Project

D-00A-06, Complete Methods Validations, Due: 12/31/2017, Status: On Schedule

D-00A-17, Hot Start of Waste Treatment Plant, Due: 12/31/2019, Status: On Schedule

D-00A-01, Achieve Initial Plant Operations for WTP, Due: 12/31/2022, Status: On Schedule

There are about 3,400 FTE equivalent contractor [Bechtel National Inc. (BNI)] and subcontractor personnel working on the WTP Project, including 1,200 craft, 500 non-manual, and about 180 subcontractor personnel FTE equivalents working at the WTP construction site (all facilities). Overall project percent complete through May 2011 is 59%, design and engineering is 82% complete, procurement is 62% complete, construction is 55% complete and Start-Up and Commissioning is 13% complete.

The overall WTP Project Schedule Variance (SV) in May was a positive \$0.2M, the Cost Variance (CV) was a negative \$2.5M. The negative cost variance was due to Construction Subcontracts and Construction Distribs control accounts and the schedule variances came primarily from Plant Material and Engineering control accounts.

Following is the status through the end of May for current project issues:

Significant Past Accomplishments:

- A permitting strategy for the on-site vessels modifications has been developed jointly and agreed upon between DOE and Ecology

Significant Planned Actions in the Next Six Months:

- Complete erection of 4th tier structural steel (77-ft to 98-ft elevation)
- Complete analytical results from the Low Order Accumulation Model (LOAM) validation testing for the non-Newtonian vessel configuration
- Complete planning and initiate fabrication and testing for the Large Scale testing for the validation of vessel mixing
- Complete Fabrication and Delivery of C5V Dampers
- Complete Siding of HLW Annex
- Complete installation of the LAW and LAB Autosampler systems
- Complete construction of the BOF switchgear facility, cooling tower and fuel oil pumphouse

Issues:

No significant issues at this time.

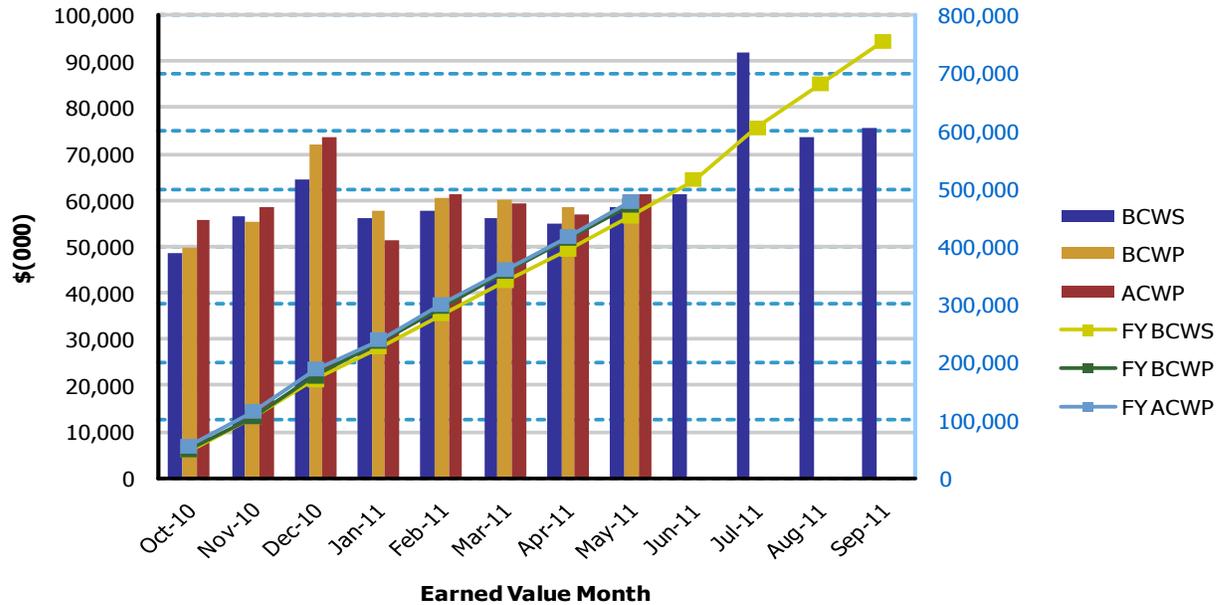
WTP – Fiscal Year To-Date Performance

Data Set: FY 2011 Earned Value Data

Data as of: May 2011

River Protection
01-D-416 - Waste Treatment Plant (WTP) Project

Monthly 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 2010	\$48,550	\$49,962	\$55,880	1.03	0.89	\$48,550	\$49,962	\$55,880	1.03	0.89
Nov 2010	\$56,608	\$55,427	\$58,449	0.98	0.95	\$105,158	\$105,389	\$114,329	1.00	0.92
Dec 2010	\$64,533	\$71,852	\$73,610	1.11	0.98	\$169,691	\$177,241	\$187,939	1.04	0.94
Jan 2011	\$55,988	\$57,756	\$51,327	1.03	1.13	\$225,679	\$234,997	\$239,266	1.04	0.98
Feb 2011	\$57,941	\$60,462	\$61,199	1.04	0.99	\$283,620	\$295,459	\$300,465	1.04	0.98
Mar 2011	\$56,009	\$60,032	\$59,335	1.07	1.01	\$339,629	\$355,491	\$359,800	1.05	0.99
Apr 2011	\$54,890	\$58,438	\$56,937	1.06	1.03	\$394,519	\$413,929	\$416,737	1.05	0.99
May 2011	\$58,530	\$58,722	\$61,263	1.00	0.96	\$453,049	\$472,651	\$478,000	1.04	0.99
Jun 2011	\$61,410					\$514,459				
Jul 2011	\$91,983					\$606,442				
Aug 2011	\$73,717					\$680,159				
Sep 2011	\$75,503					\$755,662				
PTD	\$6,180,399	\$6,208,199	\$6,236,030	1.00	1.00					

Pretreatment (PT) Facility

D-00A-19, Complete Elevation 98' Concrete Floor Slab in PT Facility, Due: 12/31/2014, Status: On Schedule

D-00A-13, Complete Installation of Pretreatment Feed Separation Vessels, Due: 12/31/2015, Status: On Schedule

D-00A-14, PT Facility Construction Substantially Complete, Due: 12/31/2017, Status: On Schedule

D-00A-15, Start PT Facility Cold Commissioning, Due: 12/31/2018, Status: On Schedule

D-00A-16, PT Facility Hot Commissioning Complete, Due: 12/31/2019, Status: On Schedule

Significant Past Accomplishments:

The 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 May 2011, overall facility percent complete is 47%, engineering is 79% complete, procurement is 44% complete, and construction is 36% complete.

In May, overall construction continues to perform well. Rebar and embed installation and fabrication of rebar wall curtains continues to support additional slab and wall placements at the 56-ft to 98-ft elevations. Construction completions for May include placement of four 5th lift (77-ft to 98-ft elevation) walls for 480 CY.

On-going work includes fabrication of piping modules, installation of drain piping, service air piping, cable trays and supports, ductwork, and sparge tubing in the hot cell. Sparge tubing welding is 50% complete in the hot cell at elevation 0', with 80% forecast to be done by July.

Engineering continues to implement changes from the technical issue resolutions into Piping and Instrumentation Design (P&ID) and piping isometric drawings. Preliminary analysis for Pretreatment Vessel Vent Process (PVP) aerosol generation has been completed which indicates a possible factor of 10x improvement. When finalized (in June), this would eliminate the biggest PVP re-design risk of the need for de-entrainment equipment. Issued calculations for ultrafiltration process (UFP) vessels 1A & 1B, and issued drawings for implementation of the vessel mixing issue resolution and other changes.

A permitting strategy for the on-site vessels modifications has been developed jointly and agreed upon between DOE and Ecology, which allows for modification work to begin in parallel with the permit review and approval process.

Procurement received seven pipe rack frames at the Marshalling Yard. They will now be sent to the Rack Integrator for installation of piping and valves later this year. The HLP-22 vessel vendor was substantially released for fabrication. The UFP VSL-1B bottom head jacket has been removed. A small team of DOE and BNI management visited vessel fabricators North West Copper and Harris Thermal in Portland, to watch and understand the status and issues with the vessel fabrications. The team noted some challenges with the fabrication, and decided that further discussions regarding the path forward were needed.

Procurement issued a Material Requisition (MR) for quotes on rotary-progressive-cavity pumps, and issued a MR for purchase of the PT chiller plant and cooling tower. Thirty five jet pump pairs, and one globe control valve, were released to ship.

Significant Planned Actions in the Next Six Months:

- Completion of PEMP Milestones for re-Committed design of the CXP and FRP vessels.
- Install hot cell piping PJV header.
- Ship HLP-VSL-27A /27B Storage vessels
- Complete nineteen mechanical systems re-committed design packages
- Complete twelve process re-committed design packages
- Fab and deliver ten hot cell equipment frames
- Complete analytical results from the Low Order Accumulation Model (LOAM) validation testing for the non-Newtonian vessel configuration
- Complete planning and initiate fabrication and testing for the Large Scale testing for the validation of vessel mixing
- Issue the revised P&ID's for the PVP system and the PVV system
- Begin Control Building basement excavation in late June
- Complete placement of one 56-ft elevation slab, three 4th lift (56-ft to 77-ft) walls, twenty five 5th lift walls, three 98-ft slabs, and complete placement of the Control Building slab, totaling approximately 4,128 CY
- Complete erection of 4th tier structural steel (77-ft to 98-ft elevation)
- Award contract for High Efficiency Mist Eliminator (HEME)
- Award contract for on-site vessel modifications.

Issues:

- Vessel Critical Path: Fabrication of vessel HLP-22 continues to be the primary critical path for the PT Facility. The fabrication of the vessel is in progress, but the vendor completion has slipped from October to December 2012. BNI is currently working with the vendor to adjust resource levels to make up the schedule difference. Efforts are also ongoing for the analysis of the on-site vessels in order to support the vessel modifications. Initial site work and pre-modification preparation work has begun. Schedules for the vessel modifications and permit needs have been provided to Ecology. The current plan is to award the first set of vessels modifications in early July 2011. Ecology authorization is required to proceed with the vessel alteration for Waste Feed Receipt Process (FRP) vessels 2A/B/C/D. Ecology is being briefed routinely on the status of vessel design, fabrication and permitting schedule, due to the critical nature of this activity.
- LOAM Test Results: The physical benchmark testing of the LOAM for application to the 5 Non-Newtonian vessels is complete. The test report has been issued for DOE review. BNI is currently meeting with DOE to discuss Volume 3 vessel assessment impacts based on the LOAM results, and conclusions on whether Newtonian conditions represent a bounding assessment. BNI will revise the Risk Evaluation for installing Heads on the five Non-Newtonian Vessels, to reflect these conclusions, prior to vessel head placement.
- PVP/PVV System Upgrades: The PVP/PVV systems were upgraded from passive to active safety systems to maintain negative pressure during all normal, off-normal, and seismic

conditions. Changes in the requirement of the Entrainment factor caused the postulated aerosol loading to increase by several orders of magnitude. This affected PVP/PVVs ability to meet functional requirements during off-normal condition. The execution strategy issued identifies the following actions to ensure that the system design meets the functional criteria:

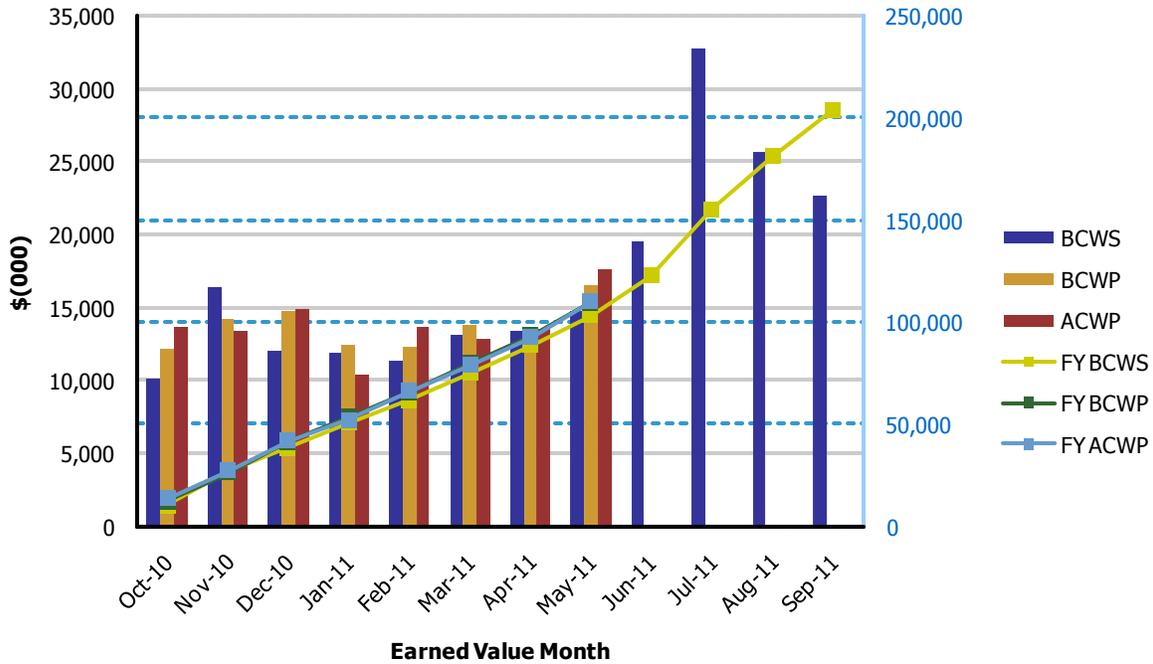
1. Develop an improved aerosol model based on testing that is aligned with the physical plant configuration. Preliminary indications are that this would lower the aerosol loading significantly.
 - a. An aerosol testing strategy has been issued, and a draft test specification is in review.
2. Evaluate alternative operating scenarios to reduce aerosol generation.
3. Procure the long-lead equipment (Scrubber and HEME) as SC-1 to mitigate schedule constraint.

Data Set: FY 2011 Earned Value Data

Data as of: May 2011

**River Protection
01-D-16E - Pretreatment Facility**

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$10,196	\$12,179	\$13,730	1.19	0.89	\$10,196	\$12,179	\$13,730	1.19	0.89
Nov 2010	\$16,462	\$14,257	\$13,360	0.87	1.07	\$26,658	\$26,436	\$27,090	0.99	0.98
Dec 2010	\$12,060	\$14,788	\$14,869	1.23	0.99	\$38,718	\$41,224	\$41,959	1.06	0.98
Jan 2011	\$11,902	\$12,449	\$10,403	1.05	1.20	\$50,620	\$53,673	\$52,362	1.06	1.03
Feb 2011	\$11,428	\$12,373	\$13,692	1.08	0.90	\$62,048	\$66,046	\$66,054	1.06	1.00
Mar 2011	\$13,145	\$13,809	\$12,923	1.05	1.07	\$75,193	\$79,855	\$78,977	1.06	1.01
Apr 2011	\$13,444	\$13,497	\$13,533	1.00	1.00	\$88,637	\$93,352	\$92,510	1.05	1.01
May 2011	\$14,789	\$16,506	\$17,668	1.12	0.93	\$103,426	\$109,858	\$110,178	1.06	1.00
Jun 2011	\$19,477					\$122,903				
Jul 2011	\$32,706					\$155,609				
Aug 2011	\$25,646					\$181,255				
Sep 2011	\$22,683					\$203,938				
PTD	\$1,159,330	\$1,174,897	\$1,143,659	1.01	1.03					

High-Level Waste (HLW) Facility

D-00A-21, Complete Construction of Structural Steel to 37' in HLW Facility, Due: 12/31/2012, Status: On Schedule

D-00A-02, HLW Facility Construction Substantially Complete, Due: 12/31/2016, Status: On Schedule

D-00A-03, Start HLW Facility Cold Commissioning, Due: 6/30/2018, Status: On Schedule

D-00A-04, HLW Facility Hot Commissioning Complete, Due: 12/31/2019, Status: On Schedule

The 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. Overall facility percent complete is 54%, with engineering design 87% complete, procurement 66% complete, and construction 34% complete.

Significant Past Accomplishments:

The majority of HLW Filter Cave activities have transitioned from procurement to the installation phase. Installation of the C5V supply header and exhaust headers are complete. Additional activities include the installation of support steel to the +8ft elevation and installation of construction support steel for installation of the 42" C5V Vertical Riser. Installation of steel and piping will continue to the +14ft elevation to coordinate with upcoming filter housing installations.

Fabrication of the final C5V filter housing is complete and all of the units have been delivered to the site. The vendor is continuing fabrication of the HOP and PJV filter housings and progressing as planned. Despite early material supply issues, fabrication of the C5V remote-operated dampers has been accelerated to maintain the original scheduled delivery of the first units in late-July. Electrical and piping commodities are progressing throughout the -21ft elevation including cooling water, cable trays and supports, and fire protection piping.

Significant Planned Actions in the Next Six Months:

- Receive Canister Decontamination Vessels and Canister Rinse Vessel
- Set Shielded Personnel Access Door RWH-DOOR-20 in the Waste Drum Swabbing and Monitoring Area
- Complete Fabrication and Delivery of C5V Dampers
- Complete Siding of Annex
- Receipt of Melter Cave 1 and 2 Feed and Feed Prep vessels
- C5V housing and remote-operated damper installations

Issues:

The fabrication and delivery of HLW vessels is being monitored closely due to long lead times and construction acceleration. Vessel status and progress is reported weekly to ensure completion and delivery prior to the scheduled installation dates.

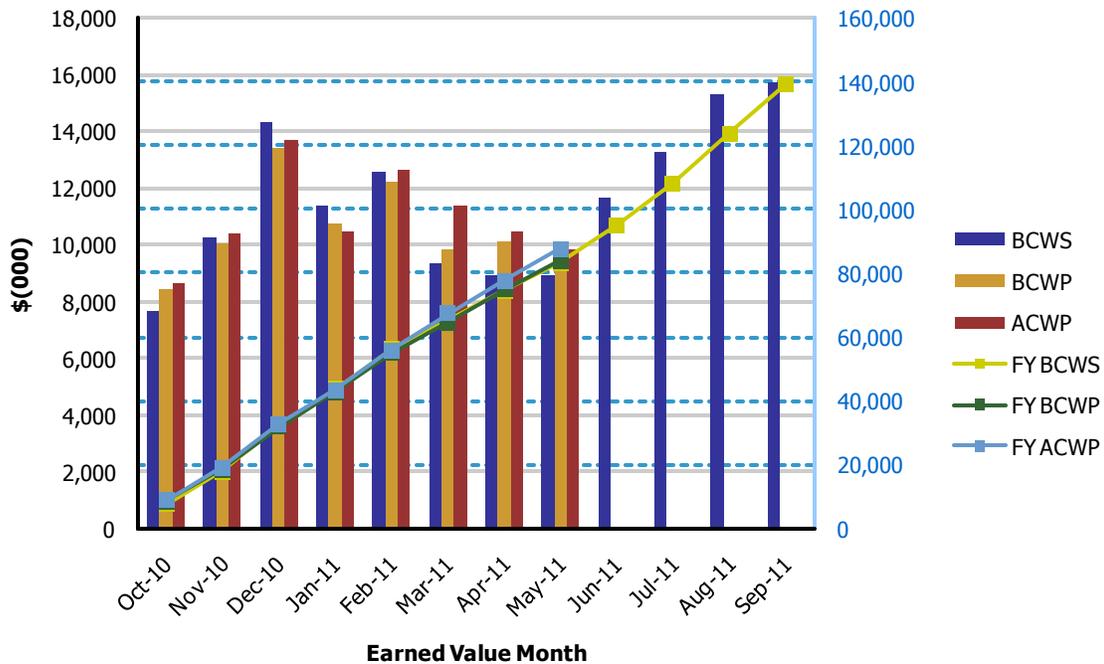
Wall complexity for the #2 Melter Cave is impacting unit rates and adding duration to schedule activities. The Filter Cave still remains on the critical path; however, melter cave build-out is being closely monitored. Lessons learned are being incorporated into #1 Melter Cave walls' activities to ensure a more efficient construction sequence.

Data Set: FY 2011 Earned Value Data

Data as of: May 2011

**River Protection
01-D-16D - High-Level Waste Facility**

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$7,653	\$8,413	\$8,615	1.10	0.98	\$7,653	\$8,413	\$8,615	1.10	0.98
Nov 2010	\$10,239	\$10,032	\$10,434	0.98	0.96	\$17,892	\$18,445	\$19,049	1.03	0.97
Dec 2010	\$14,364	\$13,384	\$13,697	0.93	0.98	\$32,256	\$31,829	\$32,746	0.99	0.97
Jan 2011	\$11,360	\$10,767	\$10,461	0.95	1.03	\$43,616	\$42,596	\$43,207	0.98	0.99
Feb 2011	\$12,550	\$12,224	\$12,651	0.97	0.97	\$56,166	\$54,820	\$55,858	0.98	0.98
Mar 2011	\$9,376	\$9,860	\$11,369	1.05	0.87	\$65,542	\$64,680	\$67,227	0.99	0.96
Apr 2011	\$8,930	\$10,154	\$10,445	1.14	0.97	\$74,472	\$74,834	\$77,672	1.00	0.96
May 2011	\$8,919	\$9,075	\$9,806	1.02	0.93	\$83,391	\$83,909	\$87,478	1.01	0.96
Jun 2011	\$11,663					\$95,054				
Jul 2011	\$13,285					\$108,339				
Aug 2011	\$15,296					\$123,635				
Sep 2011	\$15,743					\$139,378				
PTD	\$777,811	\$783,133	\$776,605	1.01	1.01					

Low-Activity Waste (LAW) Facility

D-00A-07, LAW Facility Construction Substantially Complete, Due: 12/31/2014, Status: On Schedule

D-00A-08, Start LAW Facility Cold Commissioning, Due: 12/31/2018, Status: On Schedule

D-00A-09, LAW Facility Hot Commissioning Complete, Due: 12/31/2019, Status: On Schedule

Significant Past Accomplishments:

The LAW Facility will vitrify low-activity waste from the PT Facility. Waste will be mixed with glass formers, vitrified into glass at an average daily rate of 30 metric tons, and placed in stainless-steel canisters that will be disposed on site in the Integrated Disposal Facility. Overall facility percent complete is 66%, engineering is 90% complete, procurement is 83% complete, and construction is 64% complete.

LAW secondary offgas treatment system component procurement activities continued. Vendor activities are progressing as scheduled for all offgas system components. Other procurement activities included issuance of a purchase memorandum for bid on the LAW/LAW Annex architectural specialties subcontract and release for shipment of 14 flow-indicator rotameters.

Isometric drawings were issued for multiple systems within the LAW facility including the Breathing Service Air (BSA) system, the Radioactive Liquid Waste Disposal (RLD) system, as well as piping isometrics for the Secondary Offgas/Vessel Vent Process (LVP), Steam Condensate Water (SCW), High-Pressure Steam (HPS), Low-Pressure Steam (LPS), Sodium Hydroxide Reagent (SHR), Concentrate Receipt Process (LCP), Melter Feed Process (LFP), and Autosampling (ASX) systems. Several drawing revisions were also issued to incorporate vendor information and for equipment modifications. General arrangement data sheets were issued for instrument racks for the LVP system, as well as instrument data sheets for radar instruments, transmitters, and switches. The anchorage design for the Heating, Ventilation, and Air-Conditioning (HVAC) humidifier was completed.

BNI completed installation of the glove box and two hatches for the container finishing handling (LFH) system, the electrical components and fusible links for six doors in the cask handling area, placement of concrete for the Medium-Voltage Electrical (MVE) equipment foundations, and application of floor coatings in the bogie maintenance room. Construction started on installation of support arms in the process cells and Q-rated partition walls. Thermite welding of rails in the finishing line continued, as well as installation of the fire alarm system, Low-Voltage Electrical (LVE) system equipment, piping for the air-handling unit, fan-coil units and humidifiers for the C2V ventilation system, liner in the pour caves, and container finishing line hoists. Other normal activities continued, including installation of piping for the Non-Radioactive Liquid Waste Disposal (NLD), RLD, and Plant Cooling Water (PCW) systems within the LAW, as well as installation of cable tray, pipe hangers, conduit and wiring, instrument enclosures, lighting fixtures, partition walls, and coatings.

Revised control logic diagrams were issued for the RLD system to support software development and testing. Integrated Control Network (ICN) development continued with the review of software for the primary offgas process system. Commissioning Operations personnel continued working with BNI Engineering to resolve issues associated with freeze protection strategies for sprinkler piping in stagnant air spaces, the need for container decontamination equipment, and

location of computer servers that will provide phone and PA communications capabilities. A recommendation was made to Engineering to consider requiring a better carbon bed adsorber carbon media replacement system design prior to any relaxation of media life requirements.

Significant Planned Actions in the Next Six Months:

- Complete vendor fabrication of the Carbon Bed Adsorber (CBA)
- Complete installation of container handling line shield doors
- Complete installation of the ASX system

Issues:

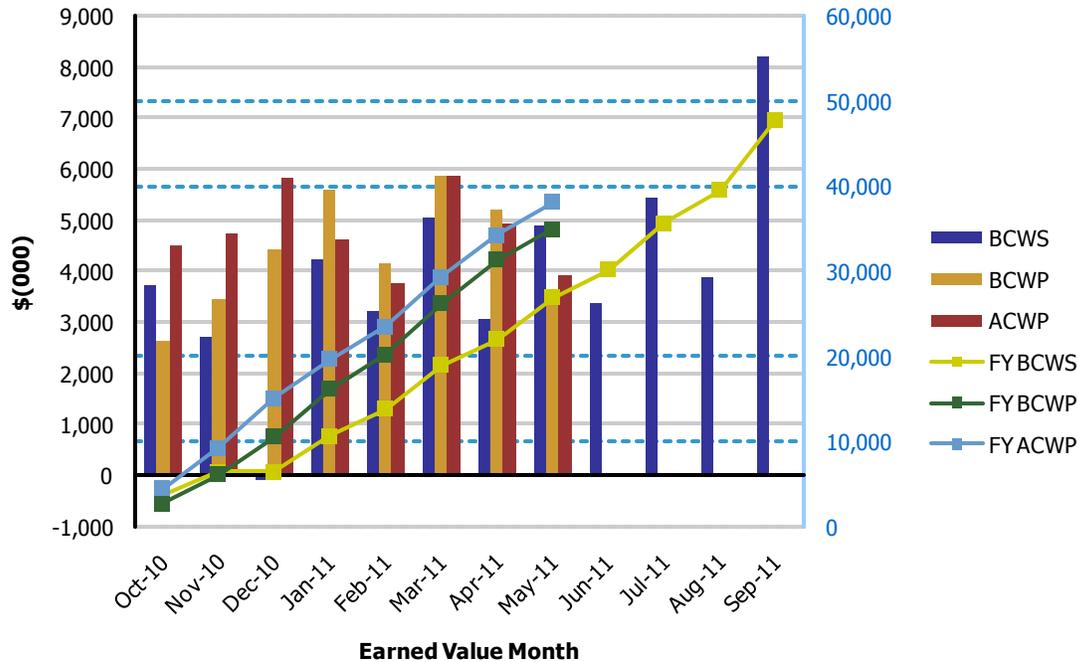
CBA fabrication difficulties were encountered related to warpage due to welding. Bechtel personnel deployed to the vendor facility, including welding engineers, have revised the assembly techniques to successfully resolve the issue and help preserve the schedule.

Data Set: FY 2011 Earned Value Data

Data as of: May 2011

River Protection
01-D-16A - Low-Activity Waste Facility

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$3,743	\$2,654	\$4,511	0.71	0.59	\$3,743	\$2,654	\$4,511	0.71	0.59
Nov 2010	\$2,732	\$3,462	\$4,752	1.27	0.73	\$6,475	\$6,116	\$9,263	0.94	0.66
Dec 2010	(\$84)	\$4,424	\$5,823	-52.67	0.76	\$6,391	\$10,540	\$15,086	1.65	0.70
Jan 2011	\$4,232	\$5,597	\$4,606	1.32	1.22	\$10,623	\$16,137	\$19,692	1.52	0.82
Feb 2011	\$3,222	\$4,153	\$3,778	1.29	1.10	\$13,845	\$20,290	\$23,470	1.47	0.86
Mar 2011	\$5,054	\$5,862	\$5,857	1.16	1.00	\$18,899	\$26,152	\$29,327	1.38	0.89
Apr 2011	\$3,062	\$5,210	\$4,930	1.70	1.06	\$21,961	\$31,362	\$34,257	1.43	0.92
May 2011	\$4,895	\$3,600	\$3,919	0.74	0.92	\$26,856	\$34,962	\$38,176	1.30	0.92
Jun 2011	\$3,364					\$30,220				
Jul 2011	\$5,443					\$35,663				
Aug 2011	\$3,895					\$39,558				
Sep 2011	\$8,214					\$47,772				
PTD	\$615,326	\$615,900	\$661,272	1.00	0.93					

Analytical Laboratory

D-00A-05, LAB Construction Substantially Complete, Due: 12/31/2012, Status: On Schedule

Significant Past Accomplishments:

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. Overall facility complete for LAB is 46%, engineering is 81% complete, procurement is 74% complete, and construction is 63% complete.

On-going construction work includes: the installation of piping in the C2V/C3V system pits, autosampler equipment above the hot cells, trolleys in the hot cells, bulk piping/hanger installation, and conduit in various planning areas. Construction completed installation of the grout covers in the area of the hot cells.

Engineering completed scoping of 15 medium-voltage electrical drawings, all mechanical handling, "M7", drawings for in-cell handling and radioactive solid waste handling, and system block diagram, "J1", drawings for all lab systems. Material requisitions for jet-pump-pair fluidic devices were issued.

As construction and engineering continue, commissioning personnel are diligently working on procedure development for caustic and/or oxidative leach during the batch processing of the feed slurry, as well incorporating comments to the Waste Acceptance Criteria Data Quality Objective Report. The operations team is inquiring about the date the LAB will have its environmental permits to allow for methods validation. The operations staff accepted proposed vendor cost savings measures to replace drawer slides and counter top fixtures, other suggestions were either denied or referred to the design authority.

Significant Planned Actions in the Next Six Months:

- Install fume hoods
- Install LAB waste drum bogie transfer port
- Install Autosampler HEPA filter housings
- Install hot cell monorail airlocks
- Complete installation of Autosampler System

Issues:

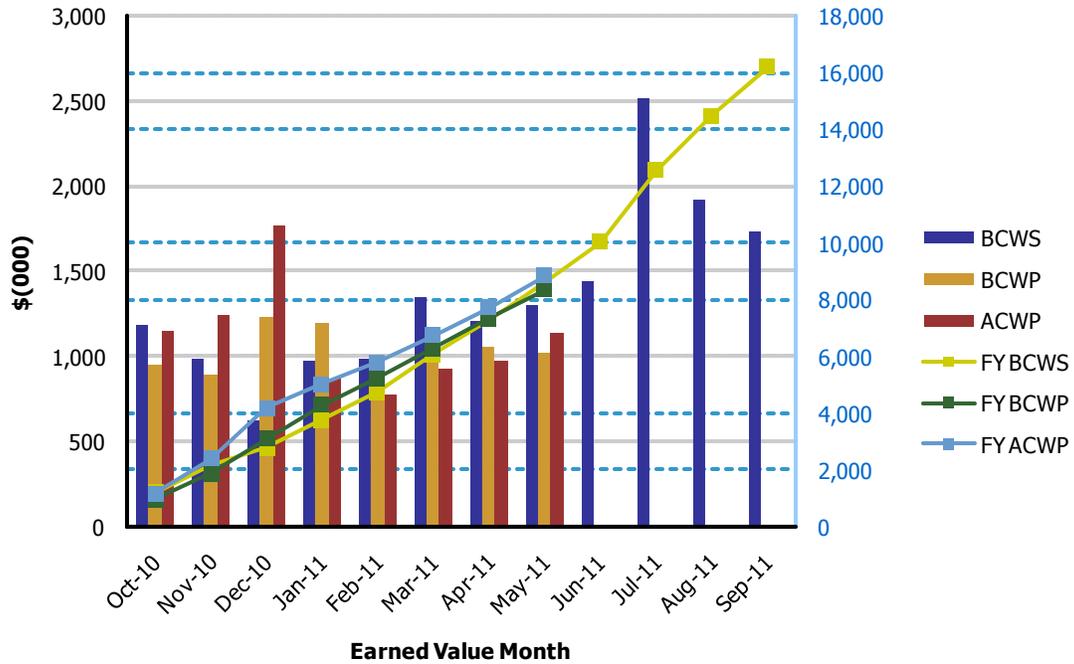
No major issues.

Data Set: FY 2011 Earned Value Data

Data as of: May 2011

**River Protection
01-D-16B - Analytical Laboratory**

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$1,180	\$954	\$1,152	0.81	0.83	\$1,180	\$954	\$1,152	0.81	0.83
Nov 2010	\$984	\$893	\$1,245	0.91	0.72	\$2,164	\$1,847	\$2,397	0.85	0.77
Dec 2010	\$621	\$1,236	\$1,768	1.99	0.70	\$2,785	\$3,083	\$4,165	1.11	0.74
Jan 2011	\$971	\$1,198	\$869	1.23	1.38	\$3,756	\$4,281	\$5,034	1.14	0.85
Feb 2011	\$982	\$949	\$770	0.97	1.23	\$4,738	\$5,230	\$5,804	1.10	0.90
Mar 2011	\$1,350	\$1,039	\$924	0.77	1.12	\$6,088	\$6,269	\$6,728	1.03	0.93
Apr 2011	\$1,210	\$1,059	\$974	0.88	1.09	\$7,298	\$7,328	\$7,702	1.00	0.95
May 2011	\$1,299	\$1,018	\$1,133	0.78	0.90	\$8,597	\$8,346	\$8,835	0.97	0.94
Jun 2011	\$1,445					\$10,042				
Jul 2011	\$2,516					\$12,558				
Aug 2011	\$1,925					\$14,483				
Sep 2011	\$1,735					\$16,218				
PTD	\$161,810	\$160,732	\$173,513	0.99	0.93					

Balance of Facilities (BOF)

D-00A-12, Steam Plant Construction Complete, Due: 12/31/2012, Status: On Schedule

Significant Past Accomplishments:

BOF provides services and utilities to support operation of the main production facilities – PT, HLW, LAW, and LAB. Overall facility percent complete for BOF is 47%, engineering is 78% complete, procurement is 46% complete, and construction is 61% complete.

Construction of BOF is progressing, and systems are being completed as demonstrated by the completion of the water treatment facility. Progress continues in the areas of plant service air for the glass former facility, fire detection equipment for the T-52 building, and cable, electrical terminations, and pressure safety valve instrumentation for the plant cooling water system in the chiller compressor plant.

The operations staff continues to evaluate facilities as they are constructed and turned over, and proposed a field change to add low point drains to the domestic water system, and concerns with the fact that the glass former facility does not have a redundant air dryer. They are also actively involved in evaluating the requirements of the emergency turbine generators.

Significant Planned Actions in the Next Six Months:

- Complete construction of cooling tower
- Complete construction of fuel oil pumphouse
- Substantially complete construction of main switchgear building
- Complete construction of BOF switchgear building
- Install structural steel for anhydrous ammonia facility
- Emergency turbine generator supplier selection and notice to proceed
- Award hi-purity gas subcontract

Issues:

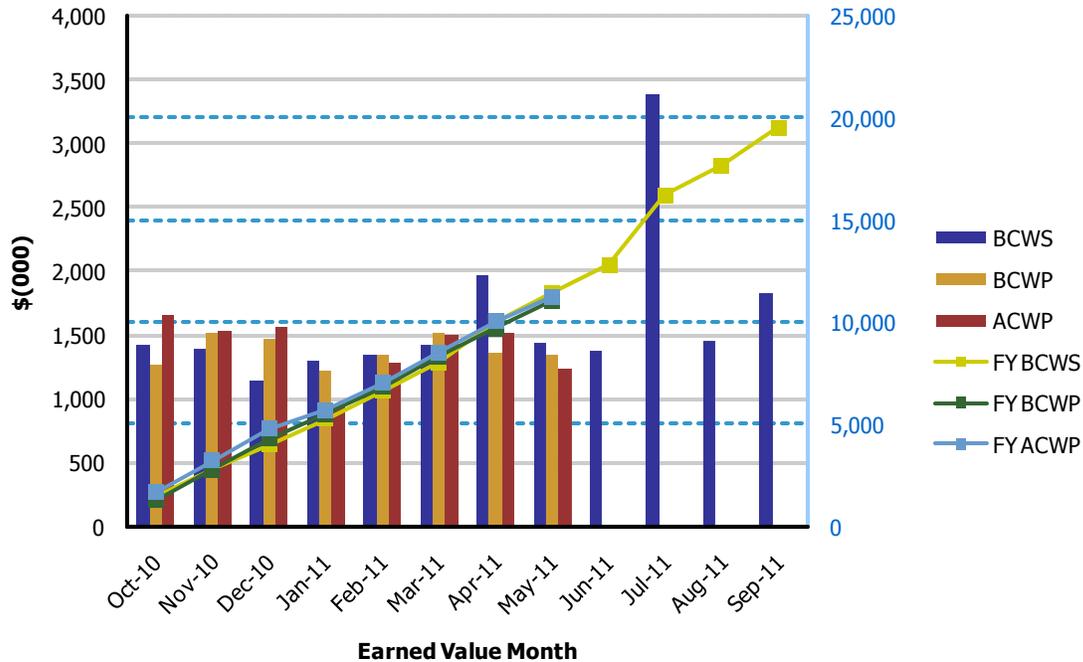
- Welding of anhydrous ammonia vessel
- Evaluation, selection, and procurement of emergency turbine generator

Data Set: FY 2011 Earned Value Data

Data as of: May 2011

**River Protection
01-D-16C - Balance of Facilities**

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$1,428	\$1,272	\$1,660	0.89	0.77	\$1,428	\$1,272	\$1,660	0.89	0.77
Nov 2010	\$1,398	\$1,520	\$1,539	1.09	0.99	\$2,826	\$2,792	\$3,199	0.99	0.87
Dec 2010	\$1,150	\$1,475	\$1,558	1.28	0.95	\$3,976	\$4,267	\$4,757	1.07	0.90
Jan 2011	\$1,302	\$1,224	\$960	0.94	1.28	\$5,278	\$5,491	\$5,717	1.04	0.96
Feb 2011	\$1,347	\$1,346	\$1,288	1.00	1.05	\$6,625	\$6,837	\$7,005	1.03	0.98
Mar 2011	\$1,429	\$1,518	\$1,505	1.06	1.01	\$8,054	\$8,355	\$8,510	1.04	0.98
Apr 2011	\$1,962	\$1,363	\$1,524	0.69	0.89	\$10,016	\$9,718	\$10,034	0.97	0.97
May 2011	\$1,442	\$1,352	\$1,237	0.94	1.09	\$11,458	\$11,070	\$11,271	0.97	0.98
Jun 2011	\$1,381					\$12,839				
Jul 2011	\$3,383					\$16,222				
Aug 2011	\$1,462					\$17,684				
Sep 2011	\$1,830					\$19,514				
PTD	\$246,651	\$245,436	\$243,186	1.00	1.01					

Waste Treatment Plant Project - Percent Complete Status Through May 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	938.6	615.9	66%	222.5	200.7	90%	234.9	195.6	83%	333.1	213.3	64%	148.1	6.3	4%
Analytical Lab	346.1	160.7	46%	52.2	42.3	81%	56.1	41.5	74%	102.7	65.2	63%	135.2	11.8	9%
Balance of Facilities	522.5	245.4	47%	77.3	60.3	78%	81.2	37.5	46%	227.8	138.8	61%	136.1	8.9	7%
High-Level Waste	1,460.3	783.1	54%	332.1	289.6	87%	454.1	299.9	66%	556.3	189.4	34%	117.8	4.2	4%
Pretreatment	2,475.2	1,174.9	47%	680.4	534.2	79%	714.3	312.4	44%	897.9	322.5	36%	182.6	5.8	3%
Shared Services	4,781.8	3,228.1	68%	1,093.2	881.4	81%	467.2	350.6	75%	1,417.8	1,018.6	72%	455.8	111.4	24%
Total WTP w/o UB	10,524.4	6,208.2	59%	2,457.8	2,008.5	82%	2,007.8	1,237.6	62%	3,535.6	1,947.6	55%	1,175.5	148.4	13%
Undistributed Budget	0.0	n/a	n/a	n/a	n/a	n/a									
Total WTP	10,524.4	6,208.2	59%	2,457.8	2,008.5	82%	2,007.8	1,237.6	62%	3,535.6	1,947.6	55%	1,175.5	148.4	13%

Source: WTP Contract Performance Report - Format 1, Data for May 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.

¹ Note: EVMS data is through May 2011.