

Final

Office of River Protection
Consent Decree 2:08-CV-5085-RMP (2016)

Monthly Report
August 2016

Office of River Protection**Consent Decree 08-5085-FVS and Amended Consent Decree 2:08-CV-5085-RMP****Project Earned Value Management System reflects June 2016 information**

Page	Topic	Leads
4	CD Milestone Statistics/Status	Bryan Trimberger/Dan McDonald/Jeff Lyon
6	Consent Decree Reports/Reviews	
7	Spare Reboiler Requirement Status	Paul Hernandez
8	Single-Shell Tank Retrieval Program • D-16B-01, D-16B-02, D-16B-03	Chris Kemp/Jeff Lyon
10	Tank Waste Retrieval Work Plan Status • Consent Decree Appendix C	Chris Kemp/Jeff Lyon
14	Waste Treatment and Immobilization Plant Project • D-00A-06, D-00A-17, D-00A-01	Joni Grindstaff/Dan McDonald
18	Pretreatment Facility • D-00A-18, D-00A-19, D-00A-13, D-00A-14, D-00A-15, D-00A-16	Dan Knight/Dan McDonald
21	High-Level Waste Facility • D-00A-20, D-00A-21, D-00A-02, D-00A-03	Wahed Abdul/Dan McDonald
25	Low-Activity Waste Facility • D-00A-07, D-00A-08, D-00A-09	Jeff Bruggeman/Dan McDonald
28	Balance of Facilities • D-00A-12	Jason Young/Dan McDonald
30	Analytical Laboratory • D-00A-005	Jennifer Sands/Dan McDonald
32	Waste Treatment Plant Project Percent Complete Status (Table)	

CD = Consent Decree

Acronyms and Abbreviations

BCP	baseline change proposal
BNI	Bechtel National, Inc.
BOF	Balance of Facilities
CV	cost variance
DFLAW	direct-feed low-activity waste
DOE	U.S. Department of Energy
EIR	external independent review
EMF	Effluent Management Facility
FY	fiscal year
HAMTC	Hanford Atomic Metals Trades Council
HEPA	high-efficiency particulate air
HLW	High-Level Waste (Facility)
HPAV	hydrogen in piping and ancillary vessels
HVAC	heating, ventilation, and air conditioning
LAB	Analytical Laboratory
LAW	Low-Activity Waste (Facility)
LBL	Low-Activity Waste Facility, Balance of Facilities, and Analytical Laboratory
MARS-V	Mobile Arm Retrieval System-Vacuum
ORP	U.S. Department of Energy, Office of River Protection
PDSA	preliminary documented safety analysis
PT	Pretreatment (Facility)
RLD	Radioactive Liquid Waste Disposal System
SV	schedule variance
WRPS	Washington River Protection Solutions LLC
WTP	Waste Treatment and Immobilization Plant

CD Milestone Statistics/Status

Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2020				
D-00A-07 Interim	LAW Facility Construction Substantially Complete	12/31/2020		On Schedule
D-16B-03*	Of the 12 SSTs referred to in B-1 and B-2, complete retrieval of tank waste in at least 5	12/31/2020		On Schedule
Fiscal Year 2022				
D-00A-08 Interim	Start LAW Facility Cold Commissioning	12/31/2022		On Schedule
Fiscal Year 2023				
D-00A-09 Interim	LAW Facility Hot Commissioning Complete	12/31/2023		On Schedule
Fiscal Year 2024				
D-16B-01*	Complete Retrieval of Tank Waste from the following remaining SSTs in WMA-C: C-102, C-105, and C-111	03/31/2024		On Schedule
D-16B-02*	Complete retrieval of tank wastes from the following SSTs in Tank Farms A and AX: A-101, A-102, A-104, A-105, A-106. AX-101, AX-102, AX-103, and AX-104. Subject to the requirements of Section IV-B-3 DOE may substitute any of the identified 9 SSTs and advise Ecology accordingly	03/31/2024		On Schedule
Fiscal Year 2030				
D-00A-02 Interim	HLW Facility Construction Substantially Complete	12/31/2030		On Schedule
Fiscal Year 2031				
D-00A-13 Interim	Complete Installation of Pretreatment Feed Separation Vessels	12/31/2031		On Schedule
D-00A-14 Interim	PT Facility Construction Substantially Complete	12/31/2031		On Schedule

Milestone	Title	Due Date	Completion Date	Status
D-00A-19 Interim	Complete Elevation 98 feet Concrete Floor Slab Placements in PT Facility	12/31/2031		On Schedule
Fiscal Year 2032				
D-00A-03 Interim	Start HLW Facility Cold Commissioning	06/30/2032		On Schedule
D-00A-06 Interim	Complete Methods Validations	06/30/2032		On Schedule
D-00A-15 Interim	Start PT Facility Cold Commissioning	12/31/2032		On Schedule
Fiscal Year 2033				
D-00A-04 Interim	HLW Facility Hot Commissioning Complete	12/31/2033		On Schedule
D-00A-16 Interim	PT Facility Hot Commissioning Complete	12/31/2033		On Schedule
D-00A-17	Hot Start of Waste Treatment Plant	12/31/2033		On Schedule
Fiscal Year 2036				
D-00A-01	Achieve Initial Plant Operations for the Waste Treatment Plan**	12/31/2036		On Schedule

* Milestones B-1, B-2, and B-3 narrative changed in accordance with 2016 amended Consent Decree (CD). Per this amendment, there is no longer a milestone B-4.

** Error in the CD: Last word of the D-00A-01 milestone should be Plant

DOE = U.S. Department of Energy

Ecology = Washington State Department of Ecology

HLW = high-level waste.

LAW = low-activity waste.

PT = pretreatment.

SST = single-shell tank.

WMA-C = C Farm waste management area.

Consent Decree Reports/Reviews

D-16C-03 series, Submit to State of Washington and State of Oregon Quarterly Report,
Due: July 31, 2016, Status: Completed.

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

D-006-00-B1, Provide State of Oregon notice of meetings in D-006-00-B, etc. no less than 30 days before they are scheduled, Due: September 25, 2016, Status: On Schedule.

D-006-00-B, Meet Approximately Every Three Years after Entry of Decree to review requirements of the Consent Decree, Due: October 25, 2016, Status: On Schedule.

Spare Reboiler Requirement Status

Milestone	Title	Due Date	Status
D-16E-01	DOE must purchase by December 31, 2016 a spare A-E-1* reboiler for the 242-A Evaporator**	12/31/2016	On Schedule
D-16E-02	Have available spare A-E-1* reboiler for the 242-A Evaporator**	12/31/2018	On Schedule

* Error in the Consent Decree, part should be identified as E-A-1.

**Consent Decree 08-5085-FVS, Part IV B.5 as amended by No. 2:08-CV-5085-RMP dated April 12, 2016.

Description of activity and progress made for the spare E-A-1 reboiler for the 242-A Evaporator, including a description of cost and schedule performance (as required *per 2016 amended Consent Decree (CD) dated April 12, 2016, Items, IV-C.1.h, and IV-C.2*):

- Since issuance of the March 11, 2016, Amended Consent Order, the U.S. Department of Energy (DOE) has provided the contractor with funding to accelerate the planned fiscal year (FY) 2017 work to design and procure the spare E-A-1 reboiler. The DOE Office of River Protection (ORP) authorized the Washington River Protection Solutions LLC (WRPS) to proceed by awarding a not-to-exceed contract action. WRPS is currently underway generating a procurement specification for the new spare 242-A Evaporator reboiler. The current procurement strategy is to award a design/build procurement contract with a vendor by December 21, 2016.
- The functions and requirements evaluation document has been completed. The design specification for the new spare 242-A Evaporator reboiler has been completed. This specification will be attached to a material request and submitted for request for proposal to solicit a design/build vendor.

Single-Shell Tank Retrieval Program

Milestone	Title	Due Date	Status
D-16B-03	Of the 12 SSTs referred to in B-1 and B-2, complete retrieval of tank waste in at least 5	12/31/2020*	On Schedule
D-16B-01	Complete retrieval of tank waste from the following remaining SSTs in WMA-C: C-102, C-105, and C-111	03/31/2024	On Schedule
D-16B-02	Complete retrieval of tank wastes from the following SSTs in Tank Farms A and AX: A-101, A-102, A-104, A-105, A-106, AX-101, AX-102, AX-103, and AX-104. Subject to the requirements of Section IV-B-3 DOE may substitute any of the identified 9 SSTs and advise Ecology accordingly	03/31/2024	On Schedule

* Pursuant to Section IV-B-7 of the Consent Decree, the U.S. Department of Energy (DOE) must submit to the Washington State Department of Ecology (Ecology) a written certification DOE has completed retrieval of a tank in accordance with the requirements of Appendix C, Part 1, of the Consent Decree.

SST = single shell tank.
WMA-C = C Farm waste management area.

Significant Accomplishments during the Prior Three Months:

- Completed post-retrieval sampling of Tank 241-C-111
- Completed proof of concept demonstrations for C-105 Mobile Arm Retrieval System-Vacuum (MARS-V) in-tank equipment removal
- Began development of Tank C-111 Retrieval Data Report
- Completed below grade removal of Buildings AX2707 and AX80
- Completed Building 2724AB demolition and below grade removal
- Completed installation of POR126 system and began cold operational acceptance testing
- Completed installation of the new A/AX change trailers and turned them over to operations
- Completed pit cleanout of AX-02D
- Prepared for concrete foundation pour on the new air and service water building (A-285)
- Completed A Farm ventilation design.

Significant Planned Activities in the Next Three Months:

- Submit retrieval data reports for 241-C-102

- Negotiate contract proposal for installing and performing the third retrieval technology at Tank C-105
- Complete Tank C-105 MARS-V containment box disassembly
- Complete removal of Tank C-105 MARS-V in-tank equipment
- Complete Tank C-105 modified sluicing system design
- Issue Tank C-111 retrieval completion certification
- Complete cleanout of Tank 241-AX-104 pits 04A and 04D, and initiate debris removal from 04C
- Complete AX-2707 fencing and gate upgrades
- Complete Tanks 241-AX-102 and 241-AX-104 extended reach sluicing system procurement
- Complete installation of the A-285 service building.

Issues:

- On July 11, 2016, the Hanford Atomic Metal Trades Council (HAMTC), a labor organization composed of various unions working at Hanford, issued a “stop work” requiring mandatory use of supplied air within the perimeter fence lines of both single-shell and double-shell tank farms. This letter also included six other demands HAMTC expected WRPS to implement immediately. On July 21, 2016, the Washington State Attorney General and Citizens (Local Union 598 and Hanford Challenge) filed motions for preliminary injunction in federal court seeking, among other things, all work inside the perimeter fences of any tank farm be performed while wearing *mandatory* supplied air.
- Funding limitations could potentially limit field activities within AX Farm, which would result in deferring tank preparation activities, which include removal of legacy operational equipment, and installation of retrieval pumps and sluicers into FY 2017 and FY 2018. Due to the prior technical challenges related to completing retrievals at Tank 241-C-102, Tank 241-C-111, and the current modifications to Tank 241-C-105, it is likely funding needed to complete Tank 241-AX-102 and Tank 241-AX-104 farm retrieval system installation will be required through FY 2018 with retrieval operations starting in FY 2019 to meet milestone D-16B-03 by December 31, 2020.
- The HAMTC stop work issued on July 11, 2016, has impacted Tank C-105 equipment removal activities due to C Farm access limitations. Construction resources have been redeployed to other work/contracts as available.
- The HAMTC stop work issued on July 11, 2016, has impacted the AX field work due to equipment availability. Pit cleanouts are currently on hold. Crews will opportunistically attempt to continue pit cleanout when crews and equipment are freed up from AY-102 construction installing four extended reach sluicer system and removal of the C-105 MARS-V.

Tank Waste Retrieval Work Plan Status

Tank	TWRWP	Expected Revisions	First Retrieval Technology	Second Technology	Third Technology
AX-101	RPP-RPT-58932, Draft	Initial Approval	Sluicing with ERSS	High-Pressure Water deployed with ERSS	-
AX-102	RPP-RPT-58933, Draft	Initial Approval	Sluicing with ERSS	High-Pressure Water deployed with ERSS	-
AX-103	RPP-RPT-58934, Draft	Initial Approval	Sluicing with ERSS	High-Pressure Water deployed with ERSS	-
AX-104	RPP-RPT-58935, Draft	Initial Approval	Sluicing with ERSS	High-Pressure Water deployed with ERSS	-
C-101	RPP-22520, Rev. 8	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-102	RPP-22393, Rev. 7	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-104	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0018	-
C-105	RPP-22520, Rev. 8	Complete	MARS-V	MARS-V-High Pressure Water Spray	Chemical Dissolution Process with ERSS
C-107	RPP-22393, Rev. 7	Complete	MARS-S	MARS-S-High Pressure Water Spray	Water Dissolution
C-108	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0025	-
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0037	-
C-110	RPP-33116, Rev. 3	Complete	Modified Sluicing	Mechanical Waste Conditioning with an In-Tank Vehicle	High Pressure Water
C-111	RPP-37739, Rev. 2	Complete	Modified Sluicing	High pressure water using the ERSS	Chemical Dissolution

Tank	TWRWP	Expected Revisions	First Retrieval Technology	Second Technology	Third Technology
					Process with ERSS
C-112	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process	-

ERSS = extended reach sluicing system.

TBD = to be determined.

MARS = Mobile Arm Retrieval System.

TWRWP = tank waste retrieval work plan.

S = sluicing.

V = vacuum.

Significant Accomplishments:

- Modification approved to RPP-22520, 241-C-101, and 241-C-105, *Tanks Waste Retrieval Work Plan* to include a third retrieval technology for C-105 retrieval on July 20, 2016.

Significant Planned Activities in the Next Three Months:

- Finalize AX Farm tank waste retrieval work plans.

Issues:

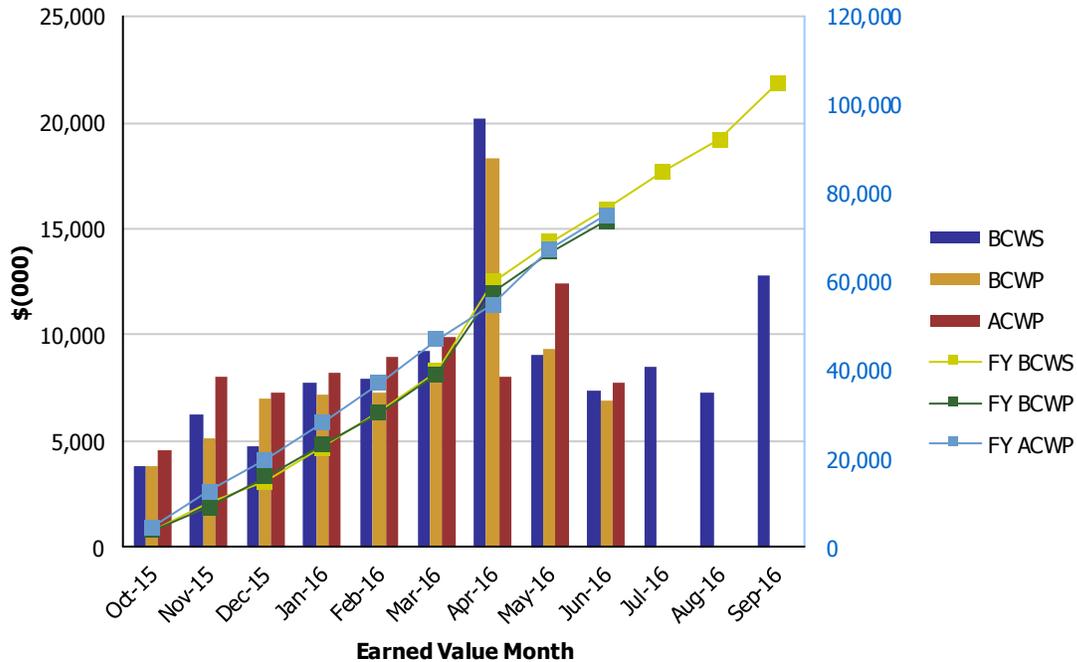
- None.

Earned Value Data: Fiscal Year 2016

June-16

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2015	\$3,770	\$3,814	\$4,560	1.01	0.84	\$3,770	\$3,814	\$4,560	1.01	0.84
Nov 2015	\$6,282	\$5,131	\$8,006	0.82	0.64	\$10,052	\$8,946	\$12,566	0.89	0.71
Dec 2015	\$4,769	\$6,970	\$7,255	1.46	0.96	\$14,821	\$15,915	\$19,821	1.07	0.80
Jan 2016	\$7,702	\$7,214	\$8,233	0.94	0.88	\$22,522	\$23,130	\$28,053	1.03	0.82
Feb 2016	\$7,948	\$7,288	\$8,959	0.92	0.81	\$30,470	\$30,417	\$37,012	1.00	0.82
Mar 2016	\$9,249	\$8,693	\$9,857	0.94	0.88	\$39,719	\$39,111	\$46,869	0.98	0.83
Apr 2016	\$20,237	\$18,288	\$8,046	0.90	2.27	\$59,956	\$57,399	\$54,916	0.96	1.05
May 2016	\$9,013	\$9,299	\$12,417	1.03	0.75	\$68,970	\$66,698	\$67,333	0.97	0.99
Jun 2016	\$7,387	\$6,885	\$7,713	0.93	0.89	\$76,357	\$73,584	\$75,045	0.96	0.98
Jul 2016	\$8,496					\$84,852				
Aug 2016	\$7,264					\$92,116				
Sep 2016	\$12,840					\$104,956				

CTD	\$668,834	\$658,811	\$685,018	0.99	0.96
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- ACWP = actual cost of work performed.
- BCWP = budgeted cost of work performed.
- BCWS = budgeted cost of work scheduled.
- CPI = cost performance index.
- CTD = contract to date.
- EVMS = earned value management system.
- FY = fiscal year.
- SPI = schedule performance index.

Retrieve and Close Single-Shell Tanks (5.02)

The June variances have a minimal variance on Consent Decree and TPA milestones (M-045-15) at A-103 for tank retrieval.

The current month **unfavorable** SV of (\$502k) is due to:

- AX Retrieval equipment procurements have been re-planned based on funding challenges and prioritization; major equipment procurements have been re-scheduled to arrive based on installation activities/requirements. This negative variance does not impact the completion of projects B-1 and B-3 of the Consent Decree milestones.

The current month **unfavorable** CV of (\$827K) is due to:

- Additional health physicist technicians (HPT)/industrial hygienist technicians (IHT), support staff, and duration/time have been required to support in-farm field activities due to vapor impact and lower work productivity. This activity increases the cost of activities at C-105 and AX-102/104 to maintain Consent Decree retrieval milestones. This cost variance is expected to continue through the project along with a “stop work” explained in the second bullet.
- On July 11, 2016, the Hanford Atomic Metal Trades Council (HAMTC), a labor organization composed of various unions working at Hanford, issued a “stop work” requiring mandatory use of supplied air within the perimeter fence lines of both SST and DST farms. This letter also included six other demands that HAMTC expected the Washington River Protection Solutions LLC to implement immediately. On July 21, 2016, the Washington State Attorney General and Citizens (Local Union 598 and Hanford Challenge) filed motions for a preliminary injunction in federal court seeking, among other things, all work inside the perimeter fences of any tank farm be performed while wearing *mandatory* supplied air.

Waste Treatment and Immobilization Plant Project

Milestone	Title	Due Date	Status
D-00A-06	Complete Methods Validations	06/30/2032	On Schedule
D-00A-17	Hot Start of Waste Treatment Plant	12/31/2033	On Schedule
D-00A-01	Achieve Initial Plant Operations for WTP	12/31/2036	On Schedule

WTP = Waste Treatment and Immobilization Plant

The Waste Treatment and Immobilization Plant (WTP) Project currently employs approximately 2,936 full-time equivalent contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 597 craft, 453 non-manual, and 137 subcontractor full-time equivalent personnel working at the WTP construction site (all facilities).

The WTP Project continues to focus on completion of the Low-Activity Waste (LAW) Facility, Balance of Facilities (BOF), and Analytical Laboratory (LAB) (collectively known as LBL, including direct-feed low-activity waste [DFLAW] and LBL facility services). As of June 2016, LBL facilities were 48 percent complete, design and engineering was 74 percent complete, procurement was 64 percent complete, construction was 65 percent complete, and startup and commissioning was 11 percent complete.

For the project to manage to the DFLAW initiative, the project is required to update the performance baseline to reflect the new work activities. This requires a change to BNI's contract with the U.S. Department of Energy (DOE), Office of River Protection (ORP). The WTP team has been working with BNI to negotiate the changes in work scope into the contract.

Significant Accomplishments during the Prior Three Months:

- The baseline change proposal (BCP) for LBL/DFLAW was submitted to the DOE Office of Project Management, Oversight, and Assessments for review.
- An External Independent Review (EIR) team led by Office of Project Management, Oversight, and Assessments was required to support the approval process of the new BCP for the LBL/DFLAW initiative. The first EIR review focused on the new scope in the BCP. The second EIR, conducted in May 2016, focused on the cost and schedule.

Significant Planned Activities in the Next Three Months:

- Contract negotiations with BNI to definitize the new LBL/DFLAW scope into the contract have been ongoing and are expected to be completed by the end of the fiscal year.
- ORP will present the new BCP to the Chief Executive for Project Management seeking approval of the LBL/DFLAW BCP for the WTP Project.

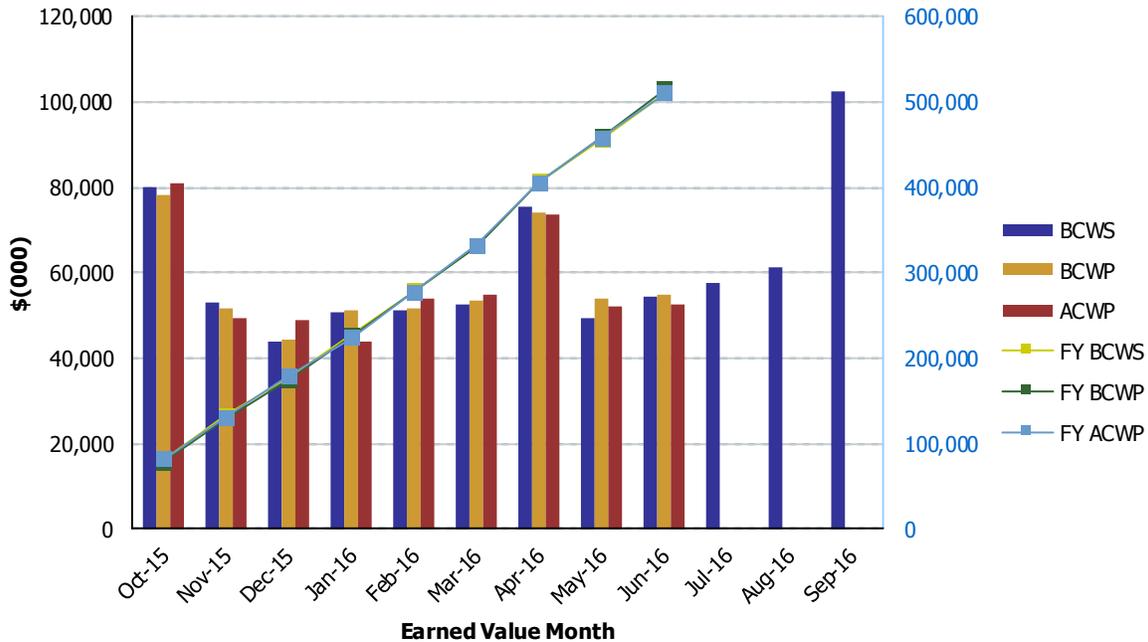
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data

Data as of: June 2016

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 2015	\$79,800	\$78,230	\$81,000	0.98	0.97	\$79,800	\$78,230	\$81,000	0.98	0.97
Nov 2015	\$52,815	\$51,614	\$49,184	0.98	1.05	\$132,615	\$129,844	\$130,184	0.98	1.00
Dec 2015	\$43,659	\$44,505	\$48,853	1.02	0.91	\$176,275	\$174,348	\$179,037	0.99	0.97
Jan 2016	\$50,515	\$51,167	\$43,662	1.01	1.17	\$226,790	\$225,515	\$222,699	0.99	1.01
Feb 2016	\$51,349	\$51,492	\$54,112	1.00	0.95	\$278,139	\$277,007	\$276,811	1.00	1.00
Mar 2016	\$52,395	\$53,645	\$54,896	1.02	0.98	\$330,533	\$330,653	\$331,707	1.00	1.00
Apr 2016	\$75,610	\$74,244	\$73,679	0.98	1.01	\$406,144	\$404,897	\$405,387	1.00	1.00
May 2016	\$49,478	\$53,800	\$51,914	1.09	1.04	\$455,622	\$458,697	\$457,300	1.01	1.00
Jun 2016	\$54,203	\$54,759	\$52,382	1.01	1.05	\$509,825	\$513,456	\$509,682	1.01	1.01
Jul 2016	\$57,534									
Aug 2016	\$61,420									
Sep 2016	\$102,314									

PTD	\$9,609,588	\$9,593,002	\$9,527,485	1.00	1.01
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|---|--|
| ACWP = actual cost of work performed. | CTD = contract to date. |
| BCWP = budgeted cost of work performed. | EVMS = earned value management system. |
| BCWS = budgeted cost of work scheduled. | FY = fiscal year. |
| CPI = cost performance index. | SPI = schedule performance index. |

Project Schedule and Cost Variance Performance

Performance Tracking	SV (\$x1,000)	CV (\$x1,000)
Current Period (June 2016)	\$556	\$2,377
Fiscal Year 2016 to-date	\$3,631	\$3,773
Cumulative (through June 2016)	(\$16,586)	\$65,517

SV = schedule variance.

CV = cost variance.

Earned Value Management System Analysis

The June **favorable** schedule variance (SV) of approximately \$0.6 million is primarily due to the following:

- LBL is an overall favorable of \$0.9 million. LBL plant equipment is a favorable \$0.6 million, primarily due to “Active Safety Process Gas Analyzers” milestone completing earlier than planned. LBL engineering is a favorable \$0.4 million, primarily due to DFLAW engineering acceleration of calculations, datasheets, and support to procurement. LBL plant operations is a favorable \$0.4 million, primarily due to a favorable performance related to working maintenance activities ahead of schedule. This is offset by an LBL construction unfavorable amount of (\$0.4 million) – BOF unfavorable primarily due to vacuum truck reliability, as well as facility services receipt of less bulk material than planned. Also, LBL startup is an unfavorable (\$0.1 million) – BOF unfavorable amount is primarily due to delays in writing procedures for the water treatment building, cooling tower facility, and chiller facility.
- High-Level Waste (HLW) Facility construction is an unfavorable (\$0.4 million), primarily due to civil work completed in prior periods.

The June **favorable** cost variance (CV) of approximately \$2.4 million is primarily due to the following:

- Project services is a favorable \$1.5 million. Engineering is a favorable \$0.1 million, primarily due to corrections being completed for relocation charges and process engineering commencing charging to LAW (ahead of budget transfer in July). General/Other services is a favorable \$0.9 million, primarily due to project and business management cost underruns for relocation and subcontracts, and other miscellaneous Project Services labor underruns. Procurement is a favorable \$0.4 million, primarily due to open positions for fiscal year (FY) 2016 to meet project services targets. Construction is a favorable \$0.1 million, primarily due to a favorable non-labor variance and positive labor usage variance, and reversal of erroneous charges for last month on construction distributed support, subcontracts, and bulk materials.
- LBL is a favorable \$1.2 million. Plant operations is a favorable \$0.9 million, with BOF favorable performance related to maintenance activities, such as inspection, refurbishments, and staffing additions later than planned. Startup is a favorable

\$0.5 million, primarily due to the forecast for staffing additions being later than planned. Construction is a favorable \$0.4 million, primarily due to bulks purchased slower than planned, offset by unfavorable performance related to a request for equitable adjustment for the DKB Insulation subcontract. Offsets are:

- Support functions (excluding construction, plant operations, and startup) is an unfavorable (\$0.2 million), primarily due to additional project management support for oversight of startup and site energization, and procurement-apportioned labor charges from shared services above plan driven by LBL prioritization.
- Design agency is an unfavorable (\$0.1 million), as LAW experienced support to construction and new hire training above plan.
- Nuclear safety engineering is an unfavorable (\$0.2 million), with LAW higher than planned support for comment resolution for the process hazard analysis and development of the process hazard analysis summary table.
- PT is an unfavorable (\$0.4 million). Nuclear safety engineering is an unfavorable (\$0.3 million), primarily due to increased support for deliverables for T1 through T3. Technical teams are an unfavorable (\$0.1 million) primarily due to additional resources used to support T1 and unplanned studies for T4.

Pretreatment Facility

Milestone	Title	Due Date	Status
D-00A-19	Complete Elevation 98' Concrete Floor Slab in PT Facility	12/31/2031	On Schedule
D-00A-13	Complete Installation of Pretreatment Feed Separation Vessels	12/31/2031	On Schedule
D-00A-14	PT Facility Construction Substantially Complete	12/31/2031	On Schedule
D-00A-15	Start PT Facility Cold Commissioning	12/31/2032	On Schedule
D-00A-16	PT Facility Hot Commissioning Complete	12/31/2033	On Schedule

PT = pretreatment.

The Pretreatment (PT) Facility will separate radioactive tank waste into high-level waste and low-activity waste fractions, and transfer each waste type to the respective vitrification facility for immobilization. As of September 2012, the PT Facility was 56 percent complete overall, with engineering design 85 percent complete, procurement 56 percent complete, construction 43 percent complete, and startup and commissioning 3 percent complete.

The U.S. Department of Energy (DOE) continues to focus on resolving five outstanding Waste Treatment and Immobilization Plant (WTP) technical issues as described in the Amended Consent Decree (i.e., preventing potential hydrogen buildup, preventing criticality, ensuring control of the pulse-jet mixers [PJM], protecting against possible erosion and corrosion, and ensuring ventilation balancing), while performing hazards analyses, and completing safety evaluations for process systems in accordance with the revised PT Facility 3-Year Interim Work Plan.

The WTP Project has made sustained progress on resolution of the five outstanding technical issues. The DOE Office of River Protection (ORP) expects to attain resolution and closure of the two nuclear safety technical issues, “Preventing Potential Hydrogen Build-Up” and “Preventing Criticality,” by the end of 2016. Work will continue past 2016 on resolving the remaining three issues. ORP has worked with Bechtel National, Inc. (BNI) to develop closure packages for each technical issue, defining work scope, required deliverables, and technical issue closure criteria.

Significant Accomplishments during the Prior Three Months:

- Standard high-solids vessel (SHSV) prototype was delivered and installed for full-scale testing at Atkins Engineering Laboratory.
- BNI issued the plutonium particulate criticality safety evaluation engineering study.
- BNI provided hydrogen in piping and ancillary vessels basis of design change package to ORP for approval. ORP has provided comments back to BNI for resolution.
- BNI issued the Erosion/Corrosion Sliding Bed Report to ORP for approval. ORP continues to review the report at this time.

- ORP accepted the WTP Criticality Safety Evaluation Report, pending conditions of approval, including but not limited to:
 - Developing an appropriate control set to implement the safe subcritical limits for the liquid portion of the waste stream, or establish a clear and defensible basis for why such a control set is not necessary.
 - Conducting a complete review and evaluation of the criticality safety aspects for process conditions at the Analytical Laboratory (LAB) and providing results via formal correspondence.
 - Developing a plan for the evaluation of the need for a criticality alarm system as the design for the WTP becomes more mature.

Significant Planned Activities in the Next Three Months:

- ORP to complete technical issue resolution of hydrogen gas events in vessels; criticality in PJM vessels; and hydrogen in piping and ancillary vessels
- ORP completion of test reports for Phase 1 and Phase 2 of PJM controls system testing
- ORP approval of the SHSV design qualification test plan
- ORP approval of the SHSV PJM control test plan
- ORP completion of the design review of the SHSV
- BNI/ORP to implement internal forecast trends for remaining technical issue resolution
- ORP approval of the Erosion/Corrosion Sliding Bed Report
- BNI to issue PJM controls Phase 3 test software requirements for review
- BNI to finalize erosion/corrosion simulant basis, Newtonian/Non-Newtonian document, and simulant for one-quarter jet impingement and pipe loop testing.

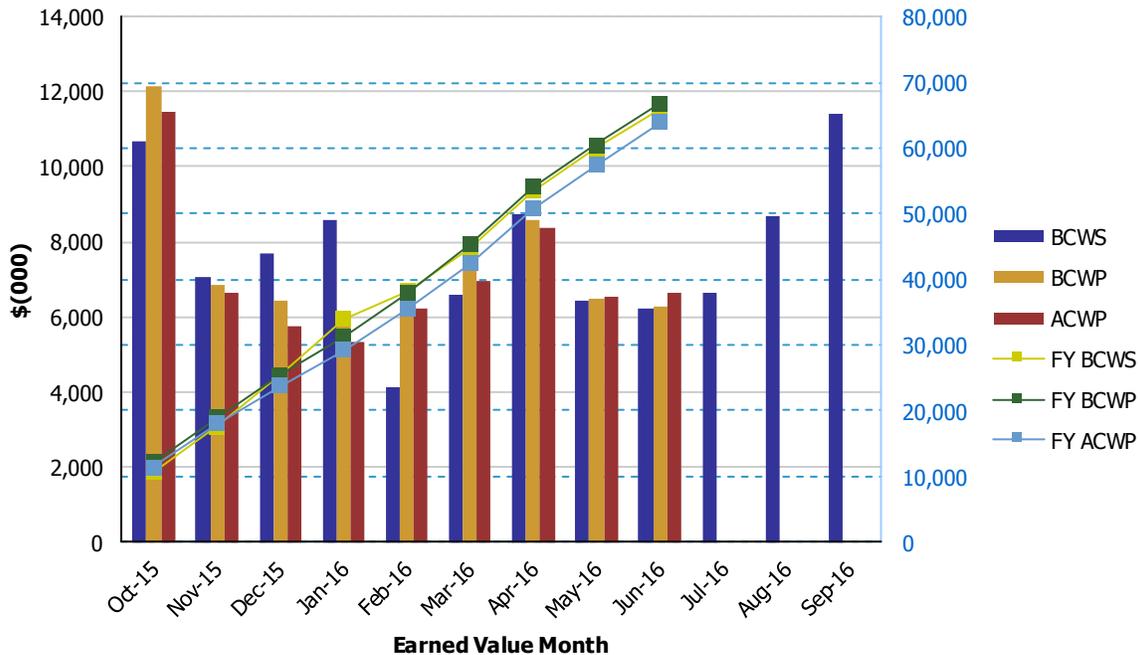
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data

Data as of: June 2016

**River Protection Project
Pretreatment Facility (WBS 1.01)**

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 2015	\$10,667	\$12,155	\$11,441	1.14	1.06	\$10,667	\$12,155	\$11,441	1.14	1.06
Nov 2015	\$7,074	\$6,836	\$6,648	0.97	1.03	\$17,741	\$18,991	\$18,089	1.07	1.05
Dec 2015	\$7,678	\$6,441	\$5,777	0.84	1.11	\$25,419	\$25,432	\$23,867	1.00	1.07
Jan 2016	\$8,595	\$5,853	\$5,332	0.68	1.10	\$34,014	\$31,285	\$29,199	0.92	1.07
Feb 2016	\$4,105	\$6,545	\$6,220	1.59	1.05	\$38,120	\$37,830	\$35,419	0.99	1.07
Mar 2016	\$6,588	\$7,604	\$6,979	1.15	1.09	\$44,708	\$45,434	\$42,398	1.02	1.07
Apr 2016	\$8,717	\$8,586	\$8,400	0.99	1.02	\$53,425	\$54,020	\$50,798	1.01	1.06
May 2016	\$6,434	\$6,485	\$6,523	1.01	0.99	\$59,859	\$60,506	\$57,321	1.01	1.06
Jun 2016	\$6,249	\$6,258	\$6,630	1.00	0.94	\$66,108	\$66,764	\$63,951	1.01	1.04
Jul 2016	\$6,642									
Aug 2016	\$8,671									
Sep 2016	\$11,427									

PTD	\$1,798,508	\$1,798,596	\$1,776,511	1.00	1.01
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- | | | | | | |
|------|---|----------------------------------|------|---|---------------------------------|
| ACWP | = | actual cost of work performed. | CTD | = | contract to date. |
| BCWP | = | budgeted cost of work performed. | EVMS | = | earned value management system. |
| BCWS | = | budgeted cost of work scheduled. | FY | = | fiscal year. |
| CPI | = | cost performance index. | SPI | = | schedule performance index. |

High-Level Waste Facility

Milestone	Title	Due Date	Status
D-00A-20	Complete Construction of Structural Steel to 14' in HLW Facility	12/31/2010	Complete
D-00A-21	Complete Construction of Structural Steel to 37' in HLW Facility	12/31/2012	Complete
D-00A-02	HLW Facility Construction Substantially Complete	12/31/2030	On Schedule
D-00A-03	Start HLW Facility Cold Commissioning	06/30/2032	On Schedule
D-00A-04	HLW Facility Hot Commissioning Complete	12/31/2033	On Schedule

HLW = high-level waste.

The High-Level Waste (HLW) Facility will receive the separated HLW concentrate from the Pretreatment (PT) Facility. This concentrate will be blended with glass formers, converted into molten glass in one of the two HLW Facility melters, and then poured into cylindrical stainless steel canisters. After cooling, the canisters will be sealed and decontaminated before shipping to interim storage.

As of September 2012, the HLW Facility was 62 percent complete overall, with engineering design 89 percent complete, procurement 81 percent complete, construction 43 percent complete, and startup and commissioning 4 percent complete. Physical percent complete for the HLW and PT facilities were frozen as of September 2012, pending development of a revised baseline to address technical and design issues.

Currently, HLW Facility activities are being performed in accordance with the fiscal year (FY) 2015/FY 2016, 2-Year Interim Work Plan. Efforts are focused on completing activities required to obtain full-production authorization by the U.S. Department of Energy (DOE), including developing longer-term work plans. Limited construction is continuing with the concrete placements, installation of support steel, and crane rails in the melter caves.

Engineering is focused on activities to support implementation of technical core team recommendations, performance of engineering studies, and analysis to disposition design and operability review comments. One of these engineering studies, the decontamination handling system engineering study, has been issued. Phase II of the HLW Facility melter offgas treatment process/process vessel vent engineering study, which is evaluating options for system changes to improve the design and operability is in progress. Design of the remaining portions of the radioactive liquid disposal (RLD) system (Phase II) is in progress following incorporation of the recently approved RLD Preliminary Documented Safety Analysis (PDSA) Change Package.

Process hazard analysis has been completed and preparation of the facility PDSA update to align design and the safety basis has begun, with the expected submission to the DOE Office of River Protection (ORP) in November 2016.

Systems engineering continues to develop system design descriptions, and incorporate system design description requirements into a requirements management system to ensure all requirements are incorporated into the facility design and subsequently verified prior to completion of HLW Facility commissioning.

Multiple high-efficiency particulate air (HEPA) filter media designs are planned to be tested to ensure the qualified filters support the needs for the HLW Facility, along with the Low-Activity Waste (LAW) Facility, Analytical Laboratory (LAB), and Balance of Facilities (BOF) (collectively known as LBL, including LBL facility services). Testing of the full-scale filter designs at Mississippi State University is ongoing. One filter design, known as “Design 4” has been through three rounds of successful full-scale design testing. The final round of testing on the “Design 4” filter was completed, again showing positive and successful test results. Following issuance of a filter selection report, NQA-1 qualification testing of the “Design 4” filter will proceed. Development of alternate designs is ongoing. Fabrication of the additional filters and testing continues. Qualification testing of Flanders filters has begun.

Significant Accomplishments during the Prior Three Months:

- Completed successful full-scale tests of the fourth “Design 4” HEPA filter.
- Began NQA-1 HEPA filter qualification testing of Flanders filters.
- Issue decontamination handling system engineering study.
- Completed HLW Facility melter handling system and HLW Facility offgas process system Phase I engineering studies to disposition some of the design and operability issues and recommendations.
- Issued HLW Facility hazards analysis to support PDSA update.
- Release material procurement and fabrication of RLD-8. RLD-8 is located in the Wet Process Cell and must be installed prior to concrete slab placement to support roof installation.
- Completed roof flashing at interface between the annex and the main facility, thereby rain-proofing the annex.

Significant Planned Activities in the Next Three Months:

- Begin NQA-1 HEPA filter qualification testing of the “Design 4” filters
- Continue full-scale HEPA filter testing to select and qualify additional filter(s) that will support the Waste Treatment and Immobilization Plant (WTP) ventilation and offgas needs
- Release material procurement and fabrication for vessel RLD-7
- Issue the radioactive waste handling system and melter cave support handling system engineering studies
- Issue an engineering study detailing the potential addition of a melter assembly building/airlock and an additional import/export dock for waste handling

- Submit draft PDSA revision to the ORP
- Continue civil build-out of the HLW Facility focusing on weathering in the building.

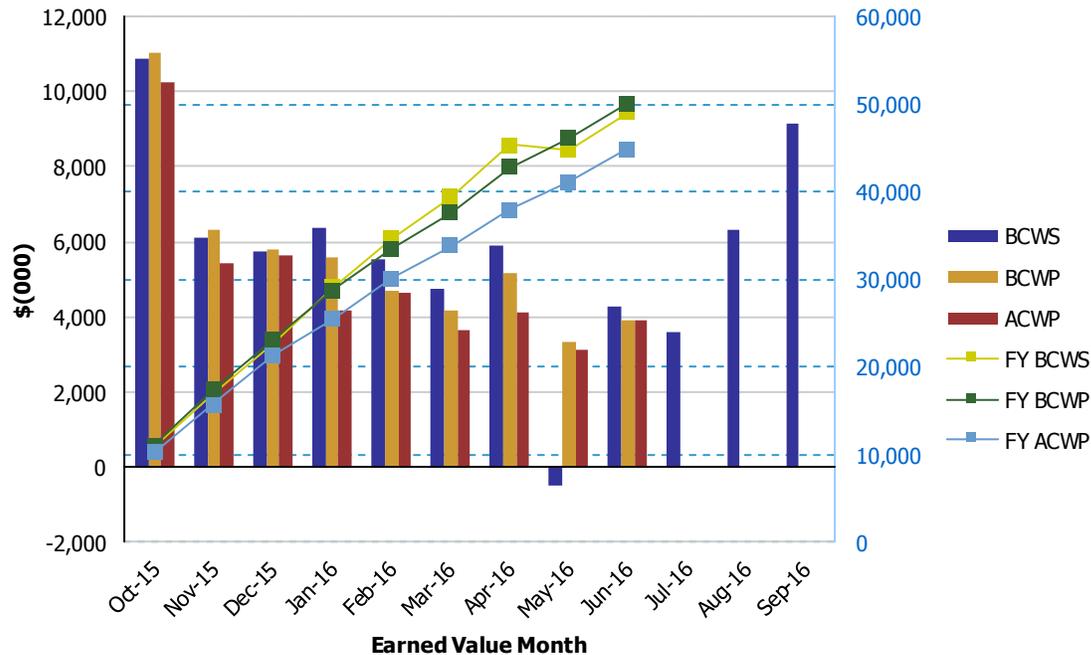
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data

Data as of: June 2016

**River Protection Project
High-Level Waste Facility (WBS 1.03)**

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 2015	\$10,905	\$11,028	\$10,257	1.01	1.08	\$10,905	\$11,028	\$10,257	1.01	1.08
Nov 2015	\$6,103	\$6,326	\$5,452	1.04	1.16	\$17,008	\$17,355	\$15,708	1.02	1.10
Dec 2015	\$5,737	\$5,795	\$5,634	1.01	1.03	\$22,745	\$23,150	\$21,343	1.02	1.08
Jan 2016	\$6,368	\$5,591	\$4,174	0.88	1.34	\$29,113	\$28,741	\$25,517	0.99	1.13
Feb 2016	\$5,551	\$4,711	\$4,631	0.85	1.02	\$34,664	\$33,453	\$30,148	0.97	1.11
Mar 2016	\$4,740	\$4,169	\$3,673	0.88	1.14	\$39,405	\$37,622	\$33,821	0.95	1.11
Apr 2016	\$5,921	\$5,168	\$4,141	0.87	1.25	\$45,325	\$42,789	\$37,962	0.94	1.13
May 2016	(\$497)	\$3,353	\$3,116	-6.74	1.08	\$44,828	\$46,143	\$41,078	1.03	1.12
Jun 2016	\$4,259	\$3,918	\$3,904	0.92	1.00	\$49,087	\$50,060	\$44,982	1.02	1.11
Jul 2016	\$3,616									
Aug 2016	\$6,321									
Sep 2016	\$9,148									

PTD	\$1,250,375	\$1,250,326	\$1,231,112	1.00	1.02
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|------|---|----------------------------------|------|---|---------------------------------|
| ACWP | = | actual cost of work performed. | CTD | = | contract to date. |
| BCWP | = | budgeted cost of work performed. | EVMS | = | earned value management system. |
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Low-Activity Waste Facility

Milestone	Title	Due Date	Status
D-00A-07	LAW Facility Construction Substantially Complete	12/31/2020	On Schedule
D-00A-08	Start LAW Facility Cold Commissioning	12/31/2022	On Schedule
D-00A-09	LAW Facility Hot Commissioning Complete	12/31/2023	On Schedule

LAW = low-activity waste.

The Low-Activity Waste (LAW) Facility will process concentrated low-activity waste, which will be mixed with silica and other glass-forming materials. The mixture will be fed into the LAW Facility's two melters, at a design capacity of 30 metric tons per day, and heated to 2,100 degrees Fahrenheit and vitrified into glass. The 300-ton melters are approximately 20 feet by 30 feet and 16 feet high. The glass mixture will then be poured into stainless steel containers, which are 4 feet in diameter, 7 feet tall, and weigh more than 7 tons. These containers are anticipated to be disposed of on the Hanford Site in the Integrated Disposal Facility. As of June 2016, the LAW Facility was 55 percent complete overall, with engineering design 76 percent complete, procurement 72 percent complete, construction 80 percent complete, and startup and commissioning 6 percent complete.

Significant Accomplishments during the Prior Three Months:

- Thermal catalytic oxidizer assembly was welded in place in its final location on greater than the 48 foot elevation
- First seven of nine refractory placements were made on gas barrier lid #2
- Installed 210 linear feet of process piping
- Installed 710 linear feet of conduit and pulled 30,100 linear feet of cable
- Installed 40 process area penetration seals
- Completed melter #1 gas barrier lid welding
- Completed the fire protection sprinkler piping hydrostatic test in the LAW Facility 21-foot elevation.

Significant Planned Activities in the Next Three Months:

- Complete second melter lid castable refractor placement
- Perform additional welds required on the melter base and melter shield lids to support seismic analysis
- Address public comments and receive approval of melter dangerous waste permits. Bechtel National, Inc. (BNI); U.S. Department of Energy (DOE), Office of River Protection (ORP); and the Washington State Department of Ecology will work to resolve all comments received

- Complete radiographic testing on the caustic scrubber and deliver the vessel
- Continue the rebaselining review process
- Start procurement evaluation process for the spare melter
- Develop hazard identification checklist, what-if tables and process hazard analysis events for accident scenarios to support preliminary documented safety analysis (PDSA) update development.

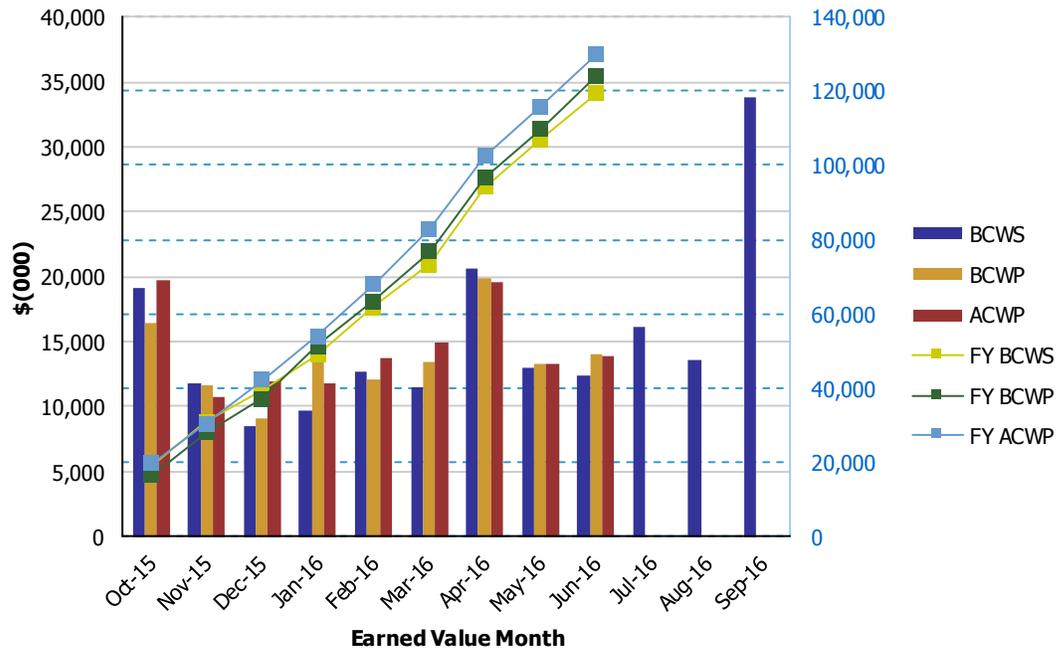
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data

Data as of: June 2016

**River Protection Project
Low-Activity Waste Facility (WBS 1.02)**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2015	\$19,131	\$16,406	\$19,702	0.86	0.83	\$19,131	\$16,406	\$19,702	0.86	0.83
Nov 2015	\$11,764	\$11,637	\$10,735	0.99	1.08	\$30,896	\$28,043	\$30,436	0.91	0.92
Dec 2015	\$8,520	\$9,132	\$11,880	1.07	0.77	\$39,416	\$37,175	\$42,316	0.94	0.88
Jan 2016	\$9,694	\$14,071	\$11,790	1.45	1.19	\$49,110	\$51,245	\$54,105	1.04	0.95
Feb 2016	\$12,760	\$12,055	\$13,698	0.94	0.88	\$61,870	\$63,300	\$67,804	1.02	0.93
Mar 2016	\$11,541	\$13,513	\$14,986	1.17	0.90	\$73,411	\$76,814	\$82,790	1.05	0.93
Apr 2016	\$20,619	\$19,828	\$19,641	0.96	1.01	\$94,030	\$96,641	\$102,431	1.03	0.94
May 2016	\$13,012	\$13,289	\$13,364	1.02	0.99	\$107,042	\$109,930	\$115,795	1.03	0.95
Jun 2016	\$12,326	\$14,005	\$13,959	1.14	1.00	\$119,369	\$123,936	\$129,754	1.04	0.96
Jul 2016	\$16,201									
Aug 2016	\$13,583									
Sep 2016	\$33,858									

PTD	\$1,337,568	\$1,332,191	\$1,331,243	1.00	1.00
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- FY = fiscal year.
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Balance of Facilities

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

The Balance of Facilities (BOF) will provide services and utilities to support operation of the main production facilities: Pretreatment (PT), High-Level Waste (HLW), Low-Activity Waste (LAW), and Analytical Laboratory (LAB). As of June 2016, BOF was 58 percent complete overall, with engineering design 79 percent complete, procurement 77 percent complete, construction 85 percent complete, and startup and commissioning 18 percent complete.

Engineering activities continue in support of the direct-feed low-activity-waste (DFLAW) initiative. Current efforts are focused on progressing the design of the Effluent Management Facility (EMF), providing documents to support the EMF Secondary Containment Permit, and supporting procurement activities. Construction efforts are focused on rebar placement for the EMF basemat and completion of the remaining items required for energization of the Waste Treatment and Immobilization Plant (WTP) switchgear building from the permanent power supply.

Significant Accomplishments during the Prior Three Months:

- Completed drilling activities and installation of vertical anodes for cathodic protection system
- Completed rectifier installation as part of the WTP cathodic protection system upgrade effort
- Initiated bid evaluations and the selection process for the EMF evaporator subcontract
- Continued installing communications in the switchgear buildings and nonradioactive liquid waste disposal
- Completed Underwriter’s Laboratory testing of the battery monitoring systems in the switchgear buildings.

Significant Planned Activities in the Next Three Months:

- Perform 60 percent design review of EMF, including representation from Bechtel National, Inc. (BNI); the U.S. Department of Energy (DOE), Office of River Protection (ORP); and Washington State Department of Ecology.
- Begin placement of the construction aids (soldier piles) that support excavation of EMF low point drain.
- Energize WTP switchgear from the permanent power supply and complete energized testing in support of DFLAW. Key steps going forward are completion of the direct-current electrical system testing, building de-energization to support an authority having jurisdiction inspection, and the final pre-energization testing of the medium-voltage electrical system.

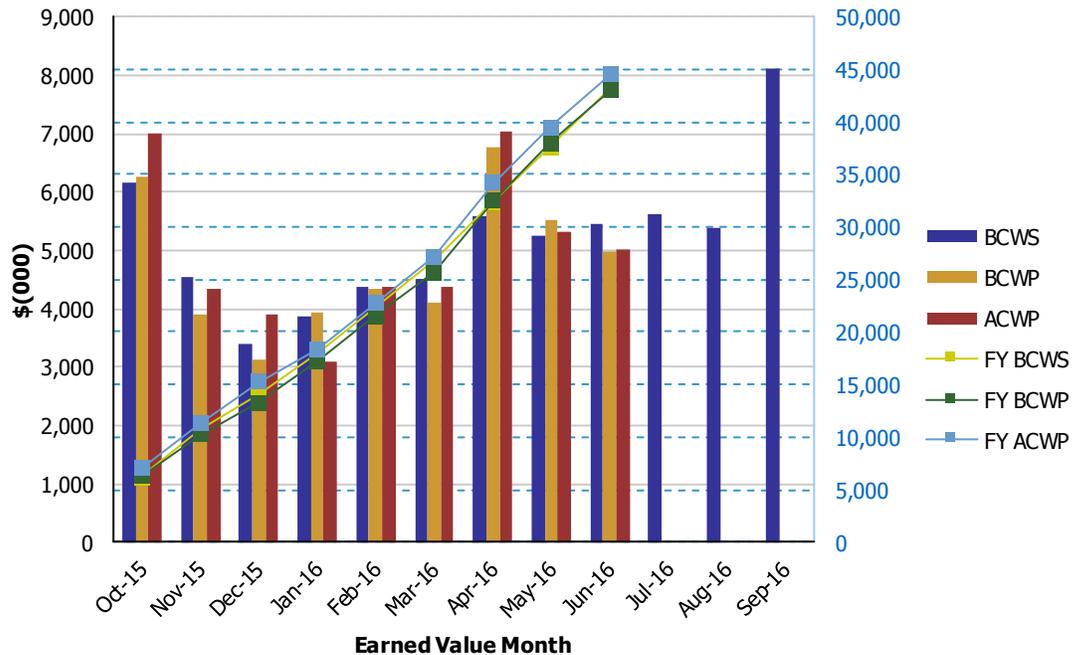
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data

Data as of: June 2016

**River Protection Project
Balance of Facilities (WBS 1.05)**

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 2015	\$6,160	\$6,249	\$7,006	1.01	0.89	\$6,160	\$6,249	\$7,006	1.01	0.89
Nov 2015	\$4,555	\$3,913	\$4,344	0.86	0.90	\$10,715	\$10,162	\$11,350	0.95	0.90
Dec 2015	\$3,400	\$3,134	\$3,917	0.92	0.80	\$14,115	\$13,296	\$15,267	0.94	0.87
Jan 2016	\$3,874	\$3,917	\$3,108	1.01	1.26	\$17,989	\$17,214	\$18,375	0.96	0.94
Feb 2016	\$4,367	\$4,344	\$4,357	0.99	1.00	\$22,356	\$21,557	\$22,732	0.96	0.95
Mar 2016	\$4,492	\$4,111	\$4,381	0.92	0.94	\$26,848	\$25,668	\$27,113	0.96	0.95
Apr 2016	\$5,581	\$6,780	\$7,042	1.21	0.96	\$32,429	\$32,448	\$34,155	1.00	0.95
May 2016	\$5,233	\$5,511	\$5,307	1.05	1.04	\$37,662	\$37,959	\$39,461	1.01	0.96
Jun 2016	\$5,435	\$4,995	\$5,016	0.92	1.00	\$43,097	\$42,954	\$44,477	1.00	0.97
Jul 2016	\$5,621									
Aug 2016	\$5,374									
Sep 2016	\$8,097									

PTD	\$472,591	\$468,155	\$468,100	0.99	1.00
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ACWP = actual cost of work performed.
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Analytical Laboratory

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

LAB = analytical laboratory.

The Analytical Laboratory (LAB) will support Waste Treatment and Immobilization Plant (WTP) operations by analyzing feed, vitrified waste, and effluent streams. As of June 2016, the LAB was 60 percent complete overall, with engineering design 79 percent complete, procurement 88 percent complete, construction 94 percent complete, and startup and commissioning 13 percent complete.

During this reporting period engineering efforts were focused on LAB system reviews to evaluate potential modifications or isolations in support of the direct-feed low-activity waste (DFLAW) initiative. Closure of nonconformance reports and construction deficiency reports continued. The remaining construction work scope will be completed in parallel with system modifications and construction activities required to support the direct feed of low-activity waste.

Significant Accomplishments during the Prior Three Months:

- Completed installation of the test engineers workstation and turned equipment over to startup
- Continued development of procedures for the WTP analytical methods development process
- Began final wall and floor coatings
- Completed turnover of the process control system in support of the test engineers workstation to startup.

Significant Planned Activities in the Next Three Months:

- Complete LAB system walkdowns and design in support of DFLAW modifications
- Complete C5V system operations engineering study in a DFLAW configuration
- Complete LAB startup schedule review to help maximize resources in fiscal year (FY) 2017 and FY 2018
- Complete turnover of the fire protection water system in support of the test engineers workstation to startup
- Select temporary laboratory space, which allows for earlier laboratory methods development and training to ensure laboratory staff are ready at the start of commissioning.

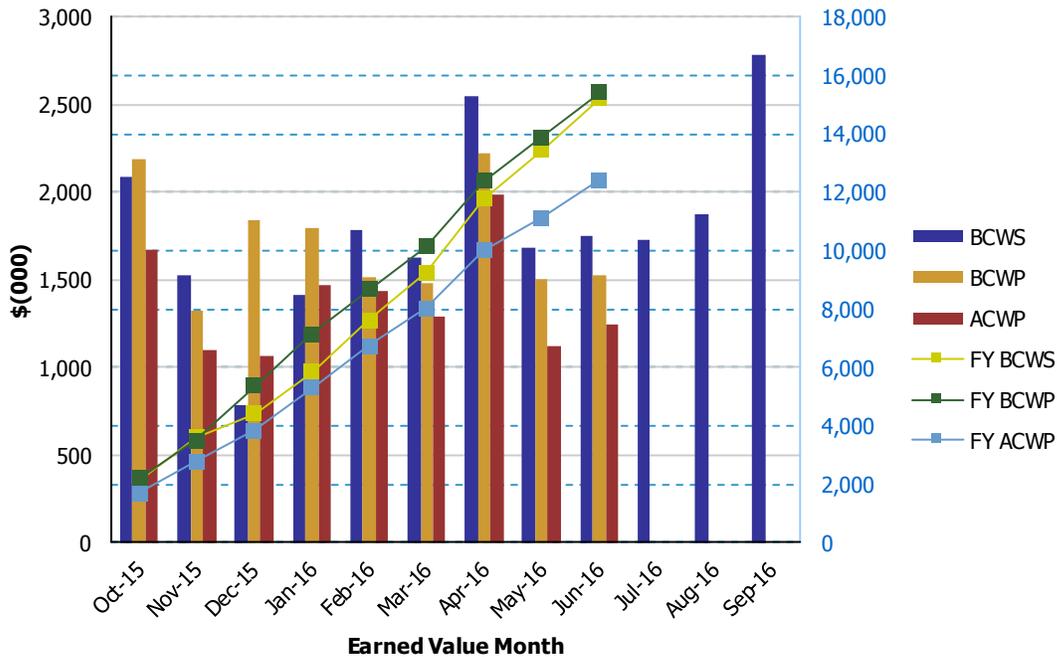
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data

Data as of: June 2016

**River Protection Project
Analytical Laboratory (WBS 1.06)**

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 2015	\$2,083	\$2,188	\$1,674	1.05	1.31	\$2,083	\$2,188	\$1,674	1.05	1.31
Nov 2015	\$1,528	\$1,324	\$1,093	0.87	1.21	\$3,611	\$3,513	\$2,768	0.97	1.27
Dec 2015	\$789	\$1,844	\$1,060	2.34	1.74	\$4,399	\$5,356	\$3,827	1.22	1.40
Jan 2016	\$1,415	\$1,797	\$1,472	1.27	1.22	\$5,815	\$7,153	\$5,299	1.23	1.35
Feb 2016	\$1,786	\$1,511	\$1,438	0.85	1.05	\$7,601	\$8,665	\$6,738	1.14	1.29
Mar 2016	\$1,628	\$1,478	\$1,291	0.91	1.15	\$9,229	\$10,143	\$8,028	1.10	1.26
Apr 2016	\$2,541	\$2,223	\$1,990	0.87	1.12	\$11,770	\$12,366	\$10,019	1.05	1.23
May 2016	\$1,682	\$1,507	\$1,117	0.90	1.35	\$13,452	\$13,874	\$11,136	1.03	1.25
Jun 2016	\$1,745	\$1,520	\$1,249	0.87	1.22	\$15,197	\$15,394	\$12,385	1.01	1.24
Jul 2016	\$1,724									
Aug 2016	\$1,876									
Sep 2016	\$2,783									

PTD	\$327,762	\$326,313	\$320,734	1.00	1.02
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Waste Treatment Plant Project Percent Complete Status (Table)

Waste Treatment Plant Project - (LBL/Project Services) Percent Complete Status																		
Through June 2016																		
(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Plant Operations Unallocated Dollars			Project Management & Shared Services Unallocated Dollars		
	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete
Facilities																		
Low-Activity Waste	2,276.0	1,257.2	55%	537.8	410.2	76%	371.6	266.9	72%	663.2	532.4	80%	699.3	43.6	6%	4.0	4.0	100%
Balance of Facilities	754.2	440.4	58%	149.6	117.9	79%	71.0	54.7	77%	255.6	217.4	85%	277.6	50.0	18%	0.5	0.5	100%
Analytical Lab	528.1	318.4	60%	106.0	83.6	79%	65.4	57.4	88%	161.5	152.4	94%	194.7	24.5	13%	0.5	0.5	100%
Direct Feed LAW	372.7	50.5	14%	80.5	36.7	46%	57.0	1.6	3%	226.3	9.3	4%	0.0	0.0	0%	8.9	2.9	33%
LBL Facility Services	607.4	119.7	20%	0.0	0.0	0%	56.4	17.4	31%	131.2	25.3	19%	261.8	38.7	15%	158.0	38.4	24%
Total LBL	4,538.4	2,186.2	48%	873.9	648.3	74%	621.4	398.0	64%	1,437.8	937.0	65%	1,433.5	156.7	11%	171.9	46.3	27%
Project Services	1,018.4	326.6	32%	128.2	46.8	37%	74.3	30.5	41%	118.1	65.5	55%	1.7	1.7	100%	696.1	182.0	26%
Total Project Services	1,018.4	326.6	32%	128.2	46.8	37%	74.3	30.5	41%	118.1	65.5	55%	1.7	1.7	100%	696.1	182.0	26%
Total LBL, DFLAW & Project Services	5,556.8	2,512.7	45%	1,002.1	695.1	69%	695.7	428.5	62%	1,555.9	1,002.5	64%	1,435.2	158.4	11%	867.9	228.3	26%
PT/HLW/SS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)																		
High-Level Waste	1,478.6	922.1	62%	364.4	325.2	89%	433.9	349.4	81%	561.1	243.2	43%	119.2	4.4	4%	n/a	n/a	n/a
Pretreatment	2,517.3	1,410.5	56%	761.7	645.8	85%	679.9	380.4	56%	890.0	378.6	43%	185.8	5.6	3%	n/a	n/a	n/a
Shared Services	4,726.9	3,632.6	77%	1,047.0	977.9	93%	451.7	395.0	87%	1,436.5	1,143.0	80%	453.5	133.2	29%	1,338.1	983.5	73%
Total HLW/PT/SS	8,722.8	5,965.2	68%	2,173.1	1,948.9	90%	1,565.5	1,124.8	72%	2,887.6	1,764.8	61%	758.5	143.2	19%	1,338.1	983.5	73%
Undistributed Budget	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total WTP	14,279.6	8,477.9	59%	3,175.2	2,644.0	83%	2,261.2	1,553.3	69%	4,443.5	2,767.3	62%	2,193.7	301.6	14%	2,206.0	1,211.8	55%
Source: Preliminary WTP Contract Performance Report - Format 1, Data for June 2016																		
<p>Note: In September 2012, the LBL Replan was incorporated into the project OTB baseline resulting in increases/decreases to the LBL facility budgets, which correspondingly increased/decreased the facility/function to-date percent complete values. In October 2012, the PT/HLW/SS Interim Work Plan was incorporated into the project OTB baseline resulting in decreases to the PT/HLW/SS facility budgets, this was due to a work scope shift from the Distributed budget to UB. Percent Complete Values shown for PT, HLW and SS have been frozen with the September 2012 values due to the Interim Work Plan and budgets being moved into UB. UB value for the project for PT/HLW/SS is \$2,014M. The percent complete values for the Total WTP are the current total LBL BCWP added to the frozen HLW/PT/SS BCWP values. In March 2014, Project Controls and Project Management work scope was moved out of Shared Services control accounts into the facilities with new control accounts being set up in the facilities. These will now be seen under Project Management/Shared Services by facility. The Shared Services PMB value has not been changed to reflect this change due to the freeze on HLW/PT and SS and the budgets remaining in UB. October 2014 data reflects the incorporation of Direct Feed LAW and the split of Shared Services into LBL Facility Services and Project Services. March 2016 LBL percent complete data is a total of LAW-BOF-LAB-DFLAW and LBL Facility Services. The Project Services Allocation account (zPSA), as shown on the CPR Format 1, is not added to LBL for percent complete purposes.</p>																		