

FINAL

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

Monthly Report  
July 2016

**Office of River Protection**  
**Consent Decree 08-5085-FVS and Consent Decree 2:08-CV-5085-RMP**  
**Monthly Report – July 2016**  
**Project Earned Value Management System reflects May 2016 information**

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CD = Consent Decree

**CD Milestone Statistics/Status**

<b>Milestone</b>	<b>Title</b>	<b>Due Date</b>	<b>Completion Date</b>	<b>Status</b>
<b>Fiscal Year 2020</b>				
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
<b>Fiscal Year 2022</b>				
D-00A-08 Interim	Start LAW Facility Cold Commissioning	12/31/2022		On Schedule
<b>Fiscal Year 2023</b>				
D-00A-09 Interim	LAW Facility Hot Commissioning Complete	12/31/2023		On Schedule
<b>Fiscal Year 2024</b>				
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
<b>Fiscal Year 2030</b>				
D-00A-02 Interim	HLW Facility Construction Substantially Complete	12/31/2030		On Schedule
<b>Fiscal Year 2031</b>				
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

<b>Milestone</b>	<b>Title</b>	<b>Due Date</b>	<b>Completion Date</b>	<b>Status</b>
D-00A-19 Interim	Complete Elevation 98 feet Concrete Floor Slab Placements in PT Facility	12/31/2031		On Schedule
<b>Fiscal Year 2032</b>				
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
<b>Fiscal Year 2033</b>				
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
<b>Fiscal Year 2036</b>				
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

CD = Consent Decree.  
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: On Schedule.

In accordance with the 2016 Amended Consent Decree, U.S. Department of Energy (DOE) will provide quarterly instead of semiannual reports.

The January 2016 Semiannual Report was issued on January 29, 2016, via DOE, Office of River Protection (ORP) letter 16-ECD-0006, “January 2016 Semi-Annual Report for State of Washington vs. U.S. Department of Energy, Case No. 08-5085-FVS, for Waste Treatment and Immobilization Plant Construction and Startup Activities and Tank Retrieval Activities - May 1, 2015, thorough October 31, 2015.”

**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 (CD), part should be identified as E-A-1

\*\*CD 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, 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. ORP authorized Washington River Protection Solutions LLC (WRPS) to proceed by awarding a not-to-exceed (NTE) contract action. The contractor 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 November 20, 2016.
- Efforts continue in regard to the generation of a functions and requirements evaluation document (FRED) WRPS engineering has completed the failure mode and effects analysis (FMEA) document. An expression of interest was submitted Tuesday, April 19 to solicit responses from NQA-1, ASME Section 8 design and build fabrication vendors. Responses to the expression of interest were due May 30, 2016. A technical evaluation of the 242-A Evaporator process steam been completed. Results of the technical evaluation support the use of 304L, stainless steel for the fabrication of the reboiler. A design specification is also being generated for the new spare 242-A Evaporator reboiler. This specification will be attached to a statement of work (SOW) submitted to the request for proposal (RFP) 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 advice Ecology accordingly.	03/31/2024	On Schedule

\* Pursuant to Section IV-B-5 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 that DOE has completed retrieval of a tank in accordance with the requirements of Appendix C, Part 1, of the Consent Decree.

DOE = U.S. Department of Energy.  
 SST = single shell tank.  
 WMA-C = C Farm waste management area.

#### Significant Accomplishments during the Prior Three Months:

- Completed post retrieval samples of Tank C-102
- Completed post-retrieval sampling of Tank 241-C-111
- Obtained Tank 241-C-105 in-process sample
- Completed removal of ancillary equipment from Tank 241-C-105 pits A and C in preparation for modified sluicing system installation
- Performed the investigation survey request (ISR) to support the containment box, rotary union, and hoses removal for C-105
- Removed hose-in-hose transfer lines (HIHTL) between the portable instrument valve box and containment box for C-105
- Reached the limits of technology on the third retrieval technology at Tank 241-C-111
- Installed the ingress/egress trailers and underground utilities for the A/AX change trailers (4th and Buffalo)
- Installed A/AX bathroom/change trailers and Access Control Entry System (ACES) stations
- Excavated and installed the West Electrical/Telecommunications system for the AX Air and Water Service Building

- Received and inspected the sump pump assembly and discharge for AX-102 and AX-104
- Completed duct work installation from POR126 to AX Tanks (with exception of tie-in)
- Shipped AX-102 and AX-104 cover blocks to ERDF for disposal
- Completed pit cleanout of Tank 241-AX-102, 02A pit
- Completed removal of Building AX-80
- Completed removal of above grade portion of building AX-2707.

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

- Submit retrieval data reports (RDR) for 241-C-102
- Negotiate contract proposal for installing and performing the third retrieval technology at Tank C-105
- Complete Tank C-105 Mobile Arm Retrieval System-Vacuum (MARS-V) containment box disassembly
- Complete Tank C-105 modified sluicing system design
- Receive Tank C-105 extended reach sluicers
- Install extended reach sluicers in C-105.
- Issue Tank C-111 retrieval completion certification
- Complete procurement of the water services building to support A/AX
- Complete AX ventilation installation and commence testing at portable exhauster POR-126
- Complete cleanout of Tank 241-AX-104 pits 04A and 04D, and initiate debris removal from 04C
- Complete cleanout of Tank 241-AX-102 pits 02D and 02B, and initiate debris removal from 02C
- Complete AX-2707 fencing and gate upgrades
- Complete A/AX infrastructure (water and utilities) design
- Complete Tank 241-AX-102 and 241-AX-104 extended reach sluicing system (ERSS) procurement
- Complete A Farm ventilation design.

### 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	Third Technology	MARS-V	MARS-V-High Pressure Water Spray	TBD
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 Process with ERSS
C-112	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process	-

ERSS = extended reach sluicing system. MARS = Mobile Arm Retrieval System. S = sluicing.  
TBD = to be determined. TWRWP = Tank Waste Retrieval Work Plan. V = vacuum.

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

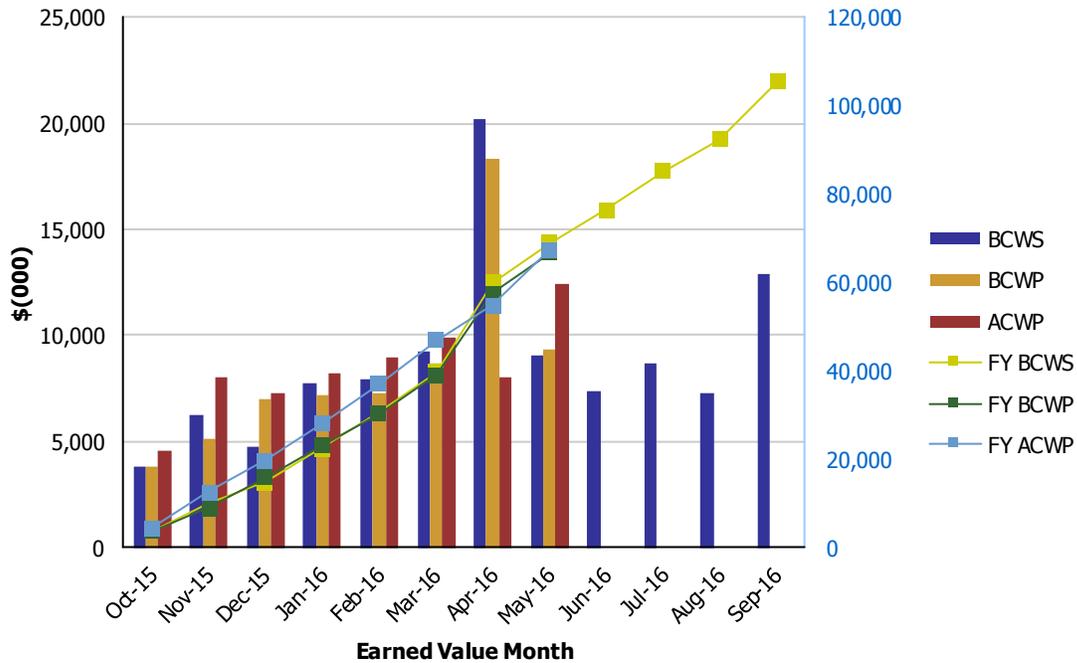
- Finalize AX Farm tank waste retrieval work plans (TWRWP)
- Modify RPP-22520, *241-C-101 and 241-C-105 Tanks Waste Retrieval Work Plan* (C-105 TWRWP) to include a third technology for Tank C-105 retrieval—Draft TWRWP modification submitted to the Washington State Department of Ecology (Ecology) for review in April 2016.

Earned Value Data: Fiscal Year 2016

May-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	\$7,403					\$76,373				
Jul 2016	\$8,720					\$85,092				
Aug 2016	\$7,264					\$92,356				
Sep 2016	\$12,900					\$105,256				
<b>CTD</b>	<b>\$661,447</b>	<b>\$651,925</b>	<b>\$677,305</b>	<b>0.99</b>	<b>0.96</b>					

- |      |   |                                  |      |   |                                 |
|------|---|----------------------------------|------|---|---------------------------------|
| 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.     |

***Retrieve and Close Single-Shell Tanks (5.02)***

The current month **favorable** schedule variance (SV) of \$286K is due to:

- The positive schedule variance can be attributed to favorable weather conditions allowing construction crews to partially recover previous schedule delays related to duct installation and condensate line installation for the AX ventilation exhausters. A positive variance support completion of projects B-1 and B-3 of the Consent Decree retrieval schedules.

The current month **unfavorable** cost variance (CV) of (\$3,118K) 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 schedules. No impact to the schedule is foreseen by this cost variance.
- A Farm ventilation design basis/scope/budget was originally based on AP Farm exhauster, as the design matured, more farm-specific requirements have emerged thus requiring additional design/support. This design is supporting procurement of two specific and redundant exhausters at A-Farm to support early legacy equipment removal from tanks that will support Consent Decree Project B-2.

### 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 3,017 full-time equivalent contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 573 craft, 430 non-manual, and 140 subcontractor full-time equivalent personnel working at the WTP construction site (all facilities).

In October 2012, the percent-complete values for the Pretreatment (PT) and High-Level Waste (HLW) facilities were frozen at the September 2012 rate. Construction, procurement, and production engineering activities were placed on hold for the PT Facility and significantly slowed down for the HLW Facility. In August 2014, the U.S. Department of Energy (DOE) approved continuation of production engineering activities for HLW. Subsequently, DOE has approved the fiscal year (FY) 2015 and FY 2016 2-Year Interim Work Plan. In April 2015, a 3-Year Interim Work Plan for the PT Facility was implemented emphasizing prioritization of technical issue resolution activities. The WTP Project is focused on resolving the PT Facility technical issues and finalizing the HLW Facility design.

The WTP Project continues to focus on completion of the Low-Activity Waste (LAW) Facility, Analytical Laboratory (LAB), and Balance of Facilities (BOF) (collectively known as LBL, including direct-feed LAW [DFLAW] and LBL facility services). As of May 2016, LBL facilities were 48 percent complete, design and engineering was 73 percent complete, procurement was 64 percent complete, construction was 64 percent complete, and startup and commissioning was 10 percent complete.

In May 2016, the cumulative to-date WTP Project schedule variance (SV) was a negative \$17.1 million, and the cumulative to-date WTP Project cost variance (CV) was a positive \$63.1 million. The cumulative to-date CV and SV is based on the progress of the LBL internal forecast.

The following is the project status through the end of May 2016.

#### Significant Accomplishments during the Prior Three Months:

- Permit to set the thermal catalytic oxidizer (TCO) was granted and the first of three sections of the TCO was set in its final location on greater than the 48 foot (+48') elevation – (LAW)
- First two refractory placements were made on gas barrier lid 2 – (LAW)
- Issued contract for NQA-1 high-efficiency particulate air (HEPA) filter qualification testing – (HLW)

- Began final wall and floor coatings – (LAB)
- Received and installed rectifier for cathodic protection system – (BOF)
- Continued the Chiller Compressor Building (82) fire protection design – (BOF)
- Contractor completed standardized high solids vessel design (SHSVD)-T Hydro Test – (PT)
- Melter 1 gas barrier lid placed and welding continues – (LAW)
- Issued HLW Facility hazards analysis to support preliminary documented safety analysis (PDSA) update – (HLW)
- Contractor issued erosion/corrosion sliding bed report to the DOE Office of River Protection (ORP) for approval pending review at this time – (PT).

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

- Complete setting the remaining sections of the TCO on the +48' elevation – (LAW)
- Complete welding of the gas barrier lid onto melter 1 – (LAW)
- Place second melter lid castable refractor – (LAW)
- Continue the rebaselining review process – (LBL)
- Complete steam plant modifications for DFLAW – (BOF)
- Complete site energization from permanent power supply – (BOF)
- Submit draft PDSA revision to ORP – (HLW).

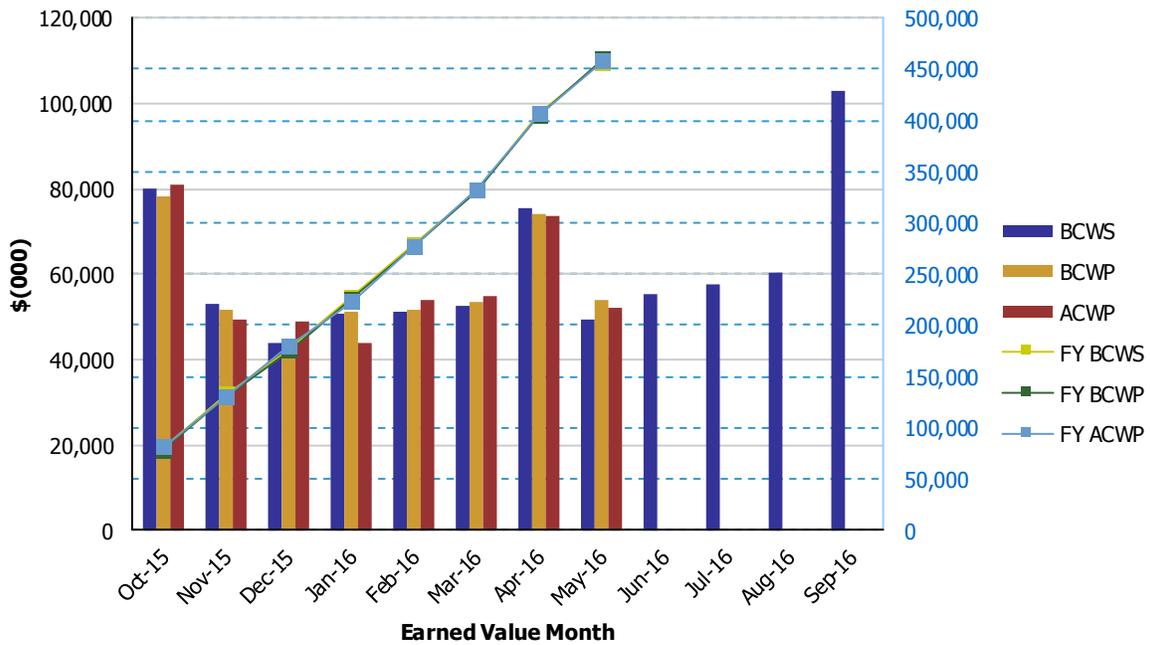
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data

Data as of: May 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	\$55,060									
Jul 2016	\$57,385									
Aug 2016	\$60,515									
Sep 2016	\$102,850									

PTD	\$9,555,385	\$9,538,243	\$9,475,103	1.00	1.01
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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.

### 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 (HLW) and low-activity waste (LAW) 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.

Construction, procurement, and production engineering activities remain on hold, resulting in no change to the percent-complete status since September 2012. Bechtel National, Inc. (BNI) and U.S. Department of Energy (DOE) continue to focus on resolving technical issues, performing hazards analyses, and completing safety evaluations for process systems in accordance with the revised PT Facility 3-year Interim Work Plan

BNI has submitted resolution plans for eight technical issues: T1, Hydrogen in Vessels; T2, Criticality; T3, Hydrogen in Piping and Ancillary Vessels (HPAV); T4, Mixing; T5, Erosion Corrosion; T6, PT Facility Optimization; T7, Vessel Analysis; and T8, Ventilation. Phase 1 of the full-scale vessel testing is continuing for the pulse jet mixers (PJM) controls utilizing the radioactive liquid waste disposal (RLD) 8T vessel. Technical review teams continue to evaluate open PT Facility technical issues. An evaluation is ongoing relative to a standardized design for high-solids vessels within the PT Facility. With primary emphasis on design and fabrication of hold point releases supporting procurement, fabrication, and delivery of the standardized high solids vessel design (SHSVD)-T16ft vessel.

#### Significant Accomplishments during the Prior Three Months:

- Contractor completed SHSVD-T hydro test
- Contractor issued plutonium particulate criticality safety evaluation (CSE) engineering study – DOE Office of River Protection (ORP) formal review continues for approval
- Contractor provided HPAV basis of design (BOD) change package to ORP for approval – ORP provided comments back to contractor for resolution

- Contractor submitted HPAV Preliminary Documented Safety Analysis (PDSA) change package to ORP for approval – comments provided to contractor; resubmitting HPAV PDSA package
- Contractor issued erosion/corrosion sliding bed report to ORP for approval pending review at this time
- Contractor completed installation of PJMs in SHSVD-T at Greenberry Industrial, Inc.
- Contractor completed installation of SHSVD-T bubblers
- ORP continues to review Waste Treatment and Immobilization Plant (WTP) Criticality Safety Evaluation Report (CSER).

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

- ORP formal review and approval of the CSER
- Issue and transmit to ORP Engineering Study – *Proposed Controls for Hydrogen Events in PTF*, Rev 0
- Complete hydrogen unmitigated/mitigated consequence calculation
- ORP approval of HPAV PDSA change package
- Issue PJM controls Phase 3 test software requirements
- Install SHSVD-T 4-inch pump suction line
- Complete SHSVD-T hydro test
- Issue simulant basis, Newtonian/non-Newtonian document
- Issue simulant qualification document
- Finalize erosion/corrosion simulant for one-quarter scale jet impingement and pipe loop testing.

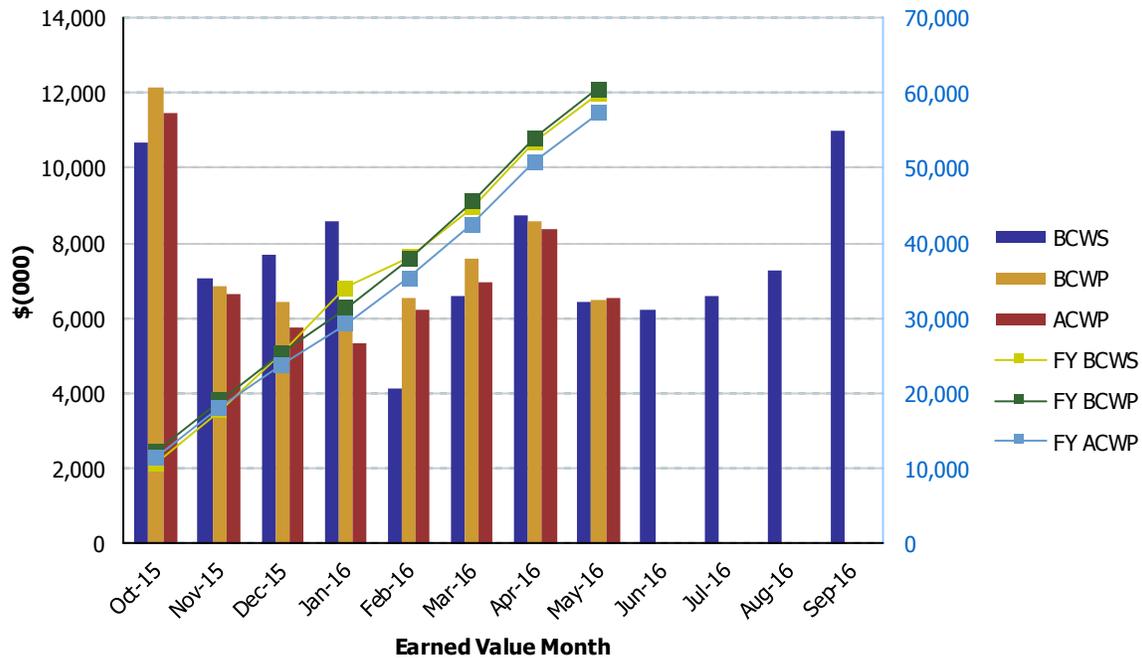
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data

Data as of: May 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									
Jul 2016	\$6,607									
Aug 2016	\$7,254									
Sep 2016	\$11,007									

PTD	\$1,792,259	\$1,792,338	\$1,769,880	1.00	1.01
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- CPI = cost performance index.
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### 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.

\* Note – Future HLW milestones are dependent on increased levels of funding becoming available

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 melter, 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 is frozen as of September 2012, pending development of a revised baseline to address technical and design issues.

Currently, all activities are being performed in accordance with the fiscal year (FY) 2015/FY 2016, 2-Year 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. Phase 1 of the HLW melter off-gas treatment process/process vessel vent engineering study, which is evaluating options for system changes to improve the design and operability, has been completed with Phase II 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 (SDD), and incorporate SDD requirements into a requirements management system to ensure that 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 HLW, along with the Low-Activity Waste (LAW) Facility, Analytical Laboratory (LAB), and the 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. The third full-scale filter has been tested, showing positive and successful test results. 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 full-scale tests of three filters of the first HEPA filter design that showed positive results
- Completed roof flashing at interface between the annex and the main facility, thereby rain-proofing the annex
- Issued contract for NQA-1 HEPA filter qualification testing
- Issued HLW facility hazards analysis to support PDSA update
- Completed HLW melter handling system and HLW off-gas process system Phase I engineering studies to disposition some of the design and operability issues and recommendations
- Release material procurement and fabrication of RLD-8.

#### **Significant Planned Activities in the Next Three Months:**

- 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 off-gas needs
- Release material procurement and fabrication for vessel RLD-7
- Issue the radioactive waste handling system, decontamination 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 ORP
- Continue civil build-out of the HLW Facility focusing on weathering in the building.

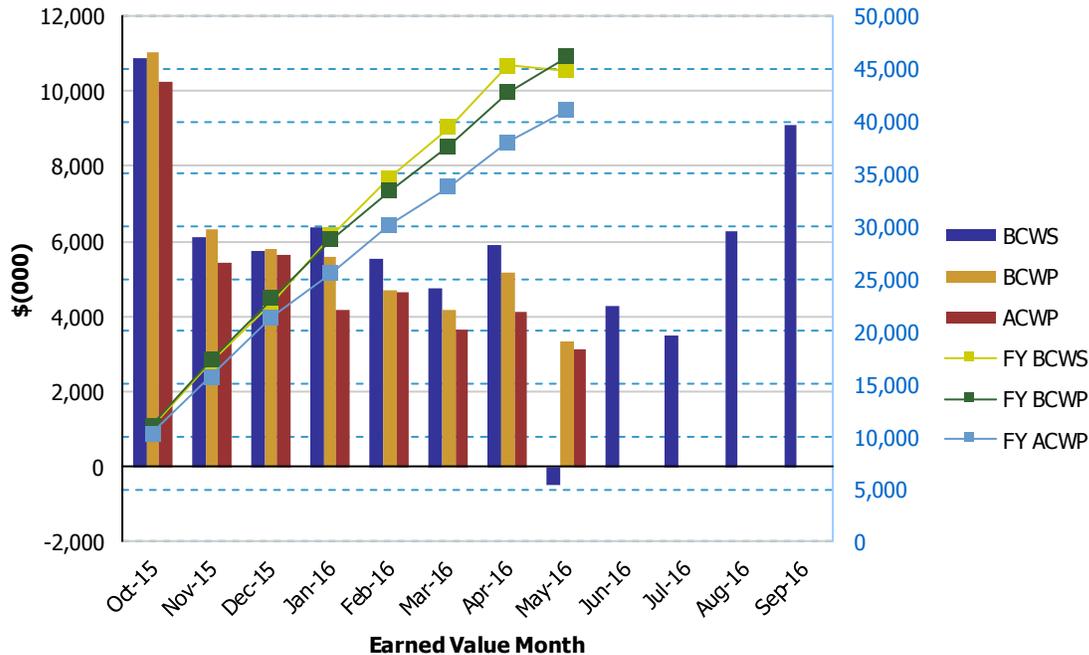
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data

Data as of: May 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									
Jul 2016	\$3,496									
Aug 2016	\$6,291									
Sep 2016	\$9,119									

PTD	\$1,246,116	\$1,246,408	\$1,227,208	1.00	1.02
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- BCWS = budgeted cost of work scheduled.      FY = fiscal year.
- CPI = cost performance index.      SPI = schedule performance index.

### 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 May 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:

- Permit to set the thermal catalytic oxidizer (TCO) was granted and the first of three sections of the TCO was set in its final location on greater than the 48 foot (+48') elevation
- First two refractory placements were made on gas barrier lid 2
- Installed 540 linear feet of process piping
- Installed 2,060 linear feet of conduit and pulled 30,100 linear feet of cable
- Installed 232 process area penetration seals
- Melter 1 gas barrier lid placed and welding continues.

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

- Complete setting the remaining sections of the TCO on the +48' elevation
- Complete welding of the gas barrier lid onto melter 1
- Place second melter lid castable refractor
- Perform additional welds required on the melter shield lids and melter base
- Melter permit approved
- Assemble and install Wet Electrostatic Precipitator internals in second vessel
- Complete the radiographic testing on the caustic scrubber
- Continue the rebaselining review process.

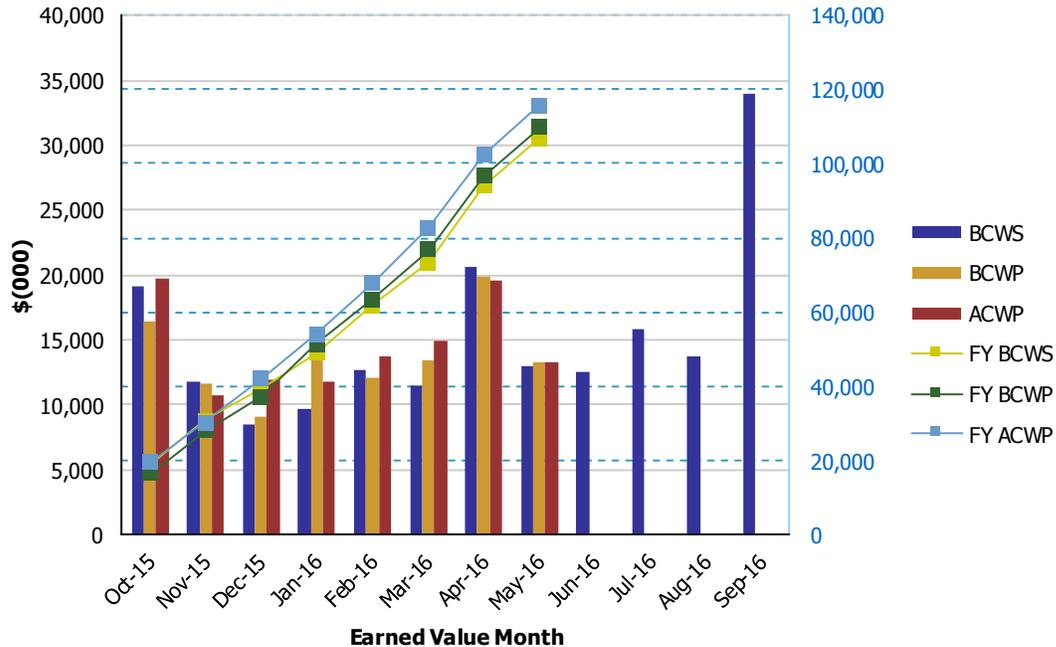
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data

Data as of: May 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	\$12,557									
Jul 2016	\$15,775									
Aug 2016	\$13,770									
Sep 2016	\$34,006									

PTD	\$1,325,241	\$1,318,186	\$1,317,284	0.99	1.00
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### **Balance of Facilities**

<b>Milestone</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
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 May 2016, BOF was 58 percent complete overall, with engineering design 78 percent complete, procurement 77 percent complete, construction 85 percent complete, and startup and commissioning 17 percent complete.

Engineering activities are in progress to develop the design for BOF systems in support of direct-feed low-activity-waste (DFLAW). Current efforts are focused on progressing the design of the Effluent Management Facility (EMF), identifying and supporting BOF system isolations, supporting procurement activities, and implementing the preliminary design safety analysis (PDSA) for the EMF into the design. Construction efforts are focused on upcoming excavation of the EMF low point drain, installation of BOF system isolations, 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:**

- Received and installed rectifier for cathodic protection system
- Continued the Chiller Compressor Building (82) fire protection design
- Continued installing communications in the switchgear buildings and nonradioactive liquid waste disposal
- Continued startup system testing in support of site energization
- Completed installing and Underwriter’s Laboratory testing of the battery monitoring systems in the switchgear buildings
- Issued material requisition purchase order for the rotary screw compressor
- Completed drilling activities and installation of vertical anodes for cathodic protection system and completed design of rectifier pad
- The U.S. Department of Energy (DOE). Office of River Protection (ORP) approved the PDSA for EMF.

#### **Significant Planned Activities in the Next Three Months:**

- Perform 60 percent design review of EMF
- Award subcontract for soldier piles of EMF low point drain
- Complete site energization from permanent power supply
- Complete steam plant modifications for DFLAW.

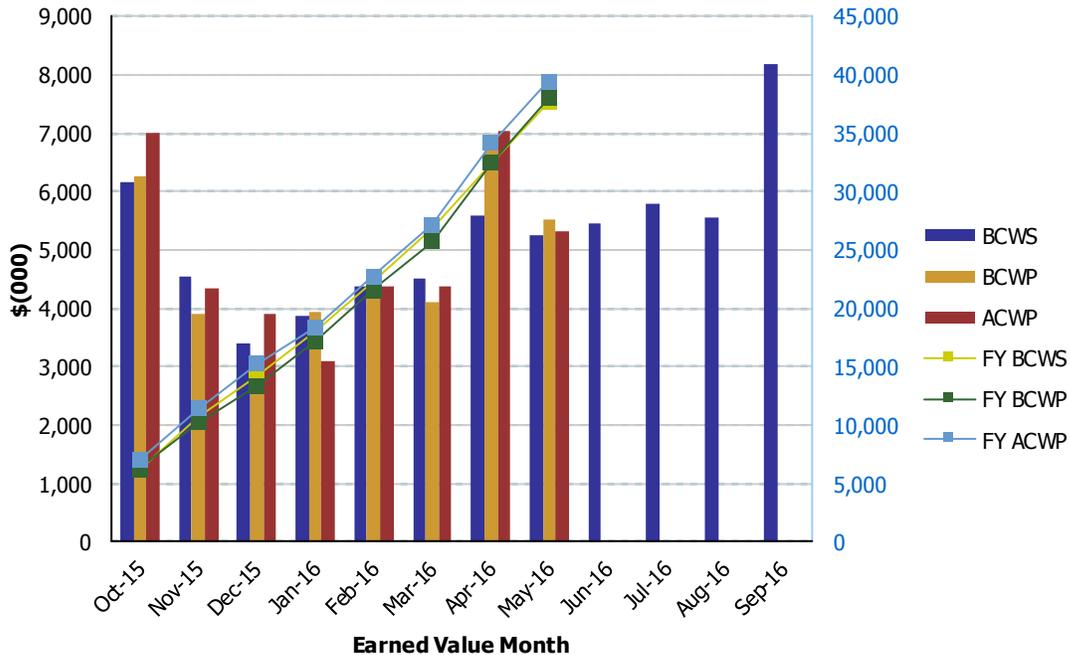
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data

Data as of: May 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									
Jul 2016	\$5,797									
Aug 2016	\$5,540									
Sep 2016	\$8,196									
PTD	\$467,157	\$463,161	\$463,084	0.99	1.00					

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 CPI = cost performance index.

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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 May 2016, the LAB was 60 percent complete overall, with engineering design 78 percent complete, procurement 88 percent complete, construction 94 percent complete, and startup and commissioning 12 percent complete.

During this reporting period engineering efforts were focused on LAB system reviews to evaluate potential modifications or isolations in support of direct-feed low-activity waste (DFLAW). Closure of nonconformance reports and construction deficiency reports continued. Construction efforts within the LAB focused on installation of the test engineers work station to support Balance of Facilities (BOF) startup efforts. 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 acceptance walk-down of the heating, ventilation, and air-conditioning (HVAC) subcontract scope consisting of duct supports, expansion joints, and instrumentation ports
- Began final wall and floor coatings
- Completed fire service water system turnover
- Continued installation of the test engineers workstation
- Continued development of procedures for the WTP analytical methods development process.

#### **Significant Planned Activities in the Next Three Months:**

- Complete test engineers work station
- Initiate component level testing of select LAB systems
- Complete LAB system walk downs and design in support of DFLAW modifications.

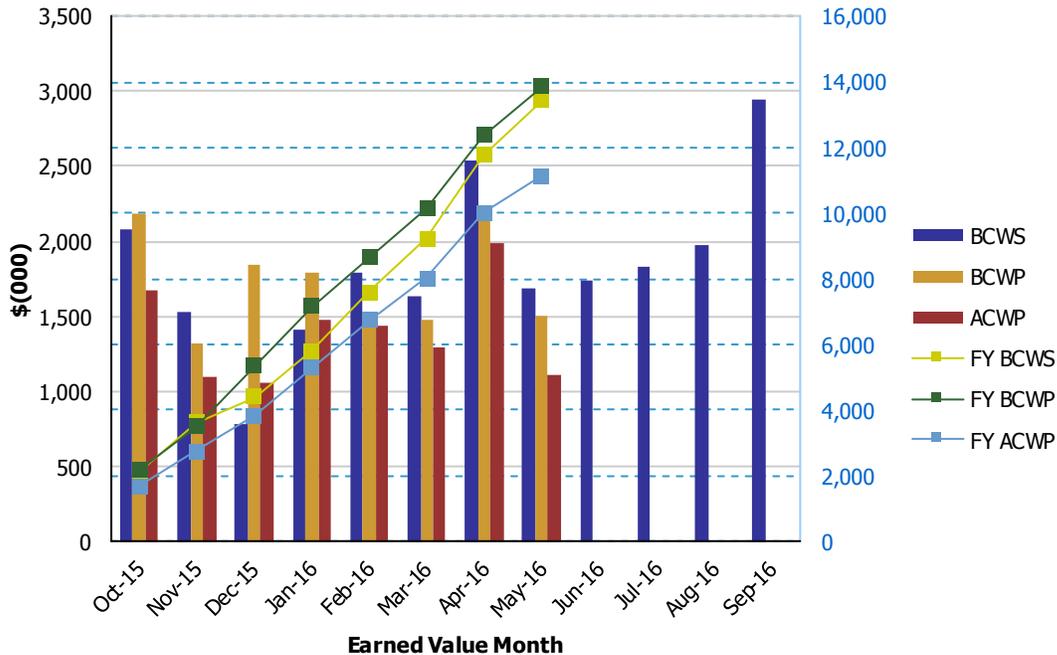
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2016 Earned Value Data

Data as of: May 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									
Jul 2016	\$1,830									
Aug 2016	\$1,981									
Sep 2016	\$2,951									

PTD	\$326,017	\$324,792	\$319,484	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 May 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
<b>Facilities</b>																		
Low-Activity Waste	2,271.9	1,243.2	55%	535.8	404.9	76%	370.9	265.6	72%	661.9	527.0	80%	699.3	41.6	6%	4.0	4.0	100%
Balance of Facilities	753.1	435.4	58%	149.5	116.9	78%	71.0	54.7	77%	254.6	215.5	85%	277.5	47.9	17%	0.5	0.5	100%
Analytical Lab	527.9	316.8	60%	106.0	83.0	78%	65.4	57.4	88%	161.2	152.1	94%	194.8	23.9	12%	0.5	0.5	100%
Direct Feed LAW	372.5	45.6	12%	79.8	34.4	43%	57.0	1.4	2%	226.8	7.1	3%	0.0	0.0	0%	8.9	2.8	31%
LBL Facility Services	607.2	112.9	19%	0.0	0.0	0%	56.4	16.5	29%	131.1	23.4	18%	261.8	36.3	14%	158.0	36.7	23%
<b>Total LBL</b>	<b>4,532.7</b>	<b>2,154.0</b>	<b>48%</b>	<b>871.1</b>	<b>639.2</b>	<b>73%</b>	<b>620.7</b>	<b>395.6</b>	<b>64%</b>	<b>1,435.6</b>	<b>925.1</b>	<b>64%</b>	<b>1,433.4</b>	<b>149.7</b>	<b>10%</b>	<b>171.9</b>	<b>44.4</b>	<b>26%</b>
Project Services	1,013.9	314.2	31%	129.2	44.9	35%	74.3	29.2	39%	118.1	64.5	55%	1.7	1.7	100%	690.5	173.9	25%
<b>Total Project Services</b>	<b>1,013.9</b>	<b>314.2</b>	<b>31%</b>	<b>129.2</b>	<b>44.9</b>	<b>35%</b>	<b>74.3</b>	<b>29.2</b>	<b>39%</b>	<b>118.1</b>	<b>64.5</b>	<b>55%</b>	<b>1.7</b>	<b>1.7</b>	<b>100%</b>	<b>690.5</b>	<b>173.9</b>	<b>25%</b>
<b>Total LBL, DFLAW &amp; Project Services</b>	<b>5,546.6</b>	<b>2,468.2</b>	<b>44%</b>	<b>1,000.3</b>	<b>684.1</b>	<b>68%</b>	<b>695.0</b>	<b>424.9</b>	<b>61%</b>	<b>1,553.7</b>	<b>989.5</b>	<b>64%</b>	<b>1,435.1</b>	<b>151.4</b>	<b>11%</b>	<b>862.4</b>	<b>218.3</b>	<b>25%</b>
<b>PT/HLW/SS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)</b>																		
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%	165.8	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%
<b>Total HLW/PT/SS</b>	<b>8,722.8</b>	<b>5,965.2</b>	<b>68%</b>	<b>2,173.1</b>	<b>1,948.9</b>	<b>90%</b>	<b>1,565.5</b>	<b>1,124.8</b>	<b>72%</b>	<b>2,887.6</b>	<b>1,764.8</b>	<b>61%</b>	<b>758.5</b>	<b>143.2</b>	<b>19%</b>	<b>1,338.1</b>	<b>983.5</b>	<b>73%</b>
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
<b>Total WTP</b>	<b>14,269.4</b>	<b>8,433.4</b>	<b>59%</b>	<b>3,173.4</b>	<b>2,633.0</b>	<b>83%</b>	<b>2,260.5</b>	<b>1,549.7</b>	<b>69%</b>	<b>4,441.3</b>	<b>2,754.3</b>	<b>62%</b>	<b>2,193.6</b>	<b>294.6</b>	<b>13%</b>	<b>2,200.5</b>	<b>1,201.8</b>	<b>55%</b>
<i>Source: Preliminary WTP Contract Performance Report - Format 1, Data for Mar 2016</i>																		
<i>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-BDF-LAB-DFLAW and LBL Facility Services. The Project Services Allocation account (PFA), as shown on the CPR Format 1, is not added to LBL for</i>																		