AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE PAGE OF P		PAGES		
							1	24
	NT/MODIFICATION NO.	3. EFFECTIVE	DATE	4. 1	REQUISITION/PURCHASE REQ. NO.	5. PRO	DJECT NO. (I	f applicable)
102 6 ISSUED BY	CODE	See Bloo	ck 16C	7	ADMINISTERED BY (If other than Item 6)	CODE	Taa.caa	M
	0001	00603					00603	
U.S. De Office P.O. Bo	of River Protection partment of Energy of River Protection x 450 d WA 99352			U O: P M:	ffice of River Protection .S. Department of Energy ffice of River Protection .O. Box 450 S: H6-60			
O NIAME AND	ADDRESS OF CONTRACTOR (No., stre		7700-4-)	-	ichland WA 99352			
WASHINGT	TON RIVER PROTECTION JANE SCHMOKER 73			(x)	9A. AMENDMENT OF SOLICITATION NO.  9B. DATED (SEE ITEM 11)  10A. MODIFICATION OF CONTRACT/ORDER N	0		
BOISE II	837290001			х	DE-AC27-08RV14800	O.		
CODE OO	0.00001	FACILITY COL	)E		THE COLUMN TWO IS NOT			
80	06500521				05/29/2008			
	-	11. THIS ITE	M ONLY APPLIES TO A	MEI	NOMENTS OF SOLICITATIONS			
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED ORDER NO. IN ITEM 10A.	PURSUANT TO:	(Specify authority) THE	СН	ANGES SET FORTH IN ITEM 14 ARE MADE IN T  ADMINISTRATIVE CHANGES (such as changes ITY OF FAR 43.103(b).	HE CON	ITRACT	
	C. THIS SUPPLEMENTAL AGREEME		NTO PURSUANT TO A	ÚTH	ORITY OF:			
	D. OTHER (Specify type of modification							
X	Clause I.103, FAR 5	2.243-2 C	hanges - Cos	t	Reimbursement (AUG 1987)			
E. IMPORTAN	T: Contractor ☐ is not,	x is required to	sign this document and	retu	urn 0 copies to the issuing	office.		
		N (Organized by U	CF section headings, inc	dudi	ng solicitation/contract subject matter where feasib	ile.)		
	tinuation Pages of Performance: 06/20	2 (0000	00/00/0010					
	vided herein, all terms and conditions of t	the document refe	renced in Item 9A or 10A		heretofore changed, remains unchanged and in fu			
A, B	Dunning / Con	react Mi	9MGEV 15C. DATE SIGNED	S	usan C. Johnson			DATE SIGNED
	IGINAL SIGNED E	3Y	4/4/11	VIV	ORIGINAL SIGNED E	3Y	2	F/4/11

(Signature of p NSN 7540-01-152-8070 Previous edition unusable

(Signature of Contracting Officer)

STANDARD FORM 30 (REV. 10-83) Prescribed by GSA FAR (48 CFR) 53.243

## Continuation Page, SF30 Block 14

#### Purpose of Modification:

The purpose of this modification is to revise Section J.4, Performance and Evaluation Measurement Plan (PEMP), Attachment 2 – Performance Measures for Base Contract Period, Effective: FY 2010-2013, to incorporate changes to PBIs 1.3, 2.1, 2.14, 3.7, 3.8, 3.11, 3.12, and 3.17 and the unallocated fee pool.

#### **Description of Modification:**

- 1. Update Section J.4-PEMP, Attachment 2, PBIs 1.3, 2.1, 2.14, 3.7, 3.8, 3.11, 3.12, and 3.17. The Unallocated Base Period Fee is also updated (PBI-Reserved).
- 2. Page changes for Section J.4, Attachment 4 are attached with changes indicated by a vertical bar on the right side of the changed pages, and are hereby incorporated into this modification.
- 3. All other Terms and Conditions remain unchanged.

## Section J.4 Performance Evaluation and Measurement Plan (PEMP)

# Attachment 2 -Performance Measures for Base Contract Period, Effective: FY 2010-2013

The performance measures described in this attachment provide performance criteria for the base contract period, specifically for during FY 2010-FY 2013. Section J.4, Attachment 1, contains performance measures incorporated into the contract during FY 2009 including some "multi-year" performance based incentives (PBIs) that have milestones in 2010 and 2011.

#### Configuration Table

Version	Date Approved	Summary of Changes	
Original	May 12, 2010 (Modification 54)	Established FY 2010-2013 PBIs	
Revision 1	July 14, 2010 (Modification 59)	Addition of PBI 3-20 through PBI 3-24	
Revision 2	August 27, 2010 (Modification 66)	Addition of PBI 2.18	
Revision 3	September 23, 2010 (Modification 72)	Addition of PBI 7.3 through PBI 7.6	
Revision 4	January 12,2011 (Modification 87)	Update PBIs 1.1, 1.3 and 2.17	
Revision 5	See Date of Contract Modification 101	Increase unallocated fee pool amount	
Revision 6	See Date of Contract Modification 102	Misc. Changes to PBI 1, PBI 2 and PBI 3	

Signature Block		
Charles Spencer, President and Project Manager Washington River Protection Solutions	Date	
Stacy Charboneau, Fee Determination Official U.S. Department of Energy, Office of River Protection	Date	I

# REPLACEMENT PAGES For

## Section J.4 PEMP, Attachment 2

(22 pages total including this cover page)

Part III - List of Documents, Exhibits, and Other Attachments, Page J-1

Cover Page, Page J.4.2-1

Table of Contents, Pages J.4.2-2 to 4

PBI-1.3, Pages J.4.2-14 to 15

PBI-2.1, Pages J.4.2-23 to 28

PBI-2.14, Pages J.4.2- 52 to 53

PBI-3.7, Page J.4.2-66

PBI-3.8, Page J.4.2-67

PBI-3.11, Page J.4.2-70

PBI-3.12, Page J.4.2-71

PBI-3.17, Page J.4.2-76

PBI-Reserved (Unallocated Fee), Page J.4.2-84

## PART III – LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

### **SECTION J -- LIST OF ATTACHMENTS**

#### **TABLE OF CONTENTS**

Attachment Number	Title of Attachment	Revision Number	Number of Pages
J.1	ABBREVIATIONS AND ACRONYM LIST	0	7
J.2	REQUIREMENTS SOURCES AND IMPLEMENTING DOCUMENTS	0	8
J.3	HANFORD SITE SERVICES AND INTERFACE REQUIREMENTS MATRIX	0	68
J.4	PERFORMANCE EVALUATION AND MEASUREMENT PLAN (PEMP)	6	99
J.5	PERFORMANCE GUARANTEE AGREEMENT	0	5
J.6	SMALL BUSINESS SUBCONTRACTING PLAN	0	14
J.7	SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM TARGETS	0	3
J.8	ADVANCE UNDERSTANDING OF COSTS	0	5
J.9	SPECIAL FINANCIAL INSTITUTION ACCOUNT AGREEMENT	N/A	5
J.10	WAGE DETERMINATIONS – SERVICE CONTRACT ACT (SCA) AND DAVIS-BACON ACT	1	48
J.11	SUPPLEMENTAL WORK DESCRIPTION TABLES	0	22
J.12	GOVERNMENT-FURNISHED SERVICES AND INFORMATION (GFS/I)	0	1
J.13	HANFORD SITE STRUCTURES LIST	0	66
J.14	HANFORD WASTE SITE ASSIGNMENT LIST	0	132
J.15	AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) MILESTONES AND PERFORMANCE MEASURES	0	12

## **Table of Contents**

PM 01 – Award Fee Performance Measure	5
PBI-1.1 CLIN 1 Waste Volume Reduction via the 242-A Evaporator	10
PBI-1.2 CLIN 1 Submittal of the SST Integrity Assurance Review Tri-Party Agreement Chang Package to Office of River Protection	je 13
PBI-1.3 CLIN 1 Project Upgrades and Life Extension Projects Completion	14
PBI-1.4 CLIN 1 222-S Upgrades and Life Extension Projects Completion	16
PBI-1.5 CLIN 1Construction Management Complex with Shops	18
PBI-1.6 CLIN 1 Tank Sampling (Grab and Cores)	19
PBI-1.7 CLIN 1 Tank Chemistry Control	20
PBI-2.1 CLIN 2 Vadose Zone/Barriers	23
PBI-2.2 CLIN 2 Waste Management C Area Closure	29
PBI-2.3 CLIN 2 Removal of SX Tank Farm Exhauster Station (Sludge Cooler)	35
PBI-2.4 CLIN 2 Complete removal and shipment to final disposition of expired Hose-In-Hose Transfer Lines	36
PBI-2.5 CLIN 2 Remove ducting and associated equipment associated with SX Farm	38
PBI-2.6 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-101	39
PBI-2.7 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-102	41
PBI-2.8 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-104	43
PBI-2.9 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-105	45
PBI-2.10 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-107	47
PBI-2.11 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-108	49
PBI-2.12 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-109	. 50
PBI-2.13 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-110	. 51
PBI-2.14 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-111	. 52

PBI-2.15 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-112	54
PBI-2.16 CLIN 2 Complete Ventilation Stack Extensions on POR-008 and POR-003	56
PBI-2.17 CLIN 2 A/AX Farm Retrieval Acceleration	57
PBI-2.18 CLIN 2 Articulating Mast System in 241-C-104	59
PBI-3.1 CLIN 3 Complete Submittal of Conceptual Design Report Documentation to Support Critical Decision 1 (CD-1) for the Interim Hanford Storage Facility (IHSF)	60
PBI-3.2 CLIN 3 Complete Submittal of Preliminary Design Documentation to Support Critical Decision 2 (CD-2) for the Interim Hanford Storage Facility (IHSF)	61
PBI-3.3 CLIN 3 Complete Submittal of Conceptual Design Report Documentation to Support Critical Decision 1 (CD-1) for the Secondary Waste Treatment Project	62
PBI-3.4 CLIN 3 Complete Submittal of Preliminary Design Documentation to Support Critical Decision 2 (CD-2) for the Secondary Waste Treatment Project	63
PBI-3.5 CLIN 3 AW-103 Feed Delivery System Design	64
PBI-3.6 CLIN 3 AZ-101 Feed Delivery System Design	65
PBI-3.7 CLIN 3 AY-102 Feed Delivery System Design	. 66
PBI-3.8 CLIN 3 SY-102 Feed Delivery System Design	. 67
PBI-3.9 CLIN 3 AY/AZ Farm Infrastructure Design	.68
PBI-3.10 CLIN 3 SY Farm Infrastructure Design	. 69
PBI-3.11 CLIN 3 AW Farm Infrastructure Design	. 70
PBI-3.12 CLIN 3 AP Farm Infrastructure Design	.71
PBI-3.13 CLIN 3 Modeling and Planning to Establish RPP Technical Baseline (System Plan)	.72
PBI-3.14 CLIN 3 Issuance of the first Tank Waste Characterization Report	.73
PBI-3.15 CLIN 3 Data Quality Objective for Strategic Plan	.74
PBI-3.16 CLIN 3 Best Basis Database Management	.75
PBI-3.17 CLIN 3 Waste Treatment Plant Operational Readiness Evaluation	.76
PBI-3.18 CLIN 3 Complete Submittal of Documentation to Support Critical Decision 0 (CD-0) for the Supplemental Treatment Project	or 77
PBI-3.19 CLIN 3 Complete Submittal of Conceptual Design Report Documentation to Support Critical Decision 1 (CD-1) for the Supplemental Treatment Project	78

to the control of the	Wodingation No. 102
PBI-3.20 CLIN 3 Flowsheet Development	79
PBI-3.21 CLIN 3 Life-Cycle Cost Model	80
PBI-3.22 CLIN 3 Solid-Phase Aluminum Speciation	81
PBI-3.23 CLIN 3 Integrated Sample Analysis Plan	82
PBI-3.24 CLIN 3 Mission Analysis Report Updated	83
PBI-Reserved - Unallocated Base Period Fee	84
PBI-7.1 CLIN 7 American Recovery and Reinvestment Act (ARRA) Program Re	eporting85
PBI-7.2 CLIN 7 ARRA Key Performance Parameters	87
PBI-7.3 CLIN 7 ARRA AW-104 Corrosion Probe	89
PBI-7.4 CLIN 7 ARRA TY Farm Barrier	90
PBI-7.5 CLIN 7 ARRA Mobile Arm Retrieval System Testing	91
PBI-7.6 CLIN 7 ARRA AP Cathodic Protection	92

# PBI-1.3 CLIN 1 Project Upgrades and Life Extension Projects Completion

Performance Fee available and assigned to this PBI: \$4,215,000

Fee Structure: Straight-Line Method (September 30, 2013)

Milestone	Fee Value
1	\$ 350,000
2	\$ 150,000
3	\$1,400,000
4	\$1,575,000
5	\$740,000
Total	\$4,215,000

#### Desired Endpoint/Outcome

Highly reliable waste evaporation and waste transfer systems are crucial to safe, efficient management of the Hanford Tank Farms prior to and during tank waste treatment. This planned scope will replace systems in support of 242-A Evaporator upgrades and life extension projects, complete life extension project s and evaporator upgrades as defined in the document titled "Engineering Study for the 242-A Life Cycle Extension Upgrades for FY 2010 through 2015", procure nondestructive equipment and complete ultrasonic test examination and video assessment reports in support of DST integrity and complete the DST Transfer System encasement pressure tests and pit coating inspections.

#### **Fee-Bearing Milestones**

1. Replace seven (7) systems in support of 242-A Evaporator Upgrades and Life Extension Projects. The Contractor shall earn \$50,000 of incremental fee upon completion of each system replaced (total \$350,000 available of incremental fee).

Work scope/completion criteria: Replace seven (7) systems in support of the 242-A Evaporator upgrades and life extension projects. (1. Reboiler Condensate Piping System, 2. Manual Flush Valve, 3. Steam Line Replacement, 4. Control Valve Upgrades, 5. Sanitary Drain Upgrades, 6. Slurry Sampling Station Upgrades, and 7. Process Condensate Sampling Station.)

<u>Completion Document:</u> Letter transmitting performance expectation completion notice and copy of the work package signature page documenting completion of installation.

2. Procure nondestructive examination equipment (NDE) for the DST Integrity Project. The Contractor shall earn \$30,000 of incremental fee upon completion of each life extension project upgrade (total \$150,000 available of incremental fee).

Work scope/completion criteria: 1) Procure three video vans, 2) NDE crawler replacement, 3) two GE Cameras, 4) procure one new ultrasonic examination control (UT) trailer, and 5) one P-Scan Projection-4 (PSP-4).

<u>Completion Document:</u> Letter transmitting performance expectation completion notice and receipt of procurements.

3. Complete six DST farm upgrades. The Contractor shall earn \$100,000 of incremental fee upon completion of each of the following upgrades: AY-101 ENRAF Densitometer, AZ-101 ENRAF Densitometer, and AW-102 ENRAF Densitometer; \$300,000 of incremental upon completion of the AW-102 Transfer Pump Replacement,; and \$400,000 of incremental fee upon completion of each exhauster upgrade, AP Farm Primary Exhauster Installation and SY-Farm Exhauster Installation.

Work scope/completion criteria: Complete six DST farm upgrades: 1.) AY-101 ENRAF Densitometer, 2.) AZ-101 ENRAF Densitometer, 3.) AP Farm Primary Exhauster Installation, 4.) AW-102 ENRAF Densitometer, 5.) AW-102 Transfer Pump Replacement, and 6.) SY-Farm Exhauster Installation.

<u>Completion Document:</u> Letter transmitting performance expectation completion notice and copy of work package signature page documenting completion of installation.

4. Complete UT examination and video assessment and issue report(s) for DST integrity. The Contractor shall earn \$75,000 of incremental fee upon completion of each UT examination report (13 total) and \$75,000 of incremental fee upon completion for each video assessment report (8 reports) (total \$1,575,000 available of incremental fee).

Work scope/completion criteria: Perform UT examinations on thirteen (13) DSTs, perform four (4) DST Annulus Video Assessments, and four (4) DST Primary Video Assessments.

<u>Completion Document:</u> Letter transmitting performance expectation completion notice and applicable UT examination and video assessment report(s).

5. Complete DST transfer system encasement pressure tests of 49 pipes and pit coating inspections by a qualified National Association of Corrosion Engineering qualified inspector of 25 pits. The Contractor shall earn \$10,000 of incremental fee upon completion of work scope for each encasement pressure check or pit coating inspection (total \$740,000 available of incremental fee).

<u>Work scope/completion criteria</u>: Perform transfer line encasement pressure checks of 49 transfer lines and pit coating inspections of 25 pits.

<u>Completion Document:</u> Letter transmitting performance expectation completion notice and a copy of the work package signature page documenting completion of the encasement pressure checks or the pit coating inspections.

## PBI-2.1 CLIN 2 Vadose Zone/Barriers

Performance Fee available and assigned to this PBI: \$10,700,000

Fee Structure: Terminal Method

Milestone	Fee Value
1	\$2,000,000
2	\$ 600,000
3	\$ 250,000
4	\$ 600,000
5	\$ 500,000
6	\$ 500,000
7	\$4,000,000
8	\$1,000,000
9	\$ 300,000
10	\$ 600,000
11	\$ 200,000
12	\$ 150,000
Total	\$10,700,000

#### **Desired Endpoint/Outcome**

Upon completion of these PBI activities, the following outcomes will be achieved:

Barriers: Characterization of four high priority sites for possible future interim surface barriers has been completed to support definition and design of barriers. Barrier design has been completed for three tank farm interim barriers based on the characterization results. Construction of interim surface barriers in TY farm and two additional locations has been completed.

NOTE: Barrier sites are subject to change based on the outcome of negotiations with Washington State Department of Ecology.

Waste Management Area (WMA) C Characterization and Corrective Measures: Phase 2 characterization of Waste Management Area C has been performed, consistent with the WMA C RFI/CMS Work Plan (RPP-PLAN-39114), including surface geophysical exploration (SGE) of two unplanned release sites and collection of soil samples using the direct push unit. Testing of a beta probe has been completed to support design of a field deployable unit. The WMA C RCRA Facility Investigation/Corrective Measures Study (TPA Milestone M-45-61) has been submitted to the Office of River Protection (ORP) in support of WMA C closure planning.

#### Fee Bearing Milestones

 Perform vadose zone direct push characterization for four potential barrier sites. The Contractor shall earn \$500,000 of incremental fee upon completion of direct push characterization of each site (total of \$2,000,000 available incremental fee). Work scope/completion criteria: Use the hydraulic hammer/direct push technology to perform logging and sampling for each of the following sites, or alternate sites mutually agreed to by the ORP and the Contractor:

- 241-S Farm, Southeast (near catch tanks/diversion box northeast of SX) by 9/30/2010
- 241-BY Farm, West (near BY-107/108 historic leak sites) by 3/31/2011
- 241-BY Farm, East (near BY-103 historic leak site) by 9/30/2011
- 241-S Farm, North by 3/31/2012

For each potential barrier location, field work shall include: placement of 4-8 direct push probes (probes pushed to refusal), geophysical logging of direct push probe holes, obtaining up to 3 soil samples per location for analysis, and placement of 2 or more deep electrodes per location. Samples will be analyzed for technetium and nitrate.

<u>Completion documents</u>: For each potential barrier location evaluated, provide to the ORP a letter report documenting completion of direct push probe-hole, logging results, placement of deep electrodes, sample locations, and summary of analytical results.

2. Perform vadose zone electrical resistivity characterization, including SGE and use of deep electrodes as appropriate, for four potential barrier sites. The Contractor shall earn \$150,000 of incremental fee upon completion of resistivity characterization of each site (total \$600,000 available incremental fee).

Work scope/completion criteria: Use electrical resistivity technology for each of the following sites, or alternate sites as directed by the ORP:

- 1. 241-S Farm, Southeast (near catch tanks/diversion box northeast of SX) by3/31/2011
- 2. 241-BY Farm, West (near BY107/108 historic leak sites) by 9/30/2011
- 3. 241-BY Farm, East (near BY103 historic leak site) by3/31/2012
- 4. 241-S Farm, North by 9/30/2012

For each potential barrier location, resistivity measurements will be obtained and analyzed employing the deep electrodes and appropriate surface electrodes.

<u>Completion documents</u>: For each potential barrier location evaluated, provide to the ORP a letter report providing the results of electrical resistivity data analysis and the resistivity anomaly maps for the potential barrier location.

 Perform well-to-well electrical resistivity measurements in WMA A-AX by 12/31/2010 to support evaluation of a potential future barrier site. The Contractor shall earn \$250,000 of incremental fee upon completion.

<u>Work/scope/completion criteria:</u> Historic leaks in WMA A/AX present a risk to groundwater; an interim barrier may mitigate that risk. Vadose zone characterization is limited. Use of well-to-well electrical resistivity measurements will provide needed characterization data for evaluation of a future barrier site and for closure planning. These measurements will guide possible future characterization of WMA A-AX for interim barrier selection, if appropriate.

<u>Completion document:</u> Letter report submitted to the ORP providing the results of electrical resistivity data analysis and the resistivity anomaly maps.

4. Complete design of three Tank Farm Interim Surface Barriers. The Contractor shall earn \$200,000 of incremental fee upon completion of the SX farm southern barrier design by June 30, 2011, \$200,000 of incremental fee upon completion of the SX farm northern barrier design by June 30, 2012, and \$200,000 of incremental fee upon completion of the BY farm west barrier design by June 30, 2013 (total of \$600,000 available incremental fee).

Work scope/completion criteria: Design an interim surface barrier for each these sites:

- 1. SX farm south
- 2. SX farm north
- 3. BY farm west.

Based on results of site characterization, an alternate location mutually agreed to by the ORP and the Contractor may replace any of these locations. Each barrier shall be designed to cover an area identified by characterization, and shall be designed to handle precipitation expected in the 25-year maximum rainfall event. The designed water retention system and/or discharge will not impact any ORP/RL waste sites. DOE-ORP and DOE-RL will be included in the design review process. Design will be issued into Hanford Document Control System (HDCS).

<u>Completion document</u>: Letter report submitted to the ORP providing information that the design of each Tank Farm Interim Surface Barrier has been issued into HDCS.

 Complete Construction of SX Farm South Interim Surface Barrier (or alternate location, as agreed by the ORP and the Contractor) by October 30, 2012, or by date required by TPA Milestone M-045-92 if revised, whichever is later. The Contractor shall earn \$500,000 of incremental fee upon completion.

Work scope/completion criteria: An interim surface barrier in 241-SX farm south shall be constructed per the documented and ORP-approved design.

<u>Completion document</u>: Letter transmitting the construction completion document approved through Section 1, Physical Construction Completion and Completion of Construction Acceptance Tests (if required) per Statement of Work (SOW), of the SX south barrier, per the documented and ORP-approved design.

 Complete Construction of SX Farm North Interim Surface Barrier (or alternate location, as agreed by the ORP and the Contractor) by June 30, 2013 or by date required by TPA milestone M-045-92 if revised, whichever is later. The Contractor shall earn \$500,000 of incremental fee upon completion.

Work scope/completion criteria: An interim surface barrier in 241-SX farm, north shall be constructed per the documented and ORP-approved design.

<u>Completion document</u>: Letter transmitting the construction completion document approved through Section 1, Physical Construction Completion and Completion of Construction Acceptance Tests (if required) per Statement of Work (SOW) of the SX farm north barrier.

7. Implement direct push soil characterization in Waste Management Area (WMA) C by June 30, 2013, to support development of a corrective measures study for WMA closure, in accordance with the WMA C RFI/CMS Work Plan (RPP-PLAN-39114). The Contractor shall earn incremental fee at a rate as indicated in the table below for each set of samples obtained per the plan.

Milestone	Item	Description	Fee
7	1	Direct push soil characterization in WMA C – 2 locations (16 samples)	\$400,000
7	2	Direct push soil characterization in WMA C – 2 locations (16 samples)	\$400,000
7	3	Direct push soil characterization in WMA C – 3 locations (24 samples)	\$600,000
7	4	Direct push soil characterization in WMA C – 3 locations (24 samples)	\$600,000
7	5	Direct push soil characterization in WMA C – 3 locations (24 samples)	\$600,000
7	6	Direct push soil characterization in WMA C – 3 locations (24 samples)	\$600,000
7	7	Direct push soil characterization in WMA C – 3 locations (24 samples)	\$600,000
7	8	Direct push soil characterization in WMA C – 1 location (8 samples)	\$200,000
***************************************		Milestone 8 Total	\$4,000,000

<u>Work scope/Completion Criteria</u>: Perform direct push logging, sampling and probe hole decommissioning at sites identified in the WMA C work plan, per the plan including obtaining surface samples, as directed by the plan. Deliver the samples to the laboratory for analysis and commence analysis per the plan.

Completion documents: A letter report will be submitted to the ORP providing direct push locations, probe-hole logging results, sample identification numbers, and chain of custody forms for each direct push location and associated samples. Completion reports may be submitted periodically for completion of one or more locations in each report.

8. Perform vadose zone electrical resistivity characterization, including Surface Geophysical Exploration (SGE) and use of deep electrodes as appropriate, at two unplanned release (UPR) sites in C tank farm by September 30, 2011 for the first site and December 31, 2011 for the second site. The Contractor shall earn \$500,000 of incremental fee upon completion of each site (total of \$1,000,000 available incremental fee).

<u>Work scope/completion criteria</u>: Perform vadose zone electrical resistivity characterization at the following unplanned release (UPR) sites in waste management area C:

1. UPR-200-E-86

#### 2. UPR-200-E-82

At each location, collect surface to surface resistivity data and surface to deep electrode resistivity data, using the previously installed deep electrodes. Analyze the data to identify resistivity anomalies.

<u>Completion document</u>: For each UPR, submit a letter report to the ORP providing the results of data analysis and the resistivity anomaly maps for the UPR in waste management area C.

 Perform testing of a beta detection system, identify detector design improvements, and define design requirements for a field deployable system by December 31,2010. The Contractor shall earn \$300,000 of incremental fee upon completion.

<u>Work scope/completion criteria</u>: In FY 2009, initial laboratory testing of a proof-of-concept beta detection probe was performed (RPP-ENV-42267) and showed promise. The initial detector will be further tested, an enhanced detector will be designed, constructed and tested, and requirements for design of a vadose zone field deployable system will be defined.

<u>Completion document</u>: Provide to DOE a letter report documenting the results of further testing of the proof-of-concept beta detection system, testing results of the enhanced detector, and requirements for design of a field deployable beta detection system.

10. Provide a Phase 2 RCRA Facility Investigation/Corrective Measures Study Report for WMA C (TPA Milestone M-045-61) by September 30, 2013. The Contractor shall earn \$600,000 of incremental fee upon completion.

<u>Work scope/completion criteria</u>: Provide a Phase 2 RCRA Facility Investigation/Corrective Measures Study Report for WMA C, by 09/30/2013, to facilitate closure of WMA C by 2019. The report will include results of characterization completed to date per RPP-PLAN-39114, evaluation of potential corrective measures for WMA C contaminated soil, and recommendations for corrective measure implementation.

<u>Completion document</u>: Provide to DOE as a formal report a Phase 2 RCRA Facility Investigation/Corrective Measures Study Report for WMA C.

11. In partial completion of TPA Milestone M-045-90, complete an interim barrier demonstration report for the T-106 interim barrier by September 30, 2010 The Contractor shall earn \$200,000 of incremental fee upon completion.

Work scope/completion criteria: Complete an interim barrier demonstration report for the T-106 interim barrier. The report shall include a recommendation and commitment on whether to proceed with additional interim barriers, and an evaluation of the barrier's ability to reduce water infiltration that drives migration of subsurface contamination to groundwater. A baseline change request (BCR) to add the new scope will be submitted, the PBI method will be defined in the associated BCR package.

<u>Completion document</u>: Letter transmitting an interim barrier demonstration report for the T-106 interim barrier.

12. Complete and document a pipeline leak detection technology field test by March 31, 2011. The Contractor shall earn \$150,000 of incremental fee upon completion.

<u>Work scope/completion criteria</u>: In support of identifying and evaluating historic waste leaks from pipelines, identify and plan a field test of technology for leak detection. Perform a field test of the selected technology on a pipeline where historic records indicate a probable leak. Report results and future recommendations.

<u>Completion document</u>: Letter transmitting a report of pipeline leak detection technology field test.

# PBI-2.14 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-111

Performance Fee available and assigned to this PBI: \$6,500,000

Fee Structure: Straight-Line Method (September 30, 2013)

Milestone	Fee Value	
1	\$2,000,000	
2	DELETED(Mod 102)	
3	\$2,000,000	
4	\$2,500,000	
Total	\$6,500,000	

#### Desired Endpoint/Outcome

Completion of tank waste retrieval activities to meet or exceed performance requirements in the "Proposed Consent Decree and Tri-Party Agreement Modifications for Hanford Tank Waste Treatment" Appendix B.

#### Fee Bearing Milestones

 Complete waste retrieval system construction for Tank 241-C-111 and turnover to operations. The Contractor shall earn \$2,000,000 of incremental fee upon completion of construction of Tank 241-C-111 and turnover to operations.

<u>Work scope/completion criteria</u>: Complete waste retrieval system construction. The retrieval system must be approved by an Independent Qualified Registered Professional Engineer (IQRPE) as compliant with Washington Administrative Code (WAC) 173-303-640 as part of the completion of construction. The Construction Completion Document, Section Ia, will be completed.

<u>Completion Document</u>: Contractor approved, Construction Completion Document through Section Ia, with exceptions listing for completion of Tank 241-C-111 waste retrieval system construction and the ORP FPD/COR's concurrence on the exceptions listing.

#### 2. DELETED

Complete bulk retrieval of Tank 241-C-111. The Contractor shall earn \$2,000,000 incremental fee upon completion of bulk retrieval of Tank 241-C-111. In the event the initially deployed retrieval technology meets or exceeds the performance requirements of the Hanford Federal Facility Agreement then additional fee in accordance with PBI-2.14, Milestone 4 below, will also be earned.

<u>Work scope/completion criteria</u>: Complete bulk waste retrieval to the performance requirements of the Hanford Federal Facility Agreement or to the limits of the initially deployed waste retrieval technology.

<u>Completion document</u>: Submittal of material balance data and engineering calculations summary information demonstrating retrieval is complete or at the limits of the deployed technology.

4. Complete bulk and heel retrieval of Tank 241-C-111. The Contractor shall earn \$2,500,000 of incremental fee upon completion of Tank 241-C-111 bulk and heel retrieval.

Work scope/completion criteria: Complete waste retrieval to meet performance requirements of the Hanford Federal Facility Agreement and Consent Order (HFFACO), or to the limits of the second deployed waste retrieval technology and the potential deployment of third technology (ORP "may request that the State agree that the U.S. Department of Energy (DOE) may forego implementing a third retrieval technology if DOE and WRPS believe that implementing such technology is not practicable under the criteria set forth" per the Consent Decree No. 08-5085-FVS, Appendix C, Part 1). The submittal to DOE of material balance data and engineering calculation summary information demonstrating retrieval is complete to the Proposed Consent Decree and Tri-Party Agreement Modifications for Hanford Tank Waste Treatment requirements. If residual volume does not comply with the completion criteria, prepare and submit to DOE an impracticality evaluation in accordance with Appendix B of the Consent Decree and Tri-Party Agreement Modifications for Hanford Tank Waste Treatment.

<u>Completion document</u>: The submittal to DOE of material balance data and engineering calculation summary information demonstrating <u>bulk and heel</u> retrieval is complete.

# PBI-3.7 CLIN 3 AY-102 Feed Delivery System Design

Performance Fee available and assigned to this PBI: \$100,000

Fee Structure: Straight-Line Method (September 30, 2013)

#### Desired Endpoint/Outcome

Complete and submit to the U.S. Department of Energy, Office of River Protection (ORP), the AY-102 Feed Delivery System Design documentation. The AY-102 Feed Delivery System Design will support waste transfers to the Waste Treatment Plant as prescribed in the RPP-40149 Integrated Waste Feed Delivery Plan to meet the mission performance expectations of the Department as stipulated within the contract.

#### **Fee Bearing Milestones**

1. AY-102 Feed Delivery System Design. The Contractor shall earn \$100,000 of incremental fee upon completion.

Work Scope/Completion Criteria: Complete design documents for the AY-102 Feed Delivery System (Description Activity ID # JJA-651010). The documents will include the appropriate procurement/construction specifications, design drawings, and engineering change notices.

<u>Completion Document</u>: Letter transmitting the AY-102 Feed Delivery System Design to the ORP.

# PBI-3.8 CLIN 3 AY/AZ Farm Infrastructure Design

Performance Fee available and assigned to this PBI: \$ 100,000

Fee Structure: Straight-Line Method (September 30, 2013)

#### **Desired Endpoint/Outcome**

Complete and submit to the U.S. Department of Energy, Office of River Protection (ORP), the AY/AZ Farm Infrastructure Design documentation. The AY/AZ Farm Infrastructure Design will support waste transfers to the Waste Treatment Plant as prescribed in the RPP-40149 Integrated Waste Feed Delivery Plan to meet the mission performance expectations of the Department as stipulated within the contract.

#### **Fee Bearing Milestones**

1. AY/AZ Farm Infrastructure Design. The Contractor shall earn \$100,000 of incremental fee upon completion.

Work Scope/Completion Criteria: Complete design documents for the AY/AZ Farm Infrastructure Design (Description Activity ID # ZJA-AY141C). The documents will include the appropriate procurement/construction specifications, design drawings, and engineering change notices.

Completion Document: Letter transmitting the AY/AZ Farm Infrastructure Design to the ORP.

# PBI-3.11 CLIN 3 AW Farm Infrastructure Design

Performance Fee available and assigned to this PBI: \$ 125,000

Fee Structure: Straight-Line Method (September 30, 2013)

### **Desired Endpoint/Outcome**

Complete and submit to the U.S. Department of Energy, Office of River Protection (ORP), the AW Farm Infrastructure Design documentation. The AW Infrastructure Design will support waste transfers to the Waste Treatment Plant as prescribed in the RPP-40149 Integrated Waste Feed Delivery Plan to meet the mission performance expectations of the Department as stipulated within the contract.

#### **Fee Bearing Milestones**

1. AW Farm Infrastructure Design

The Contractor shall earn \$125,000 of incremental fee upon completion.

Work Scope/Completion Criteria: Complete Design documents for the AW Farm Infrastructure Design (Description Activity ID # JHA-971012). The documents will include the appropriate procurement/construction specifications, design drawings and engineering change notices.

Completion Document: Letter transmitting the AW Farm Infrastructure Design to the ORP.

## PBI-3.12 CLIN 3 AP Farm Infrastructure Design

Performance Fee available and assigned to this PBI: \$ 100,000

Fee Structure: Straight-Line Method (September 30, 2013)

#### **Desired Endpoint/Outcome**

Complete and submit to the U.S. Department of Energy, Office of River Protection (ORP), the AP Farm Infrastructure Design documentation. The AP Infrastructure Design will support waste transfers to the Waste Treatment Plant as prescribed in the RPP-40149 Integrated Waste Feed Delivery Plan to meet the mission performance expectations of the Department as stipulated within the contract.

#### **Fee Bearing Milestones**

### 1. AP Farm Infrastructure Design

The Contractor shall earn \$100,000 of incremental fee upon completion.

Work Scope/Completion Criteria: Complete Design documents for the AP Farm Infrastructure Design (Description Activity ID # JGA-891010). The documents will include the appropriate procurement/construction specifications, design drawings and engineering change notices.

Completion Document: Letter transmitting the AP Farm Infrastructure Design to the ORP.

## PBI-3.17 CLIN 3 Waste Treatment Plant Operational Readiness Evaluation

Performance Fee available and assigned to this PBI: \$2,000,000

Fee Structure: Terminal Method (Due 15 days after the end of the Semi-Annual timeframe for FY 2010 and Annual timeframe for September 30,2011 through September 30, 2013)

### **Desired Endpoint/Outcome**

Complete and submit to the U.S. Department of Energy, Office of River Protection (ORP), the Waste Treatment Plant (WTP) Operational Readiness Evaluation reports on a semi-annual basis for FY 2010 and submit the WTP Operational Readiness Support Report on an annual basis for FY 2011 through FY 2013. The in-process reviews of WTP Operational Readiness will identify recommendations for the resolution or mitigation of any issues or concerns which are identified to support the safe and efficient acceptance of the WTP facilities by the Contractor.

#### Fee Bearing Milestones

1. Prepare and submit the Waste Treatment Plant Operational Readiness Evaluation reports on a semi-annual basis. The Contractor shall earn \$250,000 of incremental fee upon completion of each semi-annual update (total \$500,000 available of incremental fee).

Work Scope/Completion Criteria: Complete the semi-annual Waste Treatment Plant Operational Readiness Evaluation that supports the WTP mission.

<u>Completion Document</u>: Letter transmitting the Waste Treatment Plant Operational Readiness Evaluation report.

2. Prepare and submit the WTP Operational Readiness Support Report on an annual basis. The Contractor shall earn \$500,000 of incremental fee upon completion of each annual update (total \$1,500,000 available of incremental fee).

Work Scope/Completion Criteria: Complete the annual WTP Operational Readiness Support Report that supports earliest effective operations of the WTP.

Completion Document: Letter transmitting the WTP Operational Readiness Support Report.

## PBI-Reserved - Unallocated Base Period Fee

Performance Fee available and not allocated to a performance measure:

**Total unallocated fee:** \$6,761,214
Base unallocated fee: \$6,761,214
ARRA unallocated fee: \$0

Fee Structure: Method to be determined

Fee will be allocated to award fee or additional performance based incentives as the need is identified before the end of fiscal year 2012 for base fee, and before the end of FY 2011 for ARRA fee.