

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1 4
2. AMENDMENT/MODIFICATION NO. 167	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY Office of River Protection U.S. Department of Energy Office of River Protection P.O. Box 450 Richland WA 99352	CODE 00603	7. ADMINISTERED BY (If other than Item 6) Office of River Protection U.S. Department of Energy Office of River Protection P.O. Box 450 MS: H6-60 Richland WA 99352	CODE 00603
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) WASHINGTON RIVER PROTECTION SOLUTIONS LLC Attn: KAREN VACCA C/O URS ENERGY & CONSTRUCTION, INC. PO BOX 73 / 720 PARK BLVD BOISE ID 837290073		(x) 9A. AMENDMENT OF SOLICITATION NO.	
CODE 806500521 FACILITY CODE		9B. DATED (SEE ITEM 11)	
		x 10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AC27-08RV14800	
		10B. DATED (SEE ITEM 13) 05/29/2008	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.


CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) Clause B.5 Changes to Contract Cost of Fee and Clause B.6 Fee Structure

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ 0 _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

See Continuation Page(s)
Period of Performance: 06/20/2008 to 09/30/2013

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Susan C. Johnson
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED
16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	16C. DATE SIGNED 05/22/2012

Purpose of Modification:

The following changes are hereby incorporated into the contract:

1. Update Section J, Attachment J.4, Performance Evaluation and Measurement Plan (PEMP), Attachment J.2 Performance Measures for Base Contract Period, Effective: FY2010 – 2013, to incorporate the following Performance Based Incentives (PBI) changes:

Deletions:

PBI -1.3.5.021 – 049 Complete DST transfer System Encasement Pressure Test of Pipes (29@ \$10,000 each) - \$290,000.00

PBI – 1.3.5.143-151 Complete DST Transfer System Pit Coating Inspection (9@\$10,000 each) - \$90,000.00

PBI -1.4.1.2.2 – 7 Procure and Install Analytical Instruments (6@\$8,000 each) - \$48,000.00

PBI -1.4.3 Procure and install new manipulator FY2012 - \$50,000.00

PBI -1.4.4 Procure two new manipulators FY2013 - \$50,000.00

PBI -1.4.5.1 Complete life extension project upgrade: 222-S Room Renovations-\$150,000.00

PBI -1.4.5.4 Complete life extension project upgrade: 222-S A/C Compressor Upgrade – \$150,000.00

PBI 2.1.4.3 Complete Design of Interim Surface Barrier-BY Farm, West - \$200,000.00

PBI 2.1.7.6 – .7 Direct Push Soil Characterization in WMA C. 3 locations (24 samples)- (2@600,000 each) - \$1,200,000.00

PBI 2.2.7.3 – .4 Perform waste release tests on up to four resident waste from four retrieved or partially retrieved tanks (2@\$200,000 each) - \$400,000.00

PBI 2.2.14 Deliver draft TPA Tier 2 Closure Plan for WMA C to DOE - \$500,000.00

PBI -3.5 AW-103 Feed Delivery System Design - \$100,000.00

PBI 3.10 SY Farm Infrastructure Design - \$100,000.00

PBI 3.13.3 Submit RPP System Plan 2012 - \$750,000.00

PBI 3.17.2.2 – .3 Completion of WTP Operational Readiness Support Annual Report for FY 2012 and FY 2013 – (2@\$500,000 each) - \$1,000,000.00

As a result of these deletions totaling \$5,078,000.00, the Unallocated Available Fee Pool is increased by \$5,078,000.00.

Released from On Hold Status:

PBI -1.3.4.9 Perform SY-101 UT Examination - \$75,000.00

PBI -1.6.2.4 Complete 5 Core or Off Riser Samples - \$120,000.00

PBI – 2.4.1.2 Complete removal of the Interim Stabilization Hose-in-Hose Transfer Line (HIHTL) from C-203 (2) to C-200 Vessel (I-34623-0-2) package for Shipment - \$80,000.00

PBI – 2.4.1.11 Complete removal of the Interim Stabilization Hose-in-Hose Transfer Line (HIHTL) from S-102 to S-A (I-30512-0-1) package for Shipment - \$80,000.00

PBI 2.4.2.2 Complete shipping of HIHTL C-203 to C-200 Vessel (I-34623-0-2) - \$20,000.00

PBI – 2.4.2.11 Complete shipping of HIHTL S-102 to S-A (I-30512-0-1) - \$20,000.00

PBI -2.10.5 Complete C-107 Heel Retrieval - \$1,500,000.00

As a result of these releases, the unallocated fee pool is decreased by \$1,895,000.00 and this fee is available to be earned.

Revisions:

PBI – 1.1.3 242-A Evaporator campaign due date moved from September 30, 2012 to September 30, 2013.

2. Update Section J, Attachment J.4, PEMP, to update Table of Contents Pages J.4.2-2, J.4.2-3, and J.4.2-4.
3. Update Section J, Attachment J.4, PEMP, to update the Configuration Table to reflect the date of modification 163 and to add Revision 21 of the PEMP as a result of this modification.
4. Update Section J, Attachment J.4, PEMP, to revise the PBI-Reserved-Unallocated Base Period Fee to reflect the PBI changes. The change is as follows:

FROM:

PBI-Reserved - Unallocated Base Period Fee

The Total Unallocated Base Period Fee value is \$9,751,709. The Available Unallocated Base Period Fee Value is \$2,045,804. The Total Unavailable Unallocated Base Period Fee is \$7,705,905, which includes \$5,018,905 in original Unavailable Unallocated Base Period Fee and \$2,687,000 in Unavailable Unallocated Base Period Fee as

a result of reactivation of on-hold PBI's. Unavailable Unallocated Base Period Fee is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee.

Available Unallocated base Period Fee:	\$2,045,804 (Mod 163)
Available Unallocated ARRA Fee:	\$ 0
Total Available Unallocated Fee:	\$2,045,804 (Mod 163)

TO:

PBI-Reserved - Unallocated Base Period Fee

The Total Unallocated Base Period Fee value is \$12,934,709. The Total Available Unallocated Base Period Fee value is \$201,171. The Total Unavailable Unallocated Base Period Fee value is \$12,733,538. Unavailable Unallocated Base Period Fee is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee.

Available Unallocated Base Period Fee:	\$201,171 (Mod 167)
Available Unallocated ARRA Fee:	\$ 0
Total Available Unallocated Fee:	\$201,171 (Mod 167)

5. Attached to this modification are replacement pages for the following section:

- Section J, Attachment J.4, Pages J.4.2-21 thru 23, J.4.2-25 thru 29, J.4.2-31 thru 32, J.4.2-36 thru 46, J.4.2-48 thru 50, J.4.2-60 thru 61, J.4.2-78, J.4.2-83, J.4.2-86, J.4.2-90 thru 91, J.4.2-101 through 102.
- Section J, Attachment J.4, PEMP, to update page J.4-2 from Revision 20 to Revision 21.

6. **All other Terms and Conditions remain unchanged.**

Attachment 1

DE-AC27-08RV14800, MODIFICATION 167

Replacement Pages

(Total: Thirty-Five (35) including this Cover Page)

- **Section J, Attachment J.4.1, Pages J.4.2-1, J.4.2-21 through 23, J.4.2-25 through 29, J.4.2-31, 32, 36 through 46, 48 through 50, 60 through 61, 78, 83, 86, 90through 91, 101through 102**

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	April 4, 2011 (Modification 101)	Increase unallocated fee pool amount
Revision 6	April 4, 2011 (Modification 102)	Misc. Changes to PBI 1, PBI 2 and PBI 3
Revision 7	April 15, 2011 (Modification 105)	Increase unallocated fee pool amount
Revision 8	May 26, 2011 (Modification 109)	Increase unallocated fee pool amount
Revision 9	June 22, 2011 (Modification 111)	Adjust PBIs to reflect decrease in total available Base Period fee pool.
Revision 10	July 14, 2011 (Modification 118)	Increase unallocated fee pool amount
Revision 11	July 29, 2011 (Modification 123)	Increase unallocated fee pool amount
Revision 12	August 4, 2011 (Modification 126)	Increase unallocated fee pool amount
Revision 13	September 7, 2011 (Modification 128)	Misc Changes to PBIs 2.6 – 2.15
Revision 14	September 23, 2011 (Modification 131)	Increase unallocated fee pool amount
Revision 15	September 29, 2011 (Modification 135)	Increase unallocated fee pool amount
Revision 16	December 29, 2011 (Modification 142)	Adjust PBI's 1.4 and 2.1 to reflect increase in total available Base Period fee pool
Revision 17	January 27, 2012 (Modification 147)	Incorporate FY12 Award Fee Plan
Revision 18	February 15, 2012 (Modification 151)	Adjust PBIs and reflect adjusted total available Base Period Fee Pool
Revision 19	See date of Modification 158	Add cost and fee for CLIN 3.4 – 4.4
Revision 20	April 4, 2011 (Modification 163)	Increase unallocated fee pool amount
Revision 21	See Date of Modification 167	Adjust PBIs and reflect adjusted total available Base Period Fee Pool

PBI-1.1 CLIN 1 Waste Volume Reduction via the 242-A Evaporator

Performance Fee value is established at \$3,600,000. \$2,800,000 of the total base period fee pool has been allocated to this PBI and is available to be earned. \$800,000 is not allocated and is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee even if the workscope is complete.

Fee Structure: Terminal Method

Milestone	Fee Value	Method	Amount allocated and available to be earned	Amount not allocated and not available to be earned
1	\$1,000,000	Terminal	\$1,000,000	\$0
2	\$1,000,000	Terminal	\$1,000,000	\$0
3	\$800,000	Terminal	\$800,000	\$0
4	\$800,000	Terminal	\$0	\$800,000
Total	\$3,600,000		\$2,800,000	\$800,000

Desired Endpoint/Outcome

Prior to operations of the Waste Treatment and Immobilization Plant (WTP), conservation of Double-Shell Tank (DST) space is critical to allow continued Single-Shell Tank (SST) retrievals in accordance with negotiated regulatory milestones. The 242-A Evaporator is the primary tool to reduce waste volumes stored in the DST system. This succession of PBIs will make space for nearly one million gallons of waste retrieved from the SSTs.

Fee-Bearing Milestones

1. A 242-A evaporator campaign that creates a 240,000 gallon waste volume reduction by September 30, 2010. For the first 240,000 gallons of waste volume reduction, the Contractor shall earn \$1,000,000 of incremental fee.

Work scope/completion criteria: Operate the 242-A evaporator as a key component of the transfer and treatment system for tank farms. The evaporator campaign will process the waste to the parameters determined by Process Engineering. The volume reduction will be determined by the Process Control Plan (e.g., specific gravity goal and limits on the amount of waste removed from AW-102) with a minimum of 240,000 gallons, before flush, of free DST volume achieved. This evaporator campaign shall be scheduled to ensure maintenance of sufficient proficiency of Tank Farm personnel operating the evaporator.

Completion document: Letter transmitting the Performance Expectation Completion Notice and Letter Report and Evidence of Completion documenting that the waste volume reduction volume has been achieved and summarizing the volume reduction results.

2. A 242-A evaporator campaign(s) that creates a 240,000 gallon waste volume by September 30, 2011. For the second 240,000 gallons (cumulative total 480,000 gallons) of waste volume reduction, the Contractor shall earn \$1,000,000 of incremental fee.

Work scope/completion criteria: Operate the 242-A evaporator as a key component of the transfer and treatment system for tank farms. The evaporator campaign will process the waste to the parameters determined by Process Engineering. The volume reduction will be determined by the Process Control Plan (e.g., specific gravity goal and limits on the amount of waste removed from AW-102) with a minimum of 240,000 gallons (cumulative total 480,000 gallons), before flush, of free DST volume achieved. This evaporator campaign shall be scheduled to ensure maintenance of sufficient proficiency of Tank Farm personnel operating the evaporator. Assumes the evaporator campaign volumes can be combined to achieve milestones, e.g., if Item 1's campaigns has a volume reduction of 300,000 gallons and Item 2's campaign has a volume reduction of 180,000 gallons, both Milestones 1 and 2 are complete.

Completion document: Letter transmitting the Performance Expectation Completion Notice and Letter Report and Evidence of Completion documenting that the waste volume reduction volume has been achieved and summarizing the volume reduction results.

3. A 242-A evaporator campaign(s) that creates a 240,000 gallon waste volume reduction by September 30, 2013. For the third 240,000 gallons (cumulative total 720,000 gallons) of waste volume reduction, the Contractor shall earn \$800,000 of incremental fee.

Work scope/completion criteria: Operate the 242-A evaporator as a key component of the transfer and treatment system for tank farms. The evaporator campaign will process the waste to the parameters determined by Process Engineering. The volume reduction will be determined by the Process Control Plan (e.g., specific gravity goal and limits on the amount of waste removed from AW-102) with a minimum of 240,000 gallons (cumulative total 720,000 gallons) before flush, of free DST volume achieved. This evaporator campaign shall be scheduled to ensure maintenance of sufficient proficiency of Tank Farm personnel operating the evaporator. Assumes the evaporator campaign volumes can be combined to achieve milestones, e.g., if Item 1's campaigns has a volume reduction of 300,000 gallons and Item 2's campaign has a volume reduction of 180,000 gallons, both Milestones 1 and 2 are complete.

Completion document: Letter transmitting the Performance Expectation Completion Notice and Letter Report and Evidence of Completion documenting that the waste volume reduction volume has been achieved and summarizing the volume reduction results.

4. A 242-A evaporator campaign(s) that creates a 240,000 gallon (cumulative total 960,000 gallons) waste volume reduction by September 30, 2013. For the fourth 240,000 gallons of waste volume reduction, the Contractor shall earn \$800,000 of incremental fee.
Fee for this milestone is not available to be earned.

Work scope/completion criteria: Operate the 242-A evaporator as a key component of the transfer and treatment system for tank farms. The evaporator campaign will process the waste to the parameters determined by Process Engineering. The volume reduction will be determined by the Process Control Plan (e.g., specific gravity goal and limits on the amount of waste removed from AW-102) with a minimum of 240,000 gallons (cumulative total 960,000

gallons), before flush, of free DST volume achieved. This evaporator campaign shall be scheduled to ensure maintenance of sufficient proficiency of Tank Farm personnel operating the evaporator. Assumes the evaporator campaign volumes can be combined to achieve milestones, e.g., if Item 1's campaigns has a volume reduction of 300,000 gallons and Item 2's campaign has a volume reduction of 180,000 gallons, both Milestones 1 and 2 are complete.

Completion document: Letter transmitting the Performance Expectation Completion Notice and Letter Report and Evidence of Completion documenting that the waste volume reduction volume has been achieved and summarizing the volume reduction results.

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

Performance Fee value is established at \$3,195,000. \$2,770,000 of the total base period fee pool has been allocated to this PBI and is available to be earned. \$425,000 is not allocated and is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee even if the workscope is complete.

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

Milestone	Fee Value	Method	Amount allocated and available to be earned	Amount not allocated and not available to be earned
1	\$ 350,000	Straight-Line	\$ 250,000	\$100,000
2	\$ 150,000	Straight-Line	\$ 150,000	\$0
3	\$ 700,000	Straight-Line	\$ 700,000	\$0
4	\$1,635,000	Straight-Line	\$1,410,000	\$225,000
5	\$360,000	Straight-Line	\$ 260,000	\$100,000
Total	\$3,195,000		\$2,770,000	\$425,000

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 projects 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. Fee on two (2) systems is not available to be earned. The Contractor shall earn \$50,000 of incremental fee upon completion of each system replaced (total of \$250,000 of incremental fee is available and a total of \$100,000 of incremental fee is not available to be earned).

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 (milestone not available to be earned), and 7. Process Condensate Sampling Station (milestone not available to be earned).)

Completion Document: 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).

Completion Document: Letter transmitting performance expectation completion notice and receipt of procurements.

3. Complete four 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 and \$400,000 of incremental fee upon completion of exhauster upgrade of AP Farm Primary Exhauster Installation.

Work scope/completion criteria: Complete four DST upgrades: 1.) AY-101 ENRAF Densitometer, 2.) AZ-101 ENRAF Densitometer, 3.) AP Farm Primary Exhauster Installation, 4.) AW-102 ENRAF Densitometer, 5) DELETED Mod 151, 6) DELETED Mod 151.

Completion Document: 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; fee on 3 UT examination reports is not available to be earned) and \$75,000 of incremental fee upon completion for each video assessment report (8 reports) and a total of \$10,000 of incremental fee upon completion of each additional video assessment report (6 reports) (total of \$1,410,000 of incremental fee is available and a total of \$225,000 of incremental fee is not available to be earned).

Work scope/completion criteria: Perform UT examinations on thirteen (13) DSTs, perform seven (7) DST Annulus Video Assessments, and seven (7) DST Primary Video Assessments.

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

5. Complete DST transfer system encasement pressure tests of 20 pipes (fee on 8 pipes is not available to be earned) and pit coating inspections by a qualified National Association of Corrosion Engineering qualified inspector of 16 pits (fee on 2 pit coatings is not available to be earned). The Contractor shall earn \$10,000 of incremental fee completion of work scope for each encasement pressure check or pit coating inspection (total \$260,000 of incremental fee is available and a total of \$100,000 of incremental fee is not available to be earned).

Work scope/completion criteria: Perform transfer line encasement pressure checks of 20 (fee on 8 pipes is not available to be earned) transfer lines and pit coating inspections of 16 pits (fee on 2 pit coatings is not available to be earned).

Completion Document: 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-1.4 CLIN 1 222-S Upgrades and Life Extension Projects Completion

Performance Fee value is established at \$98,000. \$98,000 of the total base period fee pool has been allocated to this PBI and is available to be earned. \$0 is not allocated and is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee even if the workscope is complete.

Fee Structure: Terminal (with dates identified below) or Straight-Line Method (September 30, 2013)

Milestone	Fee Value	Method	Amount allocated and available to be earned	Amount not allocated and not available to be earned
1	\$ 48,000	Straight Line	\$48,000	\$0
2	\$ 50,000	Terminal	\$50,000	\$0
3	DELETED (Mod 167)	Terminal	\$0	\$0
4	DELETED (Mod167)	Terminal	\$0	\$0
5	DELETED (Mod 167)	Straight Line	\$0	\$0
Total	\$ 98,000		\$98,000	\$0

Desired Endpoint/Outcome

The 222-S Laboratory, with its unique capabilities to analyze and store highly radioactive tank waste samples, must operate reliably in support of the tank waste cleanup mission. The contractor must replace systems in support of 222-S Laboratory and life extension projects and complete four life extension project upgrades.

Fee-Bearing Milestones

1. Replace six (6) pieces of analytical equipment at the 222-S Laboratory. The Contractor shall earn \$8,000 of incremental fee upon completion of each piece of equipment replaced (total of \$48,000 of incremental fee is available to be earned).

Work scope/completion criteria: Replace six pieces of analytical equipment at the 222-S Laboratory such as viscometer, liquid scintillation counter, thermal desorption units, GC, ASE, (actual equipment to be replaced may change due to emergent needs).

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

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

2. Procure and install new manipulator by September 30, 2011. The Contractor shall earn \$50,000 of incremental fee upon completion.

Work scope/completion criteria: Procure and install new manipulator.

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

3. DELETED (Mod 167).
4. DELETED (Mod 167).
5. DELETED (Mod 167)

PBI-1.6 CLIN 1 Tank Sampling (Grab and Cores)

Performance Fee value is established at \$2,475,000. \$2,355,000 of the total base period fee pool has been allocated to this PBI and is available to be earned. \$120,000 is not allocated and is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee even if the workscope is complete.

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

Milestone	Fee Value	Method	Amount allocated and available to be earned	Amount not allocated and not available to be earned
1	\$1,875,000	Straight-Line	\$1,875,000	\$0
2	\$ 600,000	Straight-Line	\$ 480,000	\$120,000
Total	\$2,475,000		\$2,355,000	\$120,000

Desired Endpoint/Outcome

Tank waste sampling is essential to maintaining required tank waste chemistry, for maintaining tank integrity, for waste transfers and retrievals, and for post-retrieval reports. Tank waste sampling is high-risk work that must be completed safely to not impede project schedules. The contractor must ensure that sampling operations are completed with increasing efficiency and effectiveness allowing more resources to be applied to other mission critical work.

Fee-Bearing Milestones

1. Complete 25 grab samples in support of the Tank Operations Contract (TOC) mission. The Contractor shall earn \$75,000 of incremental fee upon completion of the each grab sample (total of \$1,875,000 of incremental fee is available to be earned).

Work scope/completion criteria: Completion of 25 grab samples as described in the applicable Tank Sampling and Analysis Plans (TSAPs). The plan shall identify; the type of sample, the technical need for the sampling activity, the location of the samples, and the sampling requirements. A grab sampling activity in a single-shell tank is considered all grab samples described in a TSAP for a single tank. Sampling activities for double-shell tanks may include up to two activities per TSAP, provided they are discrete sampling activities and are described as such in a TSAP (i.e., 50% retrieval, 100% retrieval).

Completion Document: Letter transmitting performance expectation completion notice and copy of the chain of custody (COC) documenting completion of grab samples and transfer of ownership to the laboratory.

2. Complete 5 core or off-riser samples in support of the TOC mission. Fee on 1 core samples is not available to be earned. The Contractor shall earn \$120,000 of incremental fee upon completion of the each core or off-riser sample (total of \$360,000 of incremental fee is available and a total of \$120,000 of incremental fee is not available to be earned).

Work scope/completion criteria: Completion of 5 samples as described in the applicable Tank Sampling and Analysis Plans (TSAPs). Fee on 1 core sample is not available to be earned. The plan shall identify; the type of sample, the technical need for the sampling activity, the location of the samples, and the sampling requirements.

Completion Document: Letter transmitting performance expectation completion notice and copy of the COC documenting completion of core samples and transfer of ownership to the laboratory.

PBI-2.1 CLIN 2 Vadose Zone/Barriers

Performance Fee value is established at \$8,050,000. \$6,950,000 of the total base period fee pool has been allocated to this PBI and is available to be earned. \$1,100,000 is not allocated and is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee even if the workscope is complete

Fee Structure: Terminal Method

Milestone	Fee Value	Method	Amount allocated and available to be earned	Amount not allocated and not available to be earned
1	\$2,000,000	Terminal	\$2,000,000	\$0
2	\$ 450,000	Terminal	\$ 450,000	\$0
3	\$ 250,000	Terminal	\$ 250,000	\$0
4	\$ 600,000	Terminal	\$ 400,000	\$ 0
5 Deleted (Mod 151)	\$ 0	Terminal	\$ 0	\$ 0
6	\$ 500,000	Terminal	\$ 0	\$ 500,000
7	\$3,400,000	Terminal	\$2,200,000	\$0
8	\$1,000,000	Terminal	\$1,000,000	\$ 0
9	\$ 300,000	Terminal	\$ 300,000	\$ 0
10	\$ 600,000	Terminal	\$ 0	\$ 600,000
11	\$ 200,000	Terminal	\$ 200,000	\$0
12	\$ 150,000	Terminal	\$ 150,000	\$0
Total	\$8,050,000		\$6,950,000	\$1,100,000

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

1. 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.

Completion documents: 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 three potential barrier sites. The Contractor shall earn \$150,000 of incremental fee upon completion of resistivity characterization of each site (total \$450,000 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) by 3/31/2011
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) by 3/31/2012
4. DELETED (MOD 151)

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

Completion documents: 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.

3. 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.

Work/scope/completion criteria: 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.

Completion document: 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. Fee for one Tank Farm Interim Surface Barrier is not available to be earned. 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, (total of \$400,000 of incremental fee is available).

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

1. SX farm south
2. SX farm north
3. Deleted (Mod 167)

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).

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

5. DELETED (Mod 151)
6. 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. Fee for this milestone is not available to be earned.

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

Completion document: 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	DELETED Mod 151	\$0
7	6	DELETED Mod 167.	\$0
7	7	DELETED Mod 167.	\$0
7	8	Direct push soil characterization in WMA C – 1 location (8 samples)	\$200,000
Milestone 7 Total			\$2,200,000 available to be earned

Work scope/Completion Criteria: 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).

Work scope/completion criteria: 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.

Completion document: 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.

9. 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.

Work scope/completion criteria: 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.

Completion document: 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. Fee for this milestone is not available to be earned.

Work scope/completion criteria: 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.

Completion document: 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.

Completion document: 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.

Work scope/completion criteria: 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.

Completion document: Letter transmitting a report of pipeline leak detection technology field test.

PBI-2.2 CLIN 2 Waste Management C Area Closure

Performance Fee value is established at \$2,550,000. \$2,550,000 of the total base period fee pool has been allocated to this PBI and is available to be earned. \$0 is not allocated and is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee even if the workscope is complete.

Fee Structure: Straight-Line Method (September 30, 2013) and Declining Method (Milestones #1, #2, #3, and #4)

Milestone	Fee Value	Method	Amount allocated and available to be earned	Amount not allocated and not available to be earned
1	\$ 200,000	Declining	\$ 200,000	\$0
2	\$ 200,000	Declining	\$ 200,000	\$0
3	\$ 200,000	Declining	\$ 200,000	\$0
4	\$ 200,000	Declining	\$ 200,000	\$0
5	\$ 200,000	Straight Line	\$ 200,000	\$0
6	\$ 200,000	Straight Line	\$ 200,000	\$0
7	\$ 400,000	Straight Line	\$ 400,000	\$ 0
8	\$ 750,000	Straight Line	\$ 750,000	\$0
9 Deleted (Mod 151)	\$ 0		\$ 0	\$ 0
10 Deleted (Mod 151)	\$ 0		\$ 0	\$ 0
11 Deleted (Mod 151)	\$ 0		\$ 0	\$ 0
12 Deleted (Mod 151)	\$ 0		\$ 0	\$ 0
13	\$ 200,000	Straight Line	\$ 200,000	\$ 0
14 Deleted (Mod 167)	\$ 0	Straight Line	\$ 0	\$ 0
Total	\$2,550,000		\$2,550,000	\$ 0

Desired Endpoint/Outcome

Upon completion of these PBI activities, the following outcomes will be achieved: Closure Demonstration and Planning: DOE receives the deliverables for those portions of the C-200 Closure Demonstration Plan necessary to complete TPA Milestone M-045-80, including: (1) a description of the radioactive waste determination process that DOE will utilize for the component of Tank Waste residuals subject to DOE authority, (2) a RCRA/CERCLA integration

white paper, (3) a tank removal engineering study, and (4) an evaluation of alternatives for removal of waste from the C-301 catch tank. DOE receives reports on feasibility studies for pipeline and diversion boxes, in support of WMA C closure decisions.

Performance assessment and regulatory documents: Waste release studies have been completed on up to 4 C farm tanks, to provide input to risk assessments. An initial risk assessment/performance assessment of WMA C has been completed and delivered to DOE. A Tier 1 closure plan meeting the requirements of DOE O 435.1 and basis documentation for a WIR determination, have been delivered to DOE. A closure plan meeting the requirements of the TPA for the SST System and a TPA Tier 2 closure plan for WMA C have been delivered to DOE.

Fee Bearing Milestones

1. In partial completion of TPA milestone M-045-80 (Part 1), provide a report describing the radioactive waste determination process that DOE will utilize for the component of Tank Waste residuals subject to DOE authority by December 2, 2010 (Declining Method milestone). The Contractor shall earn \$200,000 of incremental fee upon completion of this deliverable, subject to declining method deductions, if applicable.

Work scope/completion criteria: Develop a report describing the radioactive waste determination process, meeting all requirements of DOE Order 435.1 which DOE will utilize for the component of Tank Waste residuals in WMA C subject to DOE authority. Provide the draft report to DOE for comment. The declining method penalty calculation date for Milestones 1, 2, 3, and 4 is December 2, 2010. For each milestone there shall be a \$500 per day penalty and there shall be no fee earned after January 21, 2011.

Completion document: Submit a letter report to the Office of River Protection (ORP) describing the radioactive waste determination process that DOE will utilize for the component of Tank Waste residuals in WMA C subject to DOE authority.

2. In partial completion of TPA milestone M-045-80 (Part 2), provide a RCRA/CERCLA integration white paper by December 2, 2010 (Declining Method milestone). The Contractor shall earn \$200,000 of incremental fee upon completion of this deliverable, subject to declining method deductions, if applicable.

Work scope/completion criteria: Develop RCRA/CERCLA integration white paper, describing the RCRA/CERCLA integration process as it applies to WMA C closure. Provide the white paper to DOE for comment. The declining method penalty calculation date for Milestones 1, 2, 3, and 4 is December 2, 2010. For each milestone there shall be a \$500 per day penalty and there shall be no fee earned after January 21, 2011.

Completion document: Submit a white paper to the ORP describing the RCRA/CERCLA integration process as it applies to WMA C closure.

3. In partial completion of TPA Milestone M-045-80 (Part 3), provide a tank removal engineering study by December 2, 2010 (Declining Method milestone). The Contractor shall earn \$200,000 of incremental fee upon completion of this deliverable, subject to declining method deductions, if applicable.

Work scope/completion criteria: Provide a tank removal engineering study, evaluating the practicability of removal of a 100-Series Single-Shell Tank. The report should evaluate and augment previously completed work as necessary to meet Ecology's requirements for a demonstration of impracticability for removal or decontamination of a tank system pursuant to WAC 173-303-640(8)(b). The report will provide supporting information to make a decision on whether landfill closure for WMA C can be pursued in the RCRA Site-Wide Permit. Provide the draft report to DOE for comment. The declining method penalty calculation date for Milestones 1, 2, 3, and 4 is December 2, 2010. For each milestone there shall be a \$500 per day penalty and there shall be no fee earned after January 21, 2011.

Completion document: Submit a letter report to the ORP providing a tank removal engineering study.

4. In partial completion of TPA Milestone M-045-80 (Part 4), provide an evaluation of alternatives for removal of waste from the C-301 catch tank by December 2, 2010 (Declining Method milestone). The Contractor shall earn \$200,000 of incremental fee upon completion of the document, subject to declining method deductions, if applicable.

Work scope/completion criteria: Provide an evaluation of alternatives for removal of waste from the C-301 catch tank. The report should evaluate the methods available for retrieving solid and liquid waste from the C-301 Catch Tank, and estimate the costs and benefits for each viable alternative. Provide the draft report to DOE for comment. The declining method penalty calculation date for Milestones 1, 2, 3, and 4 is December 2, 2010. For each milestone there shall be a \$500 per day penalty and there shall be no fee earned after January 21, 2011.

Completion document: Submit a letter report to the ORP providing an evaluation of alternatives for removal of waste from the C-301 catch tank.

5. Complete an analysis of the seven diversion boxes in 241-C Tank Farm. The Contractor shall earn \$200,000 of incremental fee upon completion of the document.

Work scope/completion criteria: Evaluate existing information on the seven diversion boxes in WMA C, in support of closure planning. For each diversion box, document the condition of the diversion box based on existing information, and identify additional data that needs to be addressed prior to closure planning. The report should meet the following criteria:

- Evaluate existing characterization data for each diversion box.
- Recommend further characterization where no data exists.
- Evaluate the physical condition of each diversion box.
- Recommend further work where no data exists.
- Document the analysis findings in a written report.

Completion documents: The completed report shall be transmitted to the DOE.

6. Complete a pipeline feasibility study. The Contractor shall earn \$200,000 of incremental fee upon completion of the document.

Work scope/completion criteria: The report should meet the following criteria:

- Evaluate the existing data regarding physical condition and characterization of the pipe lines in WMA C.
- Identify option to obtain additional data necessary for closure.
- Evaluate existing information regarding available methods to characterize, stabilize and remediate pipelines, including cost and risk data.
- Provide recommendations for actions to support decisions on closure of pipelines in WMA C.
- Document the analysis findings in a written report.

Completion documents: The completed report shall be transmitted to the DOE.

7. Perform waste release tests on up to two residual waste samples from retrieved or partially retrieved tanks, to provide technical input to risk assessment modeling. The Contractor shall earn \$200,000 of incremental fee upon completion of each waste release test (total of \$400,000 of incremental fee is available to be earned).

Work scope/completion criteria: For each of up to two tank waste samples, perform waste release tests on residual waste obtained from one or more tanks following completion of initial or final retrieval. Document results as input into tank farm risk assessments and performance assessments.

Completion document: For each of up to two tank waste samples, submit a letter report to the ORP providing the results of residual waste release testing.

8. Develop five data packages and hold working sessions to develop the initial human health and environmental risk assessment/performance assessment for WMA C (WMA C PA). The Contractor shall earn \$150,000 of incremental fee upon completion of each topical area report from each of the five data package/working sessions (total of \$750,000 available incremental fee).

Work scope/completion criteria: The WMA C PA will be developed to meet the requirements of HFFACO Appendix I and DOE O 435.1. The inputs and assumptions for this activity will be developed through a series of working sessions with ORP, other DOE staff and regulatory agencies. For each topical area, develop a draft report and provide it to working session participants. Hold a working session involving DOE, Ecology, and other participants as invited by DOE. Issue meeting notes for the working session. Incorporate comments into the report and issue an update as input to the WMA C PA. Topical areas include at a minimum:

- Engineered systems #1
- Natural systems
- Engineered systems #2
- Exposure scenarios
- Numeric codes

Completion document: Provide to DOE the meeting notes for the applicable WMA C PA working session and the updated report for each topical area.

9. Deleted (Mod 151)
10. Deleted (Mod 151)

10. Deleted (Mod 151)
11. Deleted (Mod 151)
12. Deleted (Mod 151)
13. Provide a Tier 1 Closure plan for the SST system, as defined in TPA Appendix I. The Contractor shall earn \$200,000 of incremental fee upon completion of the document.

Work scope/completion criteria: Provide to DOE a Tier 1 Closure plan for the SST system that meets the requirements of the TPA, Appendix I. (Document is TPA compliant when document meets TPA requirements. It does not require regulator approval to be TPA compliant to meet the intent of this PBI deliverable).

Completion documents: Formal TPA Tier 1 Closure plan for the SST system that meets the requirements of the TPA, Appendix I.

14. Deleted (Mod 167).

PBI-2.4 CLIN 2 Complete removal and shipment to final disposition of expired Hose-In-Hose Transfer Lines

Performance Fee value is established at \$1,600,000. \$1,600,000 of the total base period fee pool has been allocated to this PBI and is available to be earned. \$0 is not allocated and is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee even if the workscope is complete.

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

Milestone	Fee Value	Method	Amount allocated and available to be earned	Amount not allocated and not available to be earned
1	\$1,280,000	Straight-Line	\$1,280,000	\$0
2	\$ 320,000	Straight-Line	\$ 320,000	\$ 0
Total	\$1,600,000		\$1,600,000	\$0

Desired Endpoint/Outcome

Expired Hose-In-Hose Transfer Lines (HIHTL) are removed from the Hanford Tank Farms in accordance with the schedule in the HIHTL Management Plan.

Fee Bearing Milestones

1. Complete removal of the following sixteen (16) interim stabilization Hose-in-Hose Transfer Lines (HIHTL). The Contractor shall earn \$80,000 for each of the HIHTL removed in incremental fee. A total of \$1,280,000 of incremental fee is available to be earned.

Identification Number	Location (From)	Location (To)
I-34610-0-1	C-203 (1)	C-200 VESSEL
I-34623-0-2	241-C 200 Vessel	Outside C-03B
I-34610-0-8	C-204	C-200 VESSEL
I-34610-0-12	C-200 VAC	C-204
I-34610-0-17	C-200 VAC	C-200 VESSEL
I-54948-0-3	C-204	C-200 VESSEL
I-05457-0-1	S-A	SY-102 (1)
I-05457-0-2	S-A	SY-102 (2)
I-21844-0-1	S-A	SY-101 (1)
I-21844-0-2	S-A	SY-101 (2)
I-30512-0-1	S-102	S-A
I-42181-0-01	SY-101 R7	SY-A
I-49637-0-4	U-D	SY (3)
I-49637-0-5	U-D	SY (4)
I-49637-0-6	U-D	SY (5)
I-49637-0-11	U-D	SY (2)

2. Complete shipping of the following sixteen (16) HIHTLs. The Contractor shall earn \$20,000 for each of the HIHTL waste shipment in incremental fee. A total of \$320,000 of incremental fee is available to be earned.

Identification Number	Location (From)	Location (To)
I-34610-0-1	C-203 (1)	C-200 VESSEL
I-34623-0-2	241-C 200 Vessel	Outside C-03B
I-34610-0-8	C-204	C-200 VESSEL
I-34610-0-12	C-200 VAC	C-204
I-34610-0-17	C-200 VAC	C-200 VESSEL
I-54948-0-3	C-204	C-200 VESSEL
I-05457-0-1	S-A	SY-102 (1)
I-05457-0-2	S-A	SY-102 (2)
I-21844-0-1	S-A	SY-101 (1)
I-21844-0-2	S-A	SY-101 (2)
I-30512-0-1	S-102	S-A
I-42181-0-01	SY-101 R7	SY-A
I-49637-0-4	U-D	SY (3)
I-49637-0-5	U-D	SY (4)
I-49637-0-6	U-D	SY (5)
I-49637-0-11	U-D	SY (2)

Work scope/completion criteria for HIHTL removal: The line has been removed from the field, and packaged for shipment to the treatment vendor. The line removal and packaging will be documented by Operations acceptance of the work package. At the completion of the HIHTL removal, the Field Work Supervisor will verify all housekeeping activities related to the work having been completed. Completion of housekeeping will be signed off in the work record of the work package.

Completion Document for HIHTL removal: Letter transmitting the work package coversheet documenting completion and acceptance by Operations.

Work scope/completion criteria for shipping: The HIHTL waste package has been shipped to the waste TSD facility.

Completion Document for shipping: The waste disposal facility verification of receipt of shipment for the waste package(s).

PBI-2.10 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-107

Performance Fee value is established at \$8,250,000. \$8,250,000 of the total base period fee pool has been allocated to this PBI and is available to be earned. \$0 is not allocated and is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee even if the workscope is complete.

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

Milestone	Fee Value	Method	Amount allocated and available to be earned	Amount not allocated and not available to be earned
1	\$1,750,000	Straight-Line	\$1,750,000	\$0
2	\$2,000,000	Straight-Line	\$2,000,000	\$0
3	\$1,000,000	Straight-Line	\$1,000,000	\$0
4	\$2,000,000	Straight-Line	\$2,000,000	\$0
5	\$1,500,000	Straight-Line	\$1,500,000	\$0
Total	\$8,250,000		\$8,250,000	\$0

Desired Endpoint/Outcome

Completion of tank waste retrieval activities to meet or exceed performance requirements in the "Consent Decree and Tri-Party Agreement Modifications for Hanford Tank Waste Treatment" Appendix B. Fee for the following milestones shall be earned in sequential order, i.e. fee for completion of a milestone shall not be awarded until the fee for the previous milestone has been awarded.

Fee Bearing Milestones

1. Complete large riser construction for Tank 241-C-107. The Contractor shall earn \$1,750,000 of incremental fee upon completion of the large riser construction on Tank 241-C-107.

Work scope/completion criteria: Complete large riser construction. The Construction Completion Document, Section Ia, will be completed.

Completion Document: Contractor approved, Construction Completion Document through Section Ia, with exceptions listing for completion of Tank 241-C-107 large riser system construction, and the ORP FPD/COR's concurrence on the exceptions listing.

2. Complete waste retrieval system construction for Tank 241-C-107 and turnover to operations. The Contractor shall earn \$2,000,000 of incremental fee upon completion of construction of Tank 241-C-107 and turnover to operations.

Work scope/completion criteria: 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.

Completion Document: Contractor approved, Construction Completion Document through Section Ia, with exceptions listing for completion of Tank 241-C-107 waste retrieval system construction, and the ORP FPD/COR's concurrence on the exceptions listing.

3. The Contractor shall earn \$1,000,000 of incremental fee upon completing retrieval of 50% of the Waste by Volume in Tank 241-C-107.

Work scope/completion criteria: Perform waste retrieval activities to achieve 50% reduction in the initial SST waste volume. The retrieval of 50% of initial SST waste by volume shall be based on an initial volume determined from the latest BBI information or a pre-retrieval volume determination, if completed. The retrieved volume will be an estimate based on material balance calculations.

Completion document: The submittal of material balance data and engineering calculations summary information demonstrating retrieval of 50% of the initial waste volume.

4. Complete bulk retrieval of Tank 241-C-107. The Contractor shall earn \$2,000,000 incremental fee upon completion of bulk retrieval of Tank 241-C-107. In the event the initially deployed retrieval technology meets or exceeds the performance requirements of the Consent Decree and Tri-Party Agreement Modifications for Hanford Tank Waste Treatment then additional fee in accordance with PBI-2.10, Milestone 5 below will also be earned.

Work scope/completion criteria: Complete bulk waste retrieval to the performance requirements of the Consent Decree and Tri-Party Agreement Modifications for Hanford Tank Waste Treatment or to the limits of the initially deployed waste retrieval technology.

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

5. Complete heel retrieval of Tank 241-C-107. The Contractor shall earn \$1,500,000 of incremental fee upon completion of Tank 241-C-107 heel retrieval to the limits of technology.

Work scope/completion criteria: Complete waste retrieval to meet performance requirements in the Consent Decree and Tri-Party Agreement Modifications for Hanford Tank Waste Treatment.

Completion document: The submittal to DOE of material balance data and engineering calculation summary information demonstrating retrieval is complete to the 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.

PBI-3.5 CLIN 3 AW-103 Feed Delivery System Design

PBI DELETED (Mod 167)

PBI-3.10 CLIN 3 SY Farm Infrastructure Design

PBI DELETED (Mod 167)

PBI-3.13 CLIN 3 Modeling and Planning to Establish RPP Technical Baseline (System Plan)

Performance Fee value is established at \$2,250,000. \$1,500,000 of the total base period fee pool has been allocated to this PBI and is available to be earned. \$750,000 is not allocated and is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee even if the workscope is complete.

Fee Structure: Terminal (September 30, 2013)

Desired Endpoint/Outcome

Complete and submit to the U.S. Department of Energy, Office of River Protection (ORP), the annual updates of the RPP System Plan to reflect assumptions approved by the U.S. Department of Energy Office of River Protection and Hanford Tank Waste Operations Simulator modeling results for FY 2010 and FY 2011. FY 2013 update will be an 18-month update. The updates 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. Submit annual RPP System Plan revision for FY 2010 and FY 2011 and an 18-month update for FY 2013. The FY 2013 18-month submittal is not available to be earned. The Contractor shall earn \$750,000 per submittal of incremental fee upon completion of each annual update for FY 2010 and FY 2011 and \$750,000 for the 18-month update in FY 2013 (total of \$1,500,000 of incremental fee is available and a total of \$750,000 of incremental fee is not available to be earned.).

Work scope/completion criteria: Annual/18-month updates of the RPP System Plan to reflect assumptions approved by the U.S. Department of Energy Office of River Protection and Hanford Tank Waste Operations Simulator modeling results.

Completion documents: Letter transmitting Contractor-approved RPP System Plan annual update to the ORP.

PBI-3.17 CLIN 3 Waste Treatment Plant Operational Readiness Evaluation

Performance Fee value is established at \$1,000,000. \$1,000,000 of the total base period fee pool has been allocated to this PBI and is available to be earned.

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

Milestone	Fee Value	Method	Amount allocated and available to be earned	Amount not allocated and not available to be earned
1	\$ 500,000	Terminal	\$ 500,000	\$0
2	\$ 500,000	Terminal	\$ 500,000	\$0
Total	\$1,000,000		\$1,000,000	\$0

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 FY 2011 WTP Operational Readiness Support Report. 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.

Completion Document: Letter transmitting the Waste Treatment Plant Operational Readiness Evaluation report.

2. Prepare and submit the WTP Operational Readiness Support Report for FY 2011. The Contractor shall earn \$500,000 of incremental fee upon completion (total of \$500,000 of incremental fee is available to be earned).

Work Scope/Completion Criteria: Complete the FY 2011 WTP Operational Readiness Support Report that supports earliest effective operations of the WTP.

Completion Document: Letter transmitting the FY 2011 WTP Operational Readiness Support Report.

PBI-3.35 CLIN 3 Complete Relocation of the Pretreatment Engineering Platform

Performance Fee available and assigned to this PBI: \$200,000

Fee Structure: Terminal (September 30, 2012)

Milestone	Fee Value	Method	Amount allocated and available to be earned
1	\$200,000	Terminal	\$200,000
Total	\$200,000		\$200,000

Desired Endpoint/Outcome

Complete the dismantlement and relocation of the Pretreatment Engineering Platform (PEP) and the refurbishment of PNNL's PDL-W facility.

Fee Bearing Milestone

1. Complete relocation of the PEP and refurbishment of PNNL's PDL-W facility. The Contractor shall earn \$200,000 of incremental fee upon completion.

Work Scope/Completion Criteria: Dismantle the PEP skids, relocate skids and associated PEP items to the new storage facility at Columbia Energy & Environmental Services Inc., and refurbish the PDL-W facility.

Completion Document: Letter transmitting PNNL's acceptance of the refurbished PDL-W facility.

PBI-Reserved - Unallocated Base Period Fee

The Total Unallocated Base Period Fee value is \$12,934,709. The Total Available Unallocated Base Period Fee value is \$201,171. The Total Unavailable Unallocated Base Period Fee value is \$12,733,538. Unavailable Unallocated Base Period Fee is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee.

Available Unallocated Base Period Fee:	\$201,171 (Mod 167)
Available Unallocated ARRA Fee:	\$ 0
Total Available Unallocated Fee:	\$201,171 (Mod 167)

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.