

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1 2
2. AMENDMENT/MODIFICATION NO. 021	3. EFFECTIVE DATE 06/30/2009	4. REQUISITION/PURCHASE REQ. NO. 09EM001091	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: DUANE SCHMOKER 720 PARK BLVD PO BOX 73 AIKEN SC 298013852		(X) 9A. AMENDMENT OF SOLICITATION NO.	9B. DATED (SEE ITEM 11)
CODE 806500521	FACILITY CODE	X 10A. MODIFICATION OF CONTRACT/ORDER NO DE-AC27-08RV14800	10B. DATED (SEE ITEM 11) 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).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Section B, Clause B.7(a)(b) Fee Structure
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return 2 copies to the issuing office.

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

Tax ID Number: 94-1381538
DUNS Number: 806500521
1. The purpose of this modification is to incorporate revised Performance Based Incentives (PBIs) in accordance with Section B, Clause B.7(a)(b) Fee Structure.

2. Description of the Modification:
Revised Section J, Attachment J.4, Performance Evaluation and Measurement Plan (PEMP) Rev 2 with Rev 3. Replacement pages are attached for revised
Continued ...

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 E. Bechtol	
15B. CONTRACTOR/OFFICER ORIGINAL SIGNED BY <i>(Signature of person authorized to sign)</i>	15C. DATE SIGNED 7/29/09	16B. UNITED STATES OF AMERICA ORIGINAL SIGNED BY <i>(Signature of Contracting Officer)</i>	16C. DATE SIGNED 8/3/09

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED	PAGE	OF
	DE-AC27-08RV14800/021	2	2

NAME OF OFFEROR OR CONTRACTOR
 WASHINGTON RIVER PROTECTION SOLUTIONS LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>PBIs 1.5, 2.1, 2.3, 2.8, and Workset Title 1 and delete PBI 2.4. In addition, a PBI summary table is incorporated into the PEMP.</p> <p>3. All changes are noted by a vertical line in the right hand margin of the attached replacement pages. Subj to Retent: N Period of Performance: 06/20/2008 to 09/30/2013</p>				

ATTACHMENT J.4

PERFORMANCE EVALUATION AND MEASUREMENT PLAN (PEMP)

PERFORMANCE EVALUATION
AND
MEASUREMENT PLAN (PEMP)
FOR THE
TANK OPERATIONS CONTRACT
Rev 3 |

Summary Table of Performance Based Incentives and Award Fee Elements

PBI No.	Title	Type	Value of PBI/Element	Completion Due Date	PBI Revision	Contract Mod
PBI 1.1.1	A 242-A evaporator campaign 240,000 gallon waste volume reduction	Incremental	\$200,000	9/30/2009	0	M009
PBI 1.1.2	A 242-A evaporator campaign 240,000 gallon waste volume reduction	Incremental	\$500,000	9/30/2009	0	M009
PBI 1.1.3	A 242-A evaporator campaign 240,000 gallon waste volume reduction	Incremental	\$800,000	9/30/2009	0	M009
PBI 1.2.1	Complete work to increase the rated maximum tank level in DST AP-103	Incremental	\$500,000	9/30/2009	0	M009
PBI 1.3.1	Perform 222-S Laboratory Upgrades. Complete design and installation of the fire detection system and 219S overflow protection for the 2nd floor of the 222-S building	Incremental	\$200,000	9/30/2009	0	M009
PBI 1.3.2	Perform DST Upgrade, AW-B pit gear actuated valves	Incremental	\$150,000	9/30/2009	0	M009
PBI 1.4.1	Successfully Complete Phase I and Phase II Verification of ISM System Implementation	Incremental	\$500,000	9/30/2009	0	M009
PBI 1.5.1	Remove Liquids from the secondary containment of the 244-CR Vault. Perform all necessary sealing activities to protect the 244-CR Vault from intrusion of liquids	Incremental (MULTI-YEAR)	\$350,000	9/30/2010	1	M021
PBI 1.6.1	Remove liquids from the UX-302A catch tank. Perform all necessary sealing activities to protect the catch tank from intrusion of liquids	Incremental	\$250,000	9/30/2009	0	M009
PBI 1.6.2	Investigate source of water intrusion and recommend isolation options	Incremental	\$100,000	9/30/2009	0	M009
PBI 1.7.1	Plan and Execute multi-depth sample supernatant and analyze.	incremental	\$100,000	9/30/2009	0	M013
PBI 1.7.2	Based on analysis results, adjust appropriate amount of caustic within limits or if not needed.	incremental	\$150,000	9/30/2009	0	M013
PBI 1.7.3	Plan and execute follow-up multi-depth grab sample and analyze; if no caustic addition is required or more samples	incremental	\$100,000	9/30/2009	0	M013
PBI 1.7.4	Evaluate compliance with waste chemistry limits and document results	incremental	\$50,000	9/30/2009	0	M013
PBI 2.1.1	Complete C-104 Construction	Incremental	\$1,600,000	9/30/2009	2	M021
PBI 2.1.2	Initiate C-104 Retrieval	Incremental	\$500,000	9/30/2009	2	M021
PBI 2.1.3	C-104 Retrieval - 50%, (\$100,000 incremental for each 5% between 25 and 50%)	Incremental (MULTI-YEAR)	\$500,000	9/30/2010	2	M021
PBI 2.1.4	Milestone Deleted				2	M021
PBI 2.2.1	Complete C-110 Construction	Incremental	\$1,000,000	9/30/2009	0	M009
PBI 2.2.2	C-110 Retrieval - 50%	Incremental	\$500,000	9/30/2009	0	M009
PBI 2.2.3	C-110 Retrieval	Incremental	\$1,000,000	9/30/2009	0	M009
PBI 2.3.1	Complete sampling per new Tank Sample Analysis Plan (TSAP)	Incremental	\$150,000	9/30/2009	2	M021
PBI 2.3.2	Milestone Deleted				2	M021
PBI 2.4.1	Milestone Deleted				1	M021

PBI No.	Title	Type	Value of PBI/Element	Completion Due Date	PBI Revision	Contract Mod
PBI 2.4.2	Milestone Deleted				1	M021
PBI 2.5.1	Complete removal of the interim stabilization hose-in-hose transfer line (HIHTL) from U-108 valve pit to U-D valve pit (RBHS-2EHT-4EINS) package for shipment	incremental	\$80,000	9/30/2009	1	M013
PBI 2.5.2	Complete shipping of the HIHTL RBHS-2EHT-4EINS	incremental	\$20,000	9/30/2009	1	M013
PBI 2.5.3	Complete removal of the interim stabilization HIHTL from U-107 valve pit to U-D valve pit HIHTL RBHS-2MHT-4MINS) package for shipping	incremental	\$80,000	9/30/2009	1	M013
PBI 2.5.4	Complete shipping of the HIHTL RBHS-2MHT-4MINS	incremental	\$20,000	9/30/2009	1	M013
PBI 2.5.5	Complete removal of the interim stabilization HIHTL from U-111 valve pit to U-D valve pit CHG-2NHT-4NINS) package for shipping	incremental	\$80,000	9/30/2009	1	M013
PBI 2.5.6	Complete shipping of the HIHTL CHG-2NHT-4NINS	incremental	\$20,000	9/30/2009	1	M013
PBI 2.5.7	Complete removal of the interim stabilization HIHTL from 244-AR valve pit to 241-AR-151 valve pit CHG-2UHT-4UINS) package for shipping	incremental	\$80,000	9/30/2009	1	M013
PBI 2.5.8	Complete shipping of the HIHTL CHG-2UHT-4UINS	incremental	\$20,000	9/30/2009	1	M013
PBI 2.5.9	Complete removal of the interim stabilization HIHTL from 241-U-09A valve pit to 241-U-09B valve pit and package for shipping	incremental	\$80,000	9/30/2009	1	M013
PBI 2.5.10	Complete shipping of the HIHTL 241-U-09A valve pit to 241-U-09B valve pit	incremental	\$20,000	9/30/2009	1	M013
PBI 2.5.11	Complete removal of the interim stabilization HIHTL from U-D valve pit to SY (1) valve pit (I-49637-0-10) package for shipment	incremental	\$80,000	9/30/2009	1	M013
PBI 2.5.12	Complete shipping of HIHTL I-49637-0-10	incremental	\$20,000	9/30/2009	1	M013
PBI 2.5.13	Complete removal of the retrieval HIHTL from C-06B pit to C06A pit (I-19643-5) package for shipment	incremental	\$80,000	9/30/2009	1	M013
PBI 2.5.14	Complete shipping of HIHTL I-19643-5	incremental	\$20,000	9/30/2009	1	M013
PBI 2.5.15	Complete removal of the retrieval HIHTL from C-106 pit to C103 pit area (I-19643-2) package for shipment	incremental	\$80,000	9/30/2009	1	M013
PBI 2.5.16	Complete shipping of HIHTL I-19643-2	incremental	\$20,000	9/30/2009	1	M013
PBI 2.5.17	Complete removal of the retrieval HIHTL from POR104 area to C-103 pump area (I-52355-0-1) package for shipment	incremental	\$80,000	9/30/2009	1	M013
PBI 2.5.18	Complete shipping of HIHTL I-52355-0-1	incremental	\$20,000	9/30/2009	1	M013
PBI 2.5.19	Complete removal of the retrieval HIHTL from POR104 area to C-103 sluicer pit (I-52355-0-2) package for shipment	incremental	\$80,000	9/30/2009	1	M013
PBI 2.5.20	Complete shipping of HIHTL I-52355-0-2	incremental	\$20,000	9/30/2009	1	M013
PBI 2.5.21	Complete removal of the retrieval HIHTL from C103 heel pit to POR104 area (I-52355-0-3) package for shipment	incremental	\$80,000	9/30/2009	1	M013

PBI No.	Title	Type	Value of PBI/Element	Completion Due Date	PBI Revision	Contract Mod
PBI 2.5.22	Complete shipping of HIHTL I-52355-0-3	Incremental	\$20,000	9/30/2009	1	M013
PBI 2.6.1	Complete the near-surface vadose zone characterization for new barrier site in TY Farm by September 30, 2009	Incremental	\$300,000	9/30/2009	1	M013
PBI 2.6.2	Deploy Surface Geophysical Exploration in tank farms S/SX	Incremental	\$250,000	9/30/2009	1	M013
PBI 2.6.3	Deploy Surface Geophysical Exploration in C tank farm	Incremental	\$150,000	9/30/2009	1	M013
PBI 2.6.4	Complete Design of TY Surface Barrier (NOTE: subject to re-negotiation if characterization determines TY Barrier ineffective)	Incremental	\$300,000	9/30/2009	1	M013
PBI 2.6.5	Complete the near-surface vadose zone characterization for new barrier site in SX Farm	Incremental	\$300,000	9/30/2009	1	M013
PBI 2.6.6	Provide a criteria document for interim barriers as described in Agreement (5) of the TPA Milestone M-45-56 Annual meeting of July 22, 2008, by June 30, 2009	Incremental	\$25,000	6/30/2009	1	M013
PBI 2.6.7	Implement direct push soil characterization in Waste Management Area (WMA) C, obtaining 40 samples, to support development of a corrective measures study for WMA closure, consistent with the WMA C RFI/CMS Work Plan (RPP-PLAN-39114)	Incremental, \$12,500 for each sample up to \$500K	\$500,000	9/30/2009	1	M013
PBI 2.6.8	Perform laboratory testing of a beta-detection system, suitable for deployment with a direct push unit for field screening of technetium	Incremental	\$100,000	9/30/2009	1	M013
PBI 2.7.1	Submission of a DOE-approved report to the Ecology	Incremental	\$375,000	9/30/2009	0	M009
PBI 2.8.1	Telerobotic arm Phase I qualification testing	Incremental	\$200,000	9/30/2009	2	M021
PBI 2.8.2	Telerobotic arm final design	Incremental	\$200,000	9/30/2009	2	M021
PBI 2.8.3	Telerobotic arm Phase II qualification testing	Incremental	\$400,000	9/30/2009	2	M021
PBI 2.8.4	Milestone Deleted				2	M021
PBI 2.8.5	Procure and evaluate shear strength measuring equipment for CTF	Incremental	\$300,000	9/30/2009	2	M021
PBI 2.8.6	Milestone Deleted				2	M021
PBI 2.8.7	Milestone Deleted				2	M021
PBI 2.8.8	Milestone Deleted				2	M021
PBI 2.8.9	Completed Design for installation of new riser in C-Farm Tank	Incremental	\$100,000	9/30/2009	2	M021
PBI 2.8.10	A Retrieval Technology review and roadmap will be completed and issued	Incremental (MULTI-YEAR)	\$150,000	9/30/2010	0	M021
PBI 2.8.11	Select two technologies required to complete heel retrieval and prepare a specification and award a contract for design and subcontractor testing for each technology.	Incremental \$50,000 for each technology for a total of \$100K (MULTI-YEAR)	\$100,000	9/30/2010	0	M021
PBI 2.8.12	Complete design, fabrication, and subcontractor functional testing of two technologies required to complete heel retrieval	Incremental \$100,000 for each technology for a total of	\$200,000	9/30/2011	0	M021

PBI No.	Title	Type	Value of PBI/Element	Completion Due Date	PBI Revision	Contract Mod
		\$200K (MULTI-YEAR)				
PBI 2.8.13	Receive shipment and perform integrated system testing at CTF of two technologies required to complete heel retrieval.	Incremental \$200,000 for each technology for a total of \$400K (MULTI-YEAR)	\$400,000	9/30/2011	0	M021
PBI 2.9.1	Restore exhauster to operation by performing required preventative and corrective maint. Perform all activities to start exhauster to evaporate supernate liquid	Incremental	\$200,000	9/30/2009	0	M013
PBI 2.9.2	Operate S-102 exhauster until <5,000 gallons of supernate remain	Incremental	\$100,000	9/30/2009	0	M013
PBI 2.10.1	Complete Design media for removal of legacy equipment	Incremental	\$200,000	9/30/2009	0	M013
PBI 2.10.2	Complete design media for the installation of the modified sluicing system	Incremental	\$300,000	9/30/2009	0	M013
PBI 2.10.3	Award procurement contract for long-lead equipment to construct Waste Retrieval system.	Incremental	\$100,000	9/30/2009	0	M013
PBI 2.10.4	Mobilize construction forces and initiate removal of legacy equipment required for installation of Waste Retrieval system	Incremental	\$100,000	9/30/2009	0	M013
PBI 3.1.1	HTWOS Model Revision	Incremental	\$100,000	3/30/2009	0	M009
PBI 3.1.2	RPP Systems Plan revision - ORP approved updated system plan	Incremental	\$200,000	5/31/2009	0	M009
PBI 3.1.3	Strategic Management Plan for Waste Feed Delivery and DST Upgrades - ORP approved completed Strategic Management Plan to support WTP	incremental	\$200,000	7/30/2009	0	M009
Award Fee						
AF-1.1	Submit PMB	Award Fee	\$200,000	6/30/2009	1	M021
AF-1.2	Independent Project Review Support	Award Fee	\$125,000	9/30/2009	0	M009
AF-2	EVMS Certification	Award Fee	\$325,000	9/1/2009	0	M009
AF-3	Revise DSA (3009,1186,1189)	Award Fee	\$325,000	9/30/2009	0	M009
NOTE:						
1	1/14/09 - Modification M009 reissued the PEMP (Revision 1) and incorporated signed PBIs					
2	Modification M013 added and revised PBIs and removed page numbers in PEMP(Revision 2); Added: 1.7, 2.9, 2.10; Revised: 2.1, 2.3, 2.4, 2.5, 2.6, 2.8.					
3	Modification M021 revised PBIs: 1.5,2.1,2.3,2.8 and Workset Title 1					

PBI-1.5 CLIN 1

Performance Based Incentive (PBI) Title: Remove Liquids from the Secondary Containment of the 244-CR Vault

Performance Fee available and assigned to this PBI: \$350,000 (Multiyear)

ORP Assistant Manager:	ORP POC:	WRPS Manager:	WRPS POC:
Stacy Charboneau	Glyn Trenchard	Mark Lindholm	Scott Saunders

Desired Endpoint/Outcome

Removal of liquids from the 244-CR Vault secondary containment and sealing of the vault to prevent intrusion of liquids.

Fee Payment Schedule

Upon completion of each fee bearing milestone set forth herein, Contractor will be paid incremental fee, in accordance with Contract Section B, "Supplies or Services and Prices/Costs."

Fee Bearing Milestones

1. (MULTIYEAR) Remove Liquids from the secondary containment of the 244-CR Vault. Perform all necessary sealing activities to protect the 244-CR Vault from intrusion of liquids. The Contractor shall earn \$350,000 of incremental fee upon completion of the liquid removal and vault sealing by September 30, 2010.

Work scope/completion criteria: The free liquid will be removed from the 244-CR Vault secondary containment. The liquid will be removed to a sump level of 26 gallons or less and below the sump level alarm (if in service). As applicable, an Independent Qualified Registered Professional Engineer (IQRPE) must approve extension of the hose-in-hose transfer line (HIHTL) service life per RPP-12711. Visual observation using in-tank camera or physical level measurement methods (e.g. manual tape) will be used to verify final sump level. Additional liquid will be removed if possible considering the liquid mitigation system limits and capabilities. The 244-CR Vault cover and above-grade risers/nozzles must be sealed to prevent intrusion of liquids.

Completion document: Letter report and video (if applicable) documenting pumpable liquids have been removed from the 244-CR Vault secondary containment. The report should also document sealing actions performed to prevent liquid intrusion.

PBI- 1.5 CLIN 1

Signature Block

ORIGINAL SIGNED BY

William Johnson, President
and Project Manager
Washington River Protection Solutions

7/29/09

Date

ORIGINAL SIGNED BY

Shirley Olinger, Manager
U.S. Department of Energy, Office of River Protection

8/3/09

Date

PBI-2.1 CLIN 2

Performance Based Incentive (PBI) Title: Completion of Retrieval Operations from SingleShell Tank 241-C-104

Performance Fee available and assigned to this PBI: \$2,600,000 (including \$500,000 of Multiyear fee)

ORP Assistant Manager:	ORP POC:	WRPS Manager:	WRPS POC:
Stacy Charboneau	Steve Pfaff	Mark Lindholm	Kent Smith

Desired Endpoint/Outcome

Completion of waste retrieval activities to meet or exceed performance requirements in the HFFACO M-45-00 series milestones.

Fee Payment Schedule

Upon completion of each fee bearing milestone set forth herein, Contractor will be paid incremental fee, in accordance with Contract Section B, "Supplies or Services and Prices/Costs."

Fee Bearing Milestones

1. Complete waste retrieval system construction for Tank 241-C-104 and turnover to operations by September 30, 2009. The Contractor shall earn \$1,600,000 of incremental fee upon completion of construction of Tank 241-C-104 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 Documents, Section 1a, will be completed. References: 1) Tank Waste Retrieval Work Plan 2) Construction Completion and Turnover, TFC-PRJ-CM-C-08, Rev B-2, issued June 3, 2008.

Completion Document: Contractor approved, Construction Completion Document through Section 1a, with exceptions listing for completion of Tank 241-C-104 waste retrieval system construction.

2. Initiate retrieval of the waste in Tank 241-C-104. The Contractor shall earn \$500,000 of incremental fee for completion of initiating retrieval of Tank 241-C-104 by September 30, 2009.

Work scope/completion criteria: Complete all testing and readiness activities including commercial-grade item dedication and initiate waste retrieval activities for reduction in SST waste volume.

Completion document: Documentation of initiating retrieval operations will consist of a SST retrieval logbook entry that administrative locks under Administrative Control 5.12 have been removed from the slurry pump and supernate pumps.

3. (MULTIYEAR) Complete retrieval of 50% of the Waste by Volume in Tank 241-C-104. The Contractor shall earn incremental fee on a linear basis between retrieval of 25% of the Waste by Volume and 50% of the Waste by volume. The Contractor shall earn \$100,000 of incremental fee for each 5% retrieved between 25% and 50%. A total of \$500,000 of incremental fee shall be earned upon completion by September 30, 2010.

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. Milestone deleted.

PBI- 2.1 CLIN 2

Signature Block

ORIGINAL SIGNED BY

William Johnson, President
and Project Manager
Washington River Protection Solutions

7/29/09

Date

ORIGINAL SIGNED BY

Shirley Olinger, Manager
U.S. Department of Energy/Office of River Protection

8/3/09

Date

PBI-2.3 CLIN 2

Performance Based Incentive (PBI) Title: Complete sampling of Tank 241-C-108 per new Tank Sample Analysis Plan

Performance Fee available and assigned to this PBI: \$150,000

ORP Assistant Manager:	ORP POC:	WRPS Manager:	WRPS POC:
Stacy Charboneau	Steve Pfaff	Mark Lindholm	Chris Burke

Desired Endpoint/Outcome

SST 241-C-108 hard heel residual has been sampled and characterized. Characterization data and physical properties are available for engineering of tank waste heel removal equipment and procedures. Data are available to estimate performance assessment results for the waste heel if not removed.

Fee Payment Schedule

Upon completion of each fee bearing milestone set forth herein, Contractor will be paid incremental fee, in accordance with Contract Section B, "Supplies or Services and Prices/Costs."

Fee Bearing Milestones

1. Complete sampling per new Tank Sample Analysis Plan (TSAP). The Contractor shall earn \$150,000 in incremental fee by September 30, 2009.

Work scope/completion criteria: Complete sampling of C-108 hard-heel per the TSAP. TSAP criteria shall ensure sufficient material is obtained to perform all waste property analyses.

Completion Document: Completed TSAP and transport samples to the 222-S Analytical Laboratory.

2. Milestone deleted.

PBI-2.3 CLIN 2

Signature Block

ORIGINAL SIGNED BY

William Johnson, President
and Project Manager
Washington River Protection Solutions

7/29/09
Date

ORIGINAL SIGNED BY

Shirley Olinger, Manager
U.S. Department of Energy, Office of River Protection

8/3/09
Date

PBI-2.8 CLIN 2

Performance Based Incentive (PBI) Title: Technology Development

Performance Fee available and assigned to this PBI: \$2,050,000 (including \$850,000 of Multiyear fee)

ORP Assistant Manager:	ORP POC:	WRPS Manager:	WRPS POC:
Stacy Charboneau	Steve Pfaff	Mark Lindholm	Scott Saunders

Desired Endpoint/Outcome

New technologies need to be developed to ensure waste is delivered to the Waste Treatment Plant (WTP) and other tank waste treatment facilities to maximize throughput through the treatment systems. To accomplish this goal, technologies need to be developed to reduce Single Shell Tank retrieval durations in hard-heel tanks and tanks that are assumed to have leaked to the environment in the past. The contractor has proposed the development of a multi-function telerobotic arm that will be deployed and moved from tank to tank to support retrieval via multiple techniques (e.g., sluicing, confined-sluicing via an end-effector, enhanced chemical cleaning). An arm will be developed and tested at the Cold Test Facility or other facility. Production units will be developed for the 100-series tanks initially to support retrieval and closure commitments. Another technology under development entails mechanical and chemical separations processes to produce Low Activity Waste (LAW) feed as part of the tank retrieval process from Double-Shell Tanks. Such feed could enable operation of the WTP LAW facility or other tank waste treatment facilities.

Fee Payment Schedule

Upon completion of each fee bearing milestone set forth herein, Contractor will be paid incremental fee, in accordance with Contract Section B, "Supplies or Services and Prices/Costs."

Fee Bearing Milestones

1. Telerobotic arm Phase I qualification testing. The Contractor shall earn \$200,000 of incremental fee upon completion by September 30, 2009.

Work scope/completion criteria: The Contractor shall demonstrate successful completion of the tank waste retrieval telerobotic arm Phase I qualification testing.

Completion document: A formal report submitted to ORP, demonstrating successful completion of Phase I qualification testing.

2. Telerobotic arm final design. The Contractor shall earn \$200,000 of incremental fee upon completion by September 30, 2009.

Work scope/completion criteria: The Contractor shall complete final design of the tank waste retrieval telerobotic arm Phase I qualification testing.

Completion document: A formal report submitted to ORP, demonstrating completion of final design.

3. Telerobotic arm Phase II qualification testing. The Contractor shall earn \$400,000 of incremental fee upon completion by September 30, 2009

Work scope/completion criteria: The Contractor shall demonstrate successful completion of tank waste retrieval telerobotic arm Phase II qualification testing with waste simulant.

Completion document: A formal report submitted to ORP, demonstrating successful completion of Phase II qualification testing with waste simulant.

4. Milestone deleted.

Desired Endpoint/Outcome

Retrievals under current criteria require that approximately 2,000,000 gallons of double-shell tank (DST) waste storage space not be used to prevent creating new tanks that might be susceptible to buoyant displacement gas release events (BDGRE). New criteria are being developed, based on actual sludge properties, to potentially show that sludge wastes do not exhibit the same BDGRE risk, and this DST waste storage space might be safely utilized. Analysis, development, and implementation of new BDGRE criteria require waste shear strength measurements, and that measurement technology must be adapted for use in DSTs.

Fee Payment Schedule

5. Procure and evaluate shear strength measuring equipment at the Cold Test Facility (CTF). The Contractor shall earn \$300,000 of incremental fee upon completion by September 30, 2009.

Work scope/completion criteria: Procure shear strength measuring equipment. Perform an engineering evaluation to identify suitability for use in tank farms through testing at CTF, and document changes required (if any) for deployment in selected DSTs.

Completion document: Letter transmitting the Performance Expectation Completion Notice and technical document of operational test results.

6. Milestone deleted.

7. Milestone deleted.

8. Milestone deleted.

Desired Endpoint/Outcome

Completed design report for installation of a new riser on a C-Farm tank.

9. Completed design for installation of a new riser on a C-Farm tank. The Contractor shall earn \$100,000 of incremental fee upon completion of the design report by September 30, 2009.

Work scope/completion criteria: Design report completed. Design includes structural analysis, design drawings, preliminary hazard analysis, constructability review, and development of an installation specification.

Completion document: Letter transmitting copies of the approved design report document demonstrating the design is complete.

Desired Endpoint/Outcome

This activity will produce a retrieval technology review and roadmap document leading to selection and further development of two tools for single-shell tank heel retrieval activities.

10. (MULTI-YEAR) A retrieval technology review and roadmap will be completed and issued. The Contractor shall earn \$150,000 of incremental multiyear fee upon completion of the retrieval technology document by September 30, 2010.

Work scope/completion criteria: A retrieval technology review will evaluate mechanical and chemical technologies and methods for heel removal subsequent to retrieval operations using modified sluicing for bulk retrieval. The technology review will include the following: alternative pumping systems; in-tank vehicles for heel removal; caustic dissolution; mechanical crawlers (i.e., systems used at other DOE facilities). The review will include evaluation of equipment to perform material pick-up and will result in a roadmap for establishing technologies for hard heel tank retrieval. This roadmap will document the back-up technologies required by the consent decree between the DOE and the Washington State Department of Ecology. The review and evaluation will produce a WRPS-approved document.

Completion document: Letter submitting WRPS-approved document to ORP that includes the elements described in the work scope/completion document.

11. (MULTI-YEAR) Select two technologies required to complete heel retrieval and prepare a specification and award a contract for design and subcontractor testing for each technology. The Contractor shall earn \$50,000 of incremental multiyear fee upon completion for each technology (total \$100,000 available incremental multiyear fee) by September 30, 2010.

Work scope/completion criteria: A performance specification will be prepared and a procurement will be awarded for design/modification and subcontractor demonstration and testing of a heel removal technology.

Completion document: Letter to ORP submitting a copy of the award document described in the work scope/completion criteria.

12. (MULTI-YEAR) Complete design, fabrication, and subcontractor functional testing of two technologies required to complete heel retrieval. The Contractor shall earn \$100,000 of incremental multiyear fee upon completion for each technology (total \$200,000 available incremental multiyear fee) by September 30, 2011.

Work scope/completion criteria: Complete the subcontractor functional testing of the selected technology.

Completion document: Letter to ORP submitting a copy of the test report.

13. (MULTI-YEAR) Receive shipment and perform integrated system testing at CTF of two technologies required to complete heel retrieval. The Contractor shall earn \$200,000 of incremental multiyear fee upon completion for each technology (total \$400,000 available incremental multiyear fee) by September 30, 2011.

Work scope/completion criteria: Complete the system testing of the selected technology.

Completion document: Letter to ORP submitting a copy of the WRPS-approved test report and evidence of satisfactory receipt inspection.

PBI- 2.8 CLIN 2

Signature Block

ORIGINAL SIGNED BY

William Johnson, President
and Project Manager
Washington River Protection Solutions

7/29/09

Date

ORIGINAL SIGNED BY

Shirley Olinger, Manager
U.S. Department of Energy, Office of River Protection

8/3/07

Date

Workset Title 1:

Contract Reference - Deliverable C3.1.2.2-1 – Performance Measurement Baseline

Target Date:

30 September 2009

Award Fee:

\$200K (submittal of PMB on 30 June 2009)

\$125K (Provide IPR assistance by 30 September 2009)

Description

WRPS will develop a TOC Project Performance Measurement Baseline (PMB). The PMB is a Project contract performance period life-cycle integrated and traceable technical scope, schedule, and cost baseline that encompass the activities to execute the requirements of this Tank Operations Contract (DE-AC27-08RV14800), integrate the WTP scope and schedule, and complete the River Protection Project mission. The PMB shall include the following:

- Technical Scope. The following baseline documents will be viewed collectively as the technical scope for the PMB:
 - The Contract Section C, Statement of Work;
 - The River Protection Project System Plan;
 - Waste site and facility lists;
 - Approved Interface Control Documents (ICDs);
 - Work Breakdown Structure (WBS) dictionary sheets
- Integrated Project Schedule and
- Time-phased Project Period of Performance life-cycle cost estimate.

The PMB will comply with the following requirements:

- The scope, cost and schedule will be linked through use of the WBS approved by DOE-ORP. The WBS will encompass the activities required in this Contract and provide the basis for project control system components, including estimating, scheduling, budgeting, and project performance reporting. Control accounts within the WBS will be identified.
- The baseline and management will comply with; ANSI/EIA-748-A-1998 Earned Value Management Systems (EVMS), DOE O 413.3A, Program and Project Management for the Acquisition of Capital Assets, and DOE M 413.3-1, Project Management for the Acquisition of Capital Assets.
- The PMB schedule will:
 - Include significant external interfaces, TPA milestones, other regulatory and DNFSB commitments, and Government-Furnished Services and Information (GFS/I) dependencies.
 - Be an integrated, logical network-based plan that correlates to the WBS, is vertically traceable to the EVMS control accounts, and successfully aligns the Tank Farm Project schedule with the WTP schedule. The schedule will be capable of summarizing from control accounts to higher WBS levels.

- A working level schedule(s) will be developed for the execution year plus 6 additional months. The working level schedule(s) will be integrated with the PMB and able to provide earned value reporting in compliance with ANSI/EIA-748-A-1998 Earned Value Management Systems (EVMS).
- The PMB cost estimate will include project resource plans, detailed resource estimates, basis of estimates, budgetary requirements, and identification of direct costs, indirect costs, management reserve, and fee.
- The method used to determine earned value will be identified for each control account.
- The PMB will integrate with the:
 - Financial systems(s);
 - Budget formulation;
 - Regulatory, DOE, and Congressional commitments; and,
 - Performance milestones including contract performance incentives and other performance measures established by DOE-ORP.

Award Fee Criteria:

The award fee criteria is based on requirements set forth in DOE O 413.3A "Program and Project Management for the Acquisition of Capital Assets" and Contract No. DE-AC27-08RV14800, "Tank Operations Contract."

Washington River Protection Solutions will earn fee based on:

- Completion of all required documents set forth in DOE O 413.3 and provided to ORP no later than June 30, 2009.
- The TOC Performance Measurement Baseline shall be life-cycle, integrated, and traceable to technical scope, schedule, and cost. The PMB will encompass all activities to execute the requirements of the Contract, integrate the WTP scope and schedule, and complete the River Protection Project mission. The Contract period PMB portion will be developed at a level that provides for traceability of all contract scope, activities, milestones and requirements in support of WTP startup.
- The WRPS Baseline Change Request will be a single document that includes all scope relative to PBS ORP-0014 "Radioactive Liquid Tank Waste Stabilization and Disposition Project" and PBS ORP-0014X-RV "Radioactive Liquid Tank Waste Stabilization and Disposition-Storage Operations Awaiting Geologic Repository". The BCR shall include at a minimum the following components :
 - TOC Strategy Overview
 - Mission Constraints
 - Change Summary and Justification
 - TOC Baseline Scope and Assumptions
 - HTWOS Planning Assumptions and Modeling Results
 - Tank Sequence Table
 - TPA Impact Analysis and Approach
 - Project Risk Analysis

- Interface Control Documents
- Baseline Change Request Cost Tables
- Schedule Summary including SST Retrieval Sequence and identification of planned retrieval technology.

AWARD FEE CRITERIA

Assist ORP in preparing for an Independent Project Review for BCR RPP-09-022 which will include both near-term Baseline (NTB) and Out Year Planning Range. This will include review of the Work Breakdown Structure, Resource Loaded Schedule, Estimates, Risk Management Plan(s), Project Control System Description, Project Execution Plan, Quality Assurance Plan, Safety Documentation, Project Assumptions, Technical and Functional Requirements and Specifications and a completed PDRI table reflecting the Integrated Project Team's (ORP and WRPS) Project Definition Rating Index (PDRI).

- In addition, WRPS will participate in the Assessment of Readiness to Proceed with the IPR conducted by ORP. The participation will be focused on the review of ORP's products such as the Project Execution Plan, Acquisition Strategy, etc.
- Maintain corrective action listing by section number of the document and by WBS for schedule, estimate, dictionary modifications and any other changes required through the review process.
- Develop a single BCR that incorporates all ORP comments including but not limited to: document changes, schedule changes, cost estimate changes, WBS dictionary changes, and milestone changes.
- Provide updated document as provided with BCR RPP-09-002 with revised data schedules and cost exhibits.
- Provide supplemental data to the ORP Project Control Officer for the OPER period.