

| ATTACHMENT J.4, ATTACHMENT 2

**PERFORMANCE EVALUATION AND MEASUREMENT PLAN
(PEMP)**

**PERFORMANCE EVALUATION
AND
MEASUREMENT PLAN (PEMP)
FOR THE
TANK OPERATIONS CONTRACT
Rev 8**

Tank Operations Contract

Performance Evaluation and Measurement Plan

The Performance Evaluation and Measurement Plan (PEMP) detail the administration of performance measures and allocation of *Total Available Fee* as defined in Section B, *Supplies or Services and Prices/Costs*.

1. PERFORMANCE MEASURES

Each performance measure will set forth the specific requirements, criteria and/or specifications for acceptable performance of an outcome and the amount of fee assigned to the individual performance measure (See PEMP Table 4-1 for a summary of work requirements that may be targeted for performance measures).

2. ALLOCATION OF AVAILABLE FEE

DOE will heavily weight the assignment of fee toward meeting production goals, such as treatment of waste and end-product goals, such as the retrieval of single-shell tank (SST) waste, treatment of tank waste, closure of SSTs, closure of SST Farms and full operational status of constructed facilities.

3. PERFORMANCE MEASURE FEE STRUCTURE METHODS

Each performance measure may have a distinct fee structure to incentivize maximum performance and resource utilization by the Contractor. Individual performance measures may require the contractor to exceed approved baseline performance to earn 100 percent (%) of the fee allocated to that performance measure. DOE is not limited to the following list of Fee Structure Methods and may combine elements of multiple fee structures. Regardless of the Fee Structure Method used, payment of fee is subject to the fee reduction terms of this Contract, and Fee Determining Official (FDO) approval that the Contractor has achieved the stated outcome for the specific performance measure.

- (a) Straight-line Method: This method provides a 100% incremental fee for completion of the performance measure prior to the expiration of the Contract period.
- (b) Declining Method: This method provides 100% incremental fee for completion of the performance measure by a specific date and/or milestone, but the percentage is reduced incrementally beyond that event. The specific percentage of reduction and corresponding time or specific milestones triggering the reductions are defined within the performance measure.

- (c) Terminal Method: This method provides 100% incremental fee for completion of the performance measure prior to a specific date and/or milestone; however, the Contractor will forfeit 100% of the fee allocated to the performance measure for completion of the performance measure after the passing of the specific date and/or milestone as defined within the performance measure.
 - (d) Provisional Dependent Method: This method provides the Contractor the opportunity to earn only *Provisional Fee* until completion of a specific milestone, a separate performance measure or multiple performance measure's, upon which the fee becomes progress or final. For example, the Contractor may complete performance measure-1, earn 90% of the fee as *Provisional*, then complete performance measure-2 and earn the associated fee for performance measure-2, as well as convert the *Provisional Fee* earned for performance measure-1 to an incremental fee.
 - (e) Subjective Method: This method provides the Contractor the opportunity to earn up to 100% fee for performance of Contract requirements based on subjective criteria as determined by DOE.
 - (f) Target Method: This method provides for the initially negotiated fee to be adjusted later by a formula based on the relationship of performance measures against the baseline. This method specifies a target baseline performance, a target fee, minimum and maximum fees, and a fee adjustment formula. After performance, the fee payable is determined in accordance with the formula. The formula provides, within limits, for increases in fee above target fee when baseline performance is exceeded, and decreases in fee below target fee when baseline performance is not achieved. This increase or decrease is intended to provide an incentive for the Contractor to manage the Contract effectively.
4. Table 4.1 summarizes the Contract work requirements that may become fee-bearing via performance measures. This table establishes a conceptual framework as a basis for development of future performance measures in accordance with Section B Clause entitled, *Fee Structure*.
5. Table 4.1 includes DOE's estimated range of available fee allocation. This table will be used as a guide in establishing available fee allocation among performance incentives for the work contained in each Sub-CLIN. This table is only a guide and actual fee allocation during contract performance will vary. Individual performance incentives within each Sub-CLIN will be assigned fee based on performance risk and other factors.

If the workscope within a Sub-CLIN is impacted by a change in the WBS, the estimated available fee allocation percentages may be adjusted at the unilateral discretion of the Contracting Officer.

Table 4.1, Summary of Work Requirements

OBJECTIVE	OUTCOMES ¹	POTENTIAL MEASURES	Estimated Weight of Total Available Fee
<i>CLIN 1 – Base Operations</i>			
C.2.1.1 Sub-CLIN 1.1 Transition	Safe and efficient transition of workscope from the Tank Farm Contract to the Tank Operations Contract	<ul style="list-style-type: none"> No fee attached directly to this scope Required to successfully perform other CLINs 	No Fee
C.2.1.2 Sub-CLIN 1.2 Safe, Compliant Operations	Safe, efficient, and compliant management of the tank waste inventory and all physical systems to support River Protection Project (RPP) System Plan requirements	<ul style="list-style-type: none"> Increased operability and availability of tank farm infrastructure Safe and efficient tank farm operations Double-Shell Tank (DST) life baselined and extended Reduction of sodium addition to DSTs Baseline costs reduced 	5%
C.2.1.3 Sub-CLIN 1.3 Analytical Laboratory Support	Optimal facility availability to support timely, cost-effective laboratory analysis	<ul style="list-style-type: none"> No fee attached directly to this scope Required to successfully perform CLINs 1.2, 2.1 and 2.2 	No Fee
<i>CLIN 2 – Single-Shell Tank (SST) Retrieval and Closure</i>			
C.2.2.1 Sub-CLIN 2.1 Single-Shell Tank Retrieval	Tank wastes are safely removed from selected single-shell tanks (SSTs) to the extent required in the Tri-Party Agreement (TPA), thereby facilitating SST farm closure while assisting with the optimization of DST space and staging of tank waste for future treatment	<ul style="list-style-type: none"> Retrieve waste from SSTs; B-104, B-201, B-202, B-203, B-204, BY-101, C-101, C-102, C104, C105, C-107, C-110, C-111, C-112, S105, S-109, T-104, T-110, T-111, T-201, T-202, T-203, T-204, U-103, U-201, U-202, U-203, U-204, etc. Volume of waste removed Number of tanks ready for closure 	18%

¹ Any features of the Offeror’s proposed strategy and approach may be implemented as first and subsequent years’ performance measures for the PEMP.

OBJECTIVE	OUTCOMES ¹	POTENTIAL MEASURES	Estimated Weight of Total Available Fee
C.2.2.2 Sub-CLIN 2.2 Single-Shell Tank Farm (Waste Management Area) Closure	Closure of the waste management areas containing the SST farms	<ul style="list-style-type: none"> Resource Conservation and Recovery Act of 1976 (RCRA)-compliant closure of C Tank Farm Waste Management Area RCRA-compliant closure of additional Waste Management Areas 	6%
<i>CLIN 3 – Waste Treatment and Immobilization Plant (WTP) Support</i>			
C.2.3.1 Sub-CLIN 3.1 Treatment Planning, Waste Feed Delivery, and WTP Transition	Implementation of the RPP System Plan and performance of required waste feed delivery	<ul style="list-style-type: none"> Operability and availability of waste delivery systems as required Tank waste staged for delivery Delivery of tank waste 	4%
C.2.3.2 Sub-CLIN 3.2 WTP Operational Readiness	Evaluate the operational readiness of the WTP construction project to support safe, efficient turnover of completed facilities.	<ul style="list-style-type: none"> Five WTP topical reports signed by the Responsible Corporate Official 	<1%
C.2.3.3 Sub-CLIN 3.3 Immobilized High Level Waste (IHLW) Storage and Shipping Facility Construction	The capability to safely store IHLW and the means to prepare Hanford IHLW and Spent Nuclear Fuel for compliant shipment to the Yucca Mountain Project	<ul style="list-style-type: none"> Completion of IHLW storage and shipping facility design Completion of IHLW storage and shipping facility construction and permitting Successful completion of Critical Decision (CD)-0 through CD-4 and Operational Readiness Review IHLW storage and shipping facility is operational and receiving IHLW 	2%
<i>CLIN 4 – Supplemental Treatment</i>			
C.2.4.1 Sub-CLIN 4.1 Demonstration Bulk Vitrification System (DBVS) Construction and Operations	An operable pilot scale bulk vitrification system that will enable DOE to determine if bulk vitrification is a viable supplemental Low Activity Waste (LAW) treatment process for completing the RPP mission	<ul style="list-style-type: none"> Completion of DBVS Design Completion of DBVS Construction and permitting Operation of DBVS Completion of DBVS testing objectives 	4%

OBJECTIVE	OUTCOMES ¹	POTENTIAL MEASURES	Estimated Weight of Total Available Fee
C.2.4.2 Sub-CLIN 4.2 Extended Demonstration Bulk Vitrification System Operations	To treat and immobilize tank waste as part of the RPP System Plan, and to transfer the immobilized waste to an on-site disposal facility	<ul style="list-style-type: none"> Complete permitting for bulk vitrification system Operation of bulk vitrification system by volume of waste treated 	3%
C.2.4.3 Sub-CLIN 4.3 Supplemental Treatment Design	Design of supplemental treatment plant(s) that augment the WTP, thereby expediting mission completion	<ul style="list-style-type: none"> Completion of supplemental treatment plant(s) conceptual design Successful completion of CD-0, CD-1, and CD-2 Completion of supplemental treatment plant(s) early permitting 	1%
C.2.4.4 Sub-CLIN 4.4 Supplemental Treatment Construction and Operations	Construction and operation of supplemental treatment plant(s) to augment the WTP, thereby expediting mission completion	<ul style="list-style-type: none"> Completion of treatment plant(s) design Completion of treatment plant(s) construction and permitting Completion of treatment plant(s) CD-3, CD-4, and Operational Readiness Review Treatment plant(s) operations by volume of waste treated and staged for treatment 	20%
C.2.4.5 Sub-CLIN 4.5 Transuranic Tank Waste Treatment and Packaging	Safe packaging, characterization, and loading for shipment of transuranic tank waste to its appropriate repository, thereby reducing the volume of tank waste that must be immobilized in the WTP or other treatment facilities	<ul style="list-style-type: none"> Volume of waste removed and treated Volume of waste shipped off-site Number of tanks ready for closure 	3%
<i>CLIN 5 – Early Feed and Operation of the WTP Low Activity Waste (LAW) Facility</i>			
C.2.5.1 Sub-CLIN 5.1 Tank Selection, Retrieval, Pretreatment and Feed Delivery Design	Evaluation and Design of retrieval, pretreatment and feed delivery systems to facilitate early use of WTP LAW treatment capabilities	<ul style="list-style-type: none"> Completion of conceptual design to maximize total tank waste treated using measures such as volume, curies and sodium Successful completion of CD-0, CD-1, and CD-2 Completion of up front permitting 	30%

OBJECTIVE	OUTCOMES ¹	POTENTIAL MEASURES	Estimated Weight of Total Available Fee
C.2.5.2 Sub-CLIN 5.2 Retrieval, Pretreatment and Feed Delivery Construction and Operations	Complete Design and Construction of retrieval, pretreatment and feed delivery systems, and Operate to stage and/or deliver feed for WTP LAW	<ul style="list-style-type: none"> • Completion of design • Successful completion of CD-3, CD-4, and Operational Readiness Reviews • Completion of permitting • Operate systems to provide pretreated waste to WTP LAW and/or stage for delivery 	
C.2.5.3 Sub-CLIN 5.3 Upgrade and Operate Effluent Treatment Facility (ETF)	Transition operations of ETF into this contract and upgrade facility to process WTP secondary waste	<ul style="list-style-type: none"> • Operability and availability of waste treatment systems as required • Treatment of WTP, Tank Farms, and other Hanford waste 	
C.2.5.4 Sub-CLIN 5.4 LAW/BOF/LAB Operations	Manage, maintain and operate the LAW/BOF/LAB Facilities	<ul style="list-style-type: none"> • Operate LAW/BOF/LAB to treat tank waste for disposal • Maximize tank waste treated using measures such as volume, curies and sodium 	
<i>CLIN 6 – Pension and Welfare Plans</i>			
C.2.6 Sub-CLIN 6.1 Hanford Employee Retirement and Benefit Plan Management and Sub-CLIN 6.2 Legacy Pension and Benefit Plan Management	<p>Effective sponsorship, management and administration of Hanford Employee Retirement and Benefit Plans</p> <p>Effective sponsorship, management and administration of designated Legacy Pension and Benefit Plans from other DOE sites</p>	<ul style="list-style-type: none"> • No fee attached directly to this scope 	No Fee

OBJECTIVE	OUTCOMES ¹	POTENTIAL MEASURES	Estimated Weight of Total Available Fee
C All elements of scope	Overall performance effectiveness, quality, timeliness, efficiency, compliance and safety.	<ul style="list-style-type: none"> • Completion of Contractor Performance Objectives, Measures and Commitments • Upgrade of facility Voluntary Protection Program status • Nuclear Safety Analysis and Process Improvements • Industrial Safety Process Improvements • Subjective determination, cross-cutting all scope, not otherwise incentivized. 	4%

6. In accordance with the Section B Clause entitled, *Changes to Contract Cost and Contract Fee*, if for any reason the Contracting Officer does not authorize work in accordance with the Section B Clause entitled, *DOE Authorization of Work*, the *Total Available Fee* as a percentage of *Total Contract Cost* by Contract Period, excluding non-fee bearing costs identified in the Section B Clause entitled, *Basis for Total Available Fee*, may be adjusted.

7. In accordance with the Section B Clause B.7 (a) entitled, *Fee Structure*, Hanford Tank Farm performance measures are provided in the following attachments:

J.4 Attachment 1: Performance Measures for Base Contract Period Effective FY2009-2010

J.4 Attachment 2: Performance Measures for Base Contract Period Effective FY2010-2013

8. DOE has identified numerous PBIs as “on hold” because there is not currently fee pool available to allocate to all PBIs. DOE intends to allocate fee to these “on hold” PBIs once several major changes are negotiated and the Base Period Fee Pool (FY2009-2013) is revised. Any available fee above what is currently shown in the contract (\$92M) will be allocated first to the Award Performance Measure (Award Fee). Then the remaining fee pool for the Base Contract period will be proportionally prorated across all remaining PBIs. In the event the fee pool is not sufficient to cover all the “on hold” PBIs then DOE will prorate the fee amount down across all of the “on hold” PBIs to maintain the risk profile established at the time the PBIs were added to the contract. Because negotiations may result in a Base Period fee pool that is lower than the \$92M currently identified in the

- Deleted:
- Deleted: n
- Deleted:

contract, all PBIs, not on hold, completed after April 30, 2013 will be paid provisionally. If the Base Period fee pool is lower than \$92M after negotiations, then the fee pool will be proportionally prorated across the active PBIs and reduced downward, and no fee will be allocated to the "on hold" PBIs.

- Deleted:
- Deleted:
- Deleted:
- Deleted:
- Deleted:

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

**Attachment 1–Performance Measures for Base Contract Period
 Effective: FY 2009-2010**

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	M025
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 No.	Title	Type	Value of PBI/Element	Completion Due Date	PBI Revision	Contract Mod
PBI 2.3.2	Milestone Deleted				2	M021
PBI 2.4.1	Milestone Deleted				1	M021
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 No.	Title	Type	Value of PBI/Element	Completion Due Date	PBI Revision	Contract Mod
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 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 No.	Title	Type	Value of PBI/Element	Completion Due Date	PBI Revision	Contract Mod
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 \$200K (MULTI-YEAR)	\$200,000	9/30/2011	0	M021
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

NOTES:	
1	1/14/09 - Modification M009 reissued the PEMP and incorporated signed PBIs
2	Modification M013 added PBIs 1.7, 2.9, 2.10 and revised PBIs 2.1, 2.3, 2.4, 2.5, 2.6, 2.8.
3	Modification M021 revised the PEMP PBIs 1.5,2.1,2.3,2.8 and Workset Title 1
4	Modification M025 revised the PEMP PBI 2.1.2.
5	Modification 054 reissues the PEMP and incorporates the PBI's as attachments. The above table is a summary of Performance Measures incorporated in previous modifications.

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	March 15, 2012 (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	May 29, 2012 (Modification 167)	Adjust PBIs and reflect adjusted total available Base Period Fee Pool
Revision 22	July 19, 2012 (Modification 176)	Adjust PBIs and reflect adjusted total available Base Period Fee Pool
Revision 23	August 30, 2012 (Modification 178)	Increase unallocated fee pool amount
Revision 24	September 28, 2012 (Modification 184)	Incorporate FY 13 Award Fee Plan
Revision 25	November 29, 2012 (Modification 186)	Add Cost and Fee for CLIN 1.2.1, 1.2.2, 3.1, 6.1
Revision 26	See date of Modification <u>208</u>	Adjust PBIs to reflect FY2013 workscope and available Base Period fee Pool

Table of Contents

PM 01 – Award Fee Performance Measure.....	6
PM 02 - FY 2011 Award Fee Performance Measure	11
PM 03 - FY 2012 Award Fee Performance Measure	15
PM 04 - FY 2013 Award Fee Performance Measure	22
Section J.4 Performance Evaluation and Measurement Plan (PEMP) FY 2010-2013....	31
PBI-1.1 CLIN 1 Waste Volume Reduction via the 242-A Evaporator.....	36
PBI-1.2 CLIN 1 Submittal of the SST Integrity Assurance Review Tri-Party Agreement Change Package to Office of River Protection.....	39
PBI-1.3 CLIN 1 Project Upgrades and Life Extension Projects Completion	40
PBI-1.4 CLIN 1 222-S Upgrades and Life Extension Projects Completion	43
PBI-1.5 CLIN 1 Construction Management Complex with Shops	45
PBI-1.6 CLIN 1 Tank Sampling (Grab and Cores).....	46
PBI-1.7 CLIN 1 Tank Chemistry Control	48
PBI-1.8 CLIN 1 Smart-Plant Foundation Implementation	51
PBI-1.9 CLIN 1 Increase Rated Maximum Tank Level AP-101 and AP-105	54
PBI-1.10 CLIN 1 AY-102 Recovery Actions.....	56
PBI-1.11 CLIN 1 Side Wall Concrete Core Sample of Single Shell Tank 241-A-106.....	58
PBI-1.12 CLIN 1 AN Farm Process Readiness	59
PBI-1.13 CLIN 1 C-107 Dome Core Analysis	60
PBI-1.14 CLIN 1 Single Shell Tank Leak Inventory Assessment of T and TX Farms	61
PBI-1.15 CLIN 1 242-A Documented Safety Analyses Upgrades.....	62
PBI-1.16 CLIN 1 Perform Hydrostatic Testing of 242-A Evaporator Slurry Line SL-167 to Support 242-A FY 2013 Campaigns	63
PBI-1.17 CLIN 1 Simulant Test for Safety Significant Double Isolation Valves.....	64
PBI-2.1 CLIN 2 Vadose Zone/Barriers.....	65

PBI-2.2 CLIN 2 Waste Management C Area Closure 72

PBI-2.3 CLIN 2 Removal of SX Tank Farm Exhauster Station (Sludge Cooler) 77

PBI-2.4 CLIN 2 Complete removal and shipment to final disposition of expired Hose-In-Hose Transfer Lines..... 78

PBI-2.5 CLIN 2 Remove ducting and associated equipment associated with SX Farm 80

PBI-2.6 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-10181

PBI-2.7 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-10283

PBI-2.8 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-10484

PBI-2.9 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-10586

PBI-2.10 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-10787

PBI-2.11 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-10889

PBI-2.12 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-10991

PBI-2.13 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-11092

PBI-2.14 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-11193

PBI-2.15 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-11296

PBI-2.16 CLIN 2 Complete Ventilation Stack Extensions on POR-008 and POR-003 .. 98

PBI-2.17 CLIN 2 A/AX Farm Retrieval Acceleration and 272-AW Facility Replacement 99

PBI-2.18 CLIN 2 Articulating Mast System in 241-C-104 101

PBI-2.20 CLIN 2 Replace 241-AN-106 HIHTL 102

PBI-3.1 CLIN 3 Complete Submittal of Conceptual Design Report Documentation to Support Critical Decision 1 (CD-1) for the Interim Hanford Storage Facility (IHSF) 103

PBI-3.2 CLIN 3 Complete Submittal of Preliminary Design Documentation to Support Critical Decision 2 (CD-2) for the Interim Hanford Storage Facility (IHSF)..... 104

PBI-3.3 CLIN 3 Complete Submittal of Conceptual Design Report Documentation to Support Critical Decision 1 (CD-1) for the Secondary Waste Treatment Project 105

PBI-3.4 CLIN 3 Complete Submittal of Preliminary Design Documentation to Support Critical Decision 2 (CD-2) for the Secondary Waste Treatment Project 106

PBI-3.5 CLIN 3 AW-103 Feed Delivery System Design	107
PBI-3.6 CLIN 3 AZ-101 Feed Delivery System Design.....	108
PBI-3.7 CLIN 3 AY-102 Feed Delivery System Design	109
PBI-3.8 CLIN 3 AY/AZ Farm Infrastructure Design.....	110
PBI-3.9 CLIN 3 AY/AZ Ventilation System Upgrade Design.....	111
PBI-3.10 CLIN 3 SY Farm Infrastructure Design	112
PBI-3.11 CLIN 3 AW Farm Infrastructure Design	113
PBI-3.12 CLIN 3 AP Farm Infrastructure Design	114
PBI-3.13 CLIN 3 Modeling and Planning to Establish RPP Technical Baseline (System Plan) 115	
PBI-3.14 CLIN 3 Issuance of the first Tank Waste Characterization Report.....	116
PBI-3.15 CLIN 3 Data Quality Objective for Strategic Plan.....	117
PBI-3.16 CLIN 3 Best Basis Database Management	118
PBI-3.17 CLIN 3 Waste Treatment Plant Operational Readiness Evaluation	119
PBI-3.18 CLIN 3 Complete Submittal of Documentation to Support Critical Decision 0 (CD-0) for the Supplemental Treatment Project.....	120
PBI-3.19 CLIN 3 Complete Submittal of Conceptual Design Report Documentation to Support Critical Decision 1 (CD-1) for the Supplemental Treatment Project.....	121
PBI-3.20 CLIN 3 Flowsheet Development	122
PBI-3.21 CLIN 3 Life-Cycle Cost Model	123
PBI-3.22 CLIN 3 Solid-Phase Aluminum Speciation.....	124
PBI-3.23 CLIN 3 Integrated Sample Analysis Plan	125
PBI-3.24 CLIN 3 Mission Analysis Report Updated	126
PBI-3.25 CLIN 3 Submit Integrated Waste Feed Delivery Plan (IWFDP) Update for Approval.....	127
PBI-3.26 CLIN 3 One System DNFSB 2010-2 Implementation Plan Commitments	128

PBI-3.33 CLIN 3 Mixing and Sampling Implementation Plan Activities for DNFSB Recommendation 2010-2.....	130
PBI-3.35 CLIN 3 Complete Relocation of the Pretreatment Engineering Platform	131
PBI-4.1 CLIN 4 Supplemental Immobilization Project – One Time Report	132
PBI-Reserved - Unallocated Base Period Fee.....	134
PBI-7.1 CLIN 7 ARRA Program Reporting	135
PBI-7.2 CLIN 7 ARRA Key Performance Parameters	137
PBI-7.3 CLIN 7 ARRA AW-104 Corrosion Probe.....	139
PBI-7.4 CLIN 7 ARRA TY Farm Barrier.....	140
PBI-7.5 CLIN 7 ARRA Mobile Arm Retrieval System Testing.....	141
PBI-7.6 CLIN 7 ARRA AP Cathodic Protection.....	142

PM 01 – Award Fee Performance Measure

Fee available assigned to this performance measure:

Fiscal Year	Total AF	AF 1	AF 2	AF-3	AF-4	AF-5
FY 2010	\$1,600,000	\$500,000	\$350,000	\$350,000	\$300,000	100,000

Fee Structure: Subjective Measure

This award fee performance measure is achieved if the Contractor meets the mission performance expectations of the U.S. Department of Energy (DOE) as stipulated within the contract. Evaluations under the award fee performance measure shall be completed annually, based on both objective and subjective criteria for performance during the evaluation period.

Award Fee Criteria

1) Safety Performance of Tank Farm Project Operations

Desired Outcome: Assure focus is maintained on overall safety and efficiency of Tank Farm project operations.

Areas of focus in overall safety and efficiency of Tank Farm project operations are:

- a) Nuclear Safety Basis Performance
- b) Environmental Performance.
- c) Radiological Safety improvements.
- d) Work Control process and Conduct of Operations improvements (e.g., work package/procedure development, field implementation of work instructions, effectiveness of Conduct of Operations councils, and Conduct of Operation mentors).
- e) Emergency Preparedness improvements.
- f) Feedback and Improvement effectiveness enhanced through improved assessments and corrective action program performance.

Evaluation criteria to measure safety performance will include both objective performance indicators and ORP's subjective evaluation of the contractor's daily operational performance.

Objective Evaluation Criteria:

Evaluation will be under the Performance Indicator Program and will be made for the six (6) programs listed in the Areas of focus portion of the award fee criteria. Under each program, the agreed upon annual performance measures will be calculated and published monthly. The three-month average for performance measures for each program will be used to calculate a composite program score.

Performance Level for Individual Performance Metric	Score
Blue: Exceptional, exceeds expectations	100
Green: Effective, meets expectations	75
Yellow: Borderline or declining performance	50
Red: Degraded or adverse performance	0

Subjective Evaluation Criteria:

- Contract requirements.
- Integrated Environment, Safety, and Health Management System (ISMS) performance objectives, measures (POM), and commitments established by the DOE.
- Responsiveness to emerging issues or high visibility items identified during senior management project reviews.
- Responsiveness to and management of performance and assessment areas needing attention as identified by contractor self-assessments, ORP assessments, and external reviews.

2) **Environmental Stewardship and Compliance**

Desired Outcome: Contractor's demonstrated environmental stewardship and compliance.

Areas of Focus for environmental stewardship and compliance:

- a) Environmental Protection and Compliance Plan and performance metrics
- b) Permitting documents and compliance to permits and licenses
- c) Proactive assessment/evaluation program
- d) Number and seriousness of any findings of noncompliance, infractions or violations, and timeframes and quality of related reporting and responses

Evaluation criteria to measure performance will include both objective performance indicators and ORP's subjective evaluation of the contractor's performance based on the following:

- quality of the documented environmental protection program;
- contractor's establishment and implementation of environmental performance metrics;
- early identification of issues and concerns through a proactive assessment/evaluation program;
- openness and professionalism of interactions with DOE and regulators;
- integration with Hanford Site regulatory compliance and the quality, timeliness, completeness, and technical accuracy of site-wide environmental reports, permits, and licenses;
- quality, timeliness, completeness, and technical accuracy of permitting documents;

- number and seriousness of any non-compliances, infractions, or violations and the timeliness and quality of related reporting and responses;
- implementation of waste minimization and pollution prevention practices; and
- compliance to environmental permit and license conditions.

3) **Quality Assurance Program Compliance.**

Desired Outcome: The Contractor is required to develop and implement a quality assurance program (QAP) based upon the requirements of DOE-EM EM-QA-001, DOE O 414.1C and 10CFR830 to implement a compliant QA program.

Areas of Focus for Quality Assurance Program Compliance:

- a) Compliance with all Management Criteria of the QAP-including: Program Requirements, Training and Qualifications; Quality Improvement, Documents and Records;
- b) work processes; design; procurement;
- c) Inspection and Acceptance testing;
- d) Independent and Management Assessment;
- e) Software QA;
- f) Implementation of ASME NQA-1-2004 as the implementing standard to meet DOE requirements.

Evaluation criteria to measure performance will include both objective performance indicators and ORP's subjective evaluation of the contractor's performance based on the following:

- Compliance with all management criteria of the QAP(TFC-PLN-02, "Quality Assurance Program Description")
- Contractor Performance
- Responsiveness to corrective action plans and issues.

4) **Contract and Business System Management** –

Desired Outcome: The Contractor will be evaluated for performance on a wide range of contract management and business system management areas. This Performance Measure includes consideration of:

- EVMS Management- Maintaining certification; results of reviews and assessments
- Cost and Schedule Integrity- Provide and maintain accurate schedules of work performed by TOC. Activities to be activity based, logic driven and integrated. Cost management efficiency, performance and effectiveness using the current baseline.
- Compliance with Federal and Departmental acquisition regulations, procedures, and guidance
- Compliance with Contract requirements not covered by PBIs and other Award Fee Performance Measures;
- Effectiveness of Subcontract and Purchasing management (including compliance with internal procedures and the Contractor's approved purchasing system) and increasing the ratio of competition awards to non-competition awards;

- Small Business Subcontracting Plan goal achievement;
- Compliance and adequacy of the Contractor's business system approvals (e.g., purchasing, accounting, budget & planning, billing, estimating, and labor accounting)
- Property Management -Maintain an effective property management system for the control, use, preservation, protection, and maintenance of Government property in the contractor's possession consistent with voluntary consensus standards and/or industry leading practices and standards (from FAR 52.245-1).

Areas of Focus for Contract and Business System Management Compliance:

- a) EVMS
- b) Cost and Schedule Integrity
- c) Subcontracting and Purchasing Management
- d) Small Business Subcontracting Plan Goals
- e) Contractors Business Systems compliance and adequacy
- f) Property Management compliance with the requirements of FAR 52.245-1

Evaluation criteria to measure performance will include both objective performance indicators and ORP's subjective evaluation of the contractor's performance based on the following:

- CPI and SPI performance
- Baseline Change Requests (BCR)
- Balanced Score Card metrics and self-assessment
- Subcontract reviews
- Assessments, reviews and audit results
- Contractors Purchasing System Review
- Subcontracting metrics against subcontracting plan goals
- Property Management System Review and assessments of contractor's property management system
- Periodic surveillances of the adequacy of the contractor's property management operations such as procedural and process compliance, storage and maintenance activities, effectiveness of inventory and custodial controls, and generation and maintenance of property records. Contractor shall be given credit for appropriate and effectiveness use of corrective action program for property deficiencies self-identified.

5) General Cleanup and Housekeeping of the Tank Farms

Desired Outcome: Improve workplace safety and compliance to procedures, especially with regard to contaminated equipment and abandoned infrastructure/facilities

Areas of Focus:

- a) Contaminated equipment packages in the Tank Farms are kept to a minimum, where only those items immediately in use, or staged for short term use are kept in the field.
- b) Demobilization of Tank Farms work should leave no removable contaminated equipment in the field (top hat assemblies, spray rings, hoses, etc.) unless short term use is planned.

- c) Contaminated equipment that is stored in the Tank Farms is managed under the Contaminated Reusable Equipment program, or dispositioned as waste if no need is identified.
- d) Contaminated equipment, wherever located, is managed with containers appropriate for the environmental condition they are stored in, to preclude the spread of contamination while stored.

Evaluation criteria to measure performance will include both objective performance indicators and ORP's subjective evaluation of the contractor's performance based on the results of periodic assessments and surveillances of the tank farms operations and facilities, and equipment and waste disposition records.

Award Fee Completion Documents

Following each evaluation period, the Contractor may submit a self-assessment, provided such assessment is submitted within thirty (30) calendar days after the end of the period. This self-assessment shall address both the strengths and weaknesses of the Contractor's performance during the evaluation period. Where deficiencies in performance are noted, the Contractor shall describe the actions planned or taken to correct such deficiencies and avoid their recurrence. The Contracting Officer will review the Contractor's self-assessment, if submitted, as part of its independent evaluation of the Contractor's management during the period."

All Documentation transmitting quarterly performance measures on Nuclear Safety Performance, Environmental Performance, Radiological Safety, Work Control (Conduct of Operations), and Emergency Preparedness, and Feedback and Improvement with total program score calculated per the Performance Indicator Program

All documentation demonstrating results of activities per the evaluation criteria in the areas of Environmental, Quality Assurance, Contract and Business System Management, and General Cleanup and Housekeeping of the Tank Farms.

PM 02 - FY 2011 Award Fee Performance Measure

Fee available assigned to this performance measure: \$1,400,000

Fee Structure: Subjective Measure

The fee structure is subjective measure. This award fee performance measure is achieved if the Contractor meets the mission performance expectations of the U.S. Department of Energy (DOE) Office of River Projection (ORP) as stipulated within the contract. Ratings under the award fee performance measure will be based on ORP's subjective evaluation of the contractor's performance during the annual FY 2011 evaluation period. ORP's evaluation of the contractor's performance will be combined to an overall rating for each functional area using the following guidance:

Award-Fee Adjectival Rating	Award-Fee Pool Available To Be Earned	Description
Excellent	91%-100%	Contractor has exceeded almost all of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Very Good	76%-90%	Contractor has exceeded many of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Good	51%-75%	Contractor has exceeded some of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Satisfactory	No Greater Than 50%	Contractor has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Unsatisfactory	0%	Contractor has failed to meet overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.

Award Fee Functional Areas

1) Performance of Tank Farm Project Operations – Conduct of Operations

Desired Outcome: Ensure focus is maintained on overall safety and efficiency of Tank Farm project operations through improvements in Conduct of Operations.

Areas of focus include the Work Control / Procedure Development process, the field implementation of work instructions, and general Conduct of Operations improvements.

Evaluation criteria to measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

- a) Results from DOE and Contractor Oversight (assessments, surveillances, Management Observation Programs (MOPs), and day-to-day oversight)
- b) Responsiveness to and management of performance and assessment areas needing attention as identified by contractor self-assessments, ORP assessments, and external reviews
- c) Additional trending data such as ORPS Reports, PERs, and Performance Indicators
- d) Results from the Conduct of Operations Council, Conduct of Operation mentors, training and Management Focus.

2) Implementation of the Corrective Action Management Program

Desired Outcome: A strong Corrective Action Management Program supporting a strong Integrated Safety Management System.

Area of Focus is the implementation of the Corrective Action Management Program.

Evaluation criteria to measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

- a) Results from DOE and Contractor Oversight (assessments, surveillances, MOPs, and day-to-day oversight)
- b) The implementation of the Problem Evaluation Request (PER) system including appropriate PER generation, PER response/cycle time, quality of corrective action closure, and the PER backlog.
- c) Quality and timeliness of root cause evaluations
- d) Quality and timeliness of corrective action plans.

3) Preparations for American Recovery and Reinvestment Act (ARRA) Transition

Desired Outcome: Contractor progress in FY 2011 that supports completion of ARRA work and prepares for ARRA close out. A planned, structured, and organized project closeout is essential to the success of the ARRA Program.

Areas of Focus for ARRA Transition include planning for ARRA transition and closeout of completed work.

Evaluation criteria to measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

- a) Develop a Transition Plan covering the transition of ARRA staff and any ARRA work that will continue into FY 2012.
- b) Implement the areas and activities of the Transition Plan that are applicable to FY 2011.
- c) Submit closure packages for completed ARRA work to DOE ORP within forty-five (45) calendar days of work completion. Closure packages are to meet the requirements of the January 13, 2011, Recovery Act Program Office Project Closeout Memorandum. The purpose of the ARRA closeout package is to ensure that actual performance and work scope completed under ARRA is documented and auditable.

4) Contract Administration and Compliance

Desired Outcome: A strong adherence to the Tank Operations Contract's terms and conditions.

Areas of Focus is the implementation of the processes to improve the timely identification of changed conditions, the quality and timeliness of Contract Change Proposals, and provide for an effective means of evaluating changes to the contract.

Evaluation criteria to measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

- a) Compliance with Contract Requirements
- b) Quality and timeliness of proposals submitted in response to the ORP Contracting Officer
- c) Effectiveness of Subcontract and Purchasing management and increasing the rates of competitive to non-competitive awards

5) Technology Development and Deployment Program Management

Desired Outcome: The development of a TDD Program that provides configuration management of TDD Project Scope and ensures adequate and useful reporting.

Areas of Focus is the implementation of the TDD Program which encompasses the oversight and control of TDD scope and reporting needs.

Evaluation criteria to measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

- a) Configuration Management of the TDD Scope and Budget
- b) Development of Reporting Requirements for TDD
- c) Overall Coordination of TDD reporting and requirements to service providers

Award Fee Completion Documents

The Contractor may submit a self-assessment after the evaluation period provided such assessment is submitted within thirty (30) calendar days after the end of the period. This self-assessment shall address both the strengths and weaknesses of the Contractor's performance during the evaluation period. Where deficiencies in performance are noted, the Contractor shall describe the actions planned or taken to correct such deficiencies and avoid their recurrence. The ORP Contracting Officer Representative (COR) and Contracting Officer will review the Contractor's self-assessment, if submitted, as part of its independent evaluation of the Contractor's management during the period.

PM 03 - FY 2012 Award Fee Performance Measure

Target Fee available assigned to this performance measure: \$3,500,000.00

Fee Structure: Subjective Measure

The fee determination structure for this fiscal year will be subjective measures. This award fee performance measure is achieved if the Contractor meets the mission performance expectations of the U.S. Department of Energy (DOE) Office of River Projection (ORP) as stipulated within the contract. Ratings under the award fee performance measure will be based on ORP's evaluation of the contractor's performance during the annual FY 2012 evaluation period. ORP's evaluation of the contractor's performance will be combined to an overall rating. Failure in any of the functional areas could result in a change to the overall rating as determined by the Fee Determination Official. Ratings will be determined using the following guidance:

Award-Fee Adjectival Rating	Award-Fee Pool Available To Be Earned	Description
Excellent	91%-100%	Contractor has exceeded almost all of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Very Good	76%-90%	Contractor has exceeded many of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Good	51%-75%	Contractor has exceeded some of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Satisfactory	No Greater Than 50%	Contractor has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Unsatisfactory	0%	Contractor has failed to meet overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.

Award Fee Functional Areas

1) Performance of Tank Farm Project Operations – Conduct of Operations

Target Fee Assigned to Functional Area: \$500,000.00

Desired Outcome: Ensure focus is maintained on overall safety and efficiency of Tank Farm project operations through improvements in Conduct of Operations and Work Control.

Areas of focus include Work Control / Procedure Development process continuous improvement, the field implementation of work instructions, and general Conduct of Operations improvements.

Evaluation criteria to measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

- a) Results from DOE and Contractor Oversight (assessments, surveillances, Management Observation Programs (MOPs), and day-to-day oversight) indicate no DOE concerns, recurring events, or programmatic negative trends.
- b) Responsiveness to and management of performance and assessment areas needing attention as identified by contractor self-assessments, ORP assessments, and external reviews as evidenced by a high ratio of WRPS self-identified issues to ORP issues and minimal rejection of WRPS corrective action plans submitted to ORP for approval.
- c) Additional trending data such as ORPS Reports, PERs, and Performance Indicators are established and monitored for Conduct of Operations and Work Control that monitor the health and status of the programs similar to those created as part of the Lockout/Tagout end point assessment issued in August 2010 to both normalize and evaluate the safety significance of trending data.
- d) Results from the Conduct of Operations Council, Conduct of Operation mentors, training and Management Focus demonstrate continuous improvement as evidenced by WRPS performance indicators and/or WRPS/ORP oversight results. Examples may include items such as implementing the corporate work control standard, proposed HPI Lab response to abnormal events, Conduct of Operations foundational training, improvements in radiological planning/field integration, or improvements in specific Conduct of Operations chapter implementation.

2) General Management

Target Fee Assigned to Functional Area: \$1,250,000.00

Desired Outcome: A strong adherence to the Tank Operations Contract's terms and conditions; Continued process improvement for compliance and adequacy of the business systems (e.g. purchasing, accounting, budget and planning, billing estimating and labor accounting) as well as internal audit functions and property management; Development of effective Management systems to support Waste Treatment Plant (WTP) Commissioning; and Safety Program implementation of work practices and conditions in a high degree of safety in accordance with established programs

Areas of Focus:

Contract Administration and Compliance: Implementation of the processes to improve the timely identification of changed conditions, the quality and timeliness of Contract Change Proposals, and provide for an effective means of evaluating changes to the contract. The continued improvement of processes used in Contractor Industrial Relations (Pensions, CIPs, reporting, workforce restructuring, etc).

Business Systems Management: Continued process improvement to improve compliance and adequacy of the business systems (e.g. purchasing, accounting, budget and planning, billing estimating and labor accounting), as well as internal audit functions and property management (compliance with FAR 52.245-1).

Support for WTP Commissioning: Development of effective Management systems and technical support for Waste Treatment Plant (WTP) Commissioning.

Safety Program Implementation: WRPS fosters safety program implementation and resolves field issues and challenges;

- a) Conditions and processes that promote worker health safety are established and monitored
- b) Radiological and industrial safety hazards are anticipated, recognized, and effectively managed.
- c) WRPS managers establish and promote a culture that supports worker safety.
- d) Personnel exhibit accountability and ownership for industrial and radiation safety.

Evaluation criteria to measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

Contract Administration and Compliance:

- a) Compliance with Contract Requirements including compliance with Federal and Departmental acquisition regulations, procedures and guidance
- b) Quality and timeliness of proposals submitted in response to the ORP Contracting Officer
- c) Effectiveness of Subcontract and Purchasing management and increasing the rates of competitive to non-competitive awards
- d) ARRA closeout activities
- e) Small Business Goals
- f) Processes used in administering of contractor industrial relations which include Pension funds, CIPs, reporting, and workforce restructuring.

Business Systems Management:

- a) Balanced Score Card Metrics and self-assessments
- b) Responsiveness to and management of performance and assessment areas needing attention as identified by contractor self-assessments, internal audits, ORP assessments, and external reviews

- c) Unallowable Costs- invoices are compliant with FAR, Acquisition guidelines and Contract terms
- d) Internal Controls – improvement in financial and operational controls
- e) Assessments and reviews – continued improvement during assessments and reviews including DCAA.
- f) Periodic surveillance of the adequacy of the contractor’s property management operations such as procedural and process compliance, storage and maintenance activities, custodial controls, generation and maintenance of property records.

Support for WTP Commissioning:

- a) Technical support to WTP – data and analysis as part of the One System Integrated Project Team is timely, relevant, and supports an integrated licensing strategy.
- b) Interface management – collaboration with other site contractors to update interface control documents and resolve interface issues is proactive; program documents are improved and matured.
- c) Infrastructure and services – input to the Infrastructure and Services Alignment Plan is timely, complete, and appropriately detailed.
- d) Risk Management – the risk program and risk register show continued improvement and effective collaboration to manage crosscutting risks
- e) Program and Project Management – Critical Decision package submissions and project planning documents are timely, effective and complete.
- f) System Planning – the System Plan reflects most current available information on WTP capabilities and demonstrates continued improvement to optimize the sequence of tank waste treatment for reduction of total mission risk.
- g) Closure of WRPS actions associated with external WTP reviews is timely and effective.

Safety Program Implementation:

- a) Personnel use safe work practices and adhere to safety requirements. This includes adhering to safety briefing requirements, using proper personal protective equipment, ensuring equipment is in a safe condition prior to beginning work, and stopping in the face of uncertainty.
- b) Effective safety programs with clearly defined policies, procedures, and responsibilities are implemented.
- c) Both initial and continuing training provide personnel with the knowledge and skills necessary to meet safety program requirements and to work safely.
- d) Managers and workers are actively involved in, support, and reinforce safety program management and implementation.
- e) Managers and workers are held accountable for achieving safe work performance in their work groups.
- f) Personnel are proactive in coaching coworkers or correcting conditions when such behaviors or conditions are observed.
- g) A safe, orderly working environment is maintained. This includes; prompt and compliant management of wastes, effective management of contaminated in-process and/or reusable

equipment. The intent is to minimize the contribution to radiological dose, and to minimize the potential to spread contamination in and around the tank farms.

- h) Lessons learned from accident investigations and industry operating experience, are used to improve safety.
- i) Lessons learned from the drill programs are captured, areas for improvement are identified, and future training is conducted in those identified areas.
- j) Safety practices and conditions are periodically evaluated using established metrics, and the results are used to make improvements.
- k) Personnel at all levels of the organization promptly identify and communicate to management problems that can adversely affect plant safety and reliability.

3) Quality Assurance Program Compliance

Target Fee Assigned to Functional Area: \$500,000.00

Desired Outcome: The Contractor is required to develop and implement a quality assurance program (QAP) based upon the requirements of DOE-EM EM-QA-001, DOE O 414.1C and 10CFR830 to implement a compliant QA program.

Areas of Focus for Quality Assurance Program Compliance:

Compliance with all Management Criteria of the QAP-including: Program Requirements, Training and Qualifications; Quality Improvement, Documents and Records; work processes; design; procurement; Inspection and Acceptance testing; Independent and Management Assessment; Software QA; Implementation of ASME NQA-1-2004 as the implementing standard to meet DOE requirements.

Evaluation criteria to measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

- a) Compliance with all management criteria of the QAP (TFC-PLN-02, "Quality Assurance Program Description") Contractor Performance Responsiveness to corrective action plans and issues.
- b) Improvement in the following areas previously identified as requiring improvement:
 - 1. Corrective action management; responsiveness to addressing issues, properly classifying problems, adequate assessment of cause, properly determining extent of condition, adequate corrective action planning (establishing of remedial actions to control the deficient condition, and adequate establishment of corrective actions to correct the problem), and adequate management of the NTS reporting process.
 - 2. Establishment of software and safety software QA processes; including software grading, establishment and implementation of software life cycle activities, installation and use of software, software baseline and configuration management, software change control, and software retirement.
 - 3. Records management process improvements to assure compliance with NQA-1-2004 (and addendums to 2007)
 - 4. Procurement management; management and oversight of sub-contractors.

4) Nuclear Safety

Target Fee Assigned to Functional Area: \$850,000.00

Desired Outcome: The Contractor maintains the Tank Farms safety basis, and manages required amendments in accordance with the requirements of the Nuclear Safety Management Rule and its implementing Orders and Standards

Areas of Focus include Contract requirements and responsiveness to emerging issues, high visibility items, and any areas needing attention as identified by contractor self-assessments, ORP assessments, and external reviews.

Evaluation criteria to measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

- a) Completion of Planned Improvements identified in the Tank Farms Documented Safety Analysis (DSA)
- b) Timely declaration and management of Potential Inadequacies in the Safety Basis (PISA's);
- c) Upgrading of the 242-A Evaporator DSA to comply with DOE-STD-3009 CN3
- d) Unreviewed Safety Question process compliance with 10 CFR 830.203 and DOE G 424.1-1B, *Implementation Guide for Use in Addressing Unreviewed Safety Question Requirements*.
- e) Responsiveness to and management of performance and assessment areas needing attention as identified by contractor self-assessments, ORP assessments, and external reviews.

5) Environmental Regulatory Management

Target Fee Assigned to Functional Area: \$400,000.00

Desired Outcome: Contractor's demonstrated environmental stewardship and compliance.

Areas of Focus for environmental stewardship and compliance:

- a) Environmental Protection and Compliance Plan and performance metrics
- b) Permitting documents and compliance to permits and licenses
- c) Proactive assessment/evaluation program
- d) Number and seriousness of any findings of noncompliance, infractions or violations, and timeframes and quality of related reporting and responses

Evaluation criteria: measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

- a) Quality and implementation of the documented environmental protection program and the contractor's establishment and implementation of environmental performance metrics;
- b) early identification of issues and concerns through a proactive assessment/evaluation program;
- c) integration with Hanford Site regulatory compliance
- d) quality, timeliness, completeness, and technical accuracy of environmental reports, permits, and licenses;
- e) quality, timeliness, completeness, and technical accuracy of permitting documents;
- f) number and seriousness of any non-compliances, infractions, or violations and the timeliness and quality of related reporting and responses; and
- g) implementation of waste minimization and pollution prevention practices.

PM 04 - FY 2013 Award Fee Performance Measure

Target Fee available assigned to this performance measure: \$5,000,000.00. \$66,774.00 of the award fee has been allocated. \$4,933,226 is not allocated.

Deleted:

Deleted: .

Fee Structure: Subjective Measure

The fee determination structure for this fiscal year will be subjective measures. This award fee performance measure is achieved if the Contractor meets the mission performance expectations of the U.S. Department of Energy (DOE) Office of River Projection (ORP) as stipulated within the contract. Ratings under the award fee performance measure will be based on ORP's evaluation of the contractor's performance during the annual FY 2013 evaluation period. ORP's evaluation of the contractor's performance will be combined to an overall rating. Failure in any of the functional areas could result in a change to the overall rating as determined by the Fee Determination Official. Ratings will be determined using the following guidance:

Award-Fee Adjectival Rating	Award-Fee Pool Available To Be Earned	Description
Excellent	91%-100%	Contractor has exceeded almost all of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Very Good	76%-90%	Contractor has exceeded many of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Good	51%-75%	Contractor has exceeded some of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Satisfactory	No Greater Than 50%	Contractor has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Unsatisfactory	0%	Contractor has failed to meet overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.

Award Fee Functional Areas

1) Performance of Tank Farm Project Operations – Conduct of Operations

Target Fee Assigned to Functional Area: \$850,000.00

Desired Outcome: Demonstrated improvements in Conduct of Operations and Work Control.

Areas of focus include Work Control/Procedure Development process continuous improvement, the field implementation of work instructions, and general Conduct of Operations improvements.

Evaluation criteria to measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

- a) DOE and Contractor oversight indicate no DOE Level 1 finding, recurring events, or programmatic adverse trends;
- b) Additional trending data such as Occurrence Reporting & Processing System Reports, Problem Evaluation Requests, and Performance Indicators are established and monitored for Conduct of Operations and Work Control that monitor the health and status of the programs similar to those created as part of the Field Execution Observation Team (FEOT) process to both normalize and evaluate the safety significance of trending data and WRPS management takes actions to mitigate performance deficiencies;
- c) Tank Farm general area housekeeping and maintenance is improved. Examples may include overall radiological zone reduction, farm signage and equipment labeling, and demonstrated reduction of radioactive contaminated material and equipment;
- d) Responsiveness to and management of performance and assessment areas needing attention as identified by contractor self-assessments, ORP assessments, and external reviews as evidenced by a high ratio of WRPS self-identified issues that eliminate the need for ORP issues to be identified and minimal ORP rejection of corrective action plans;
- e) The restructured Conduct of Operations Council and Training and Management Focus demonstrate continuous improvement as evidenced by WRPS performance indicators, effective improvement initiatives, and/or WRPS/ORP oversight results. Examples may include items such as implementing continued work control enhancements (Work Efficiency Design Lab), increased senior management field presence, Field Excellence Captains ownership of Conduct of Operations initiatives and issues, additional Human Performance Improvement Lab response to abnormal events or lessons learned, or drill program improvement;
- f) Base Operations Transfer and Single-Shell Retrieval & Closure Transfer processes, where applicable, demonstrate continuous improvement and consistency between the two line organizations for increased safety or more efficient transfer process;

2) General Management

Target Fee Assigned to Functional Area: \$1,500,000.00

Desired Outcome: Continued process improvement of the business systems (e.g. purchasing, accounting, budget and planning, billing estimating and labor accounting, as well as internal audit functions and property management).

Areas of Focus:

Contract Administration: Implementation of the processes to improve the timely identification of changed conditions, the quality and timeliness of Contract Change Proposals, and provide for an effective means of evaluating changes to the contract. The continued improvement of processes used in Contractor Industrial Relations (Pensions, Contractor Incentive Plans (CIPs), reporting, workforce restructuring, etc).

Business Systems Management: Continued process improvement to improve compliance and adequacy of the business systems (e.g. purchasing, accounting, budget and planning, billing estimating and labor accounting), as well as internal audit functions and property management (compliance with FAR 52.245-1).

Support for WTP Commissioning: Development of improved Management systems and technical support for Waste Treatment Plant (WTP) Commissioning.

Conduct of Engineering: Improvement in effectiveness, consistency of Engineering systems and programs.

Evaluation criteria to measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

Contract Administration

- a) Quality and timeliness of proposals submitted in response to the ORP Contracting Officer;
- b) Effectiveness of Subcontract and Purchasing management and increasing the rates of competitive to non-competitive awards;
- c) Small Business Goals;
- d) Processes used in administering of contractor industrial relations which include Pension funds, CIPs, reporting, and workforce restructuring.

Business Systems Management:

- a) Balanced Score Card Metrics and self-assessments;
- b) Responsiveness to and management of performance and assessment areas needing attention as identified by contractor self-assessments, internal audits, ORP assessments, and external reviews;
- c) Internal Controls – improvement in financial and operational controls;

- d) Assessments and reviews – continued improvement during assessments both internal and external;
- e) Periodic surveillance of the adequacy of the contractor’s property management operations such as procedural and process compliance, storage and maintenance activities, custodial controls, generation and maintenance of property records;
- f) Project Cost & Schedule Performance - DOE will evaluate reported performance indices in the Monthly Performance Report, the EVMS, and any other known source of performance information (regardless of whether or not such information is reported by the Contractor). The evaluated indices will include: (i) the rolling six-month average; and (ii) the monthly data
- g) Risk Management – DOE will evaluate the Contractor’s Risk Management Program to identify risks (threats and opportunities), forecast potential schedule and cost impacts, and implement Risk Response Plans. DOE will evaluate actions taken by the Contractor during the rating period to eliminate or mitigate specific risks (or implement opportunities).

Support for WTP Commissioning:

- a) Technical support to WTP – data and analysis as part of the One System Integrated Project Team is timely, relevant, and supports an integrated licensing strategy;
- b) Interface management – collaboration with other site contractors to update interface control documents and resolve interface issues is proactive; program documents are improved and matured;
- c) Infrastructure and services – input to the Infrastructure and Services Alignment Plan is timely, complete, and appropriately detailed;
- d) Risk Management – the risk program and risk register show continued improvement and effective collaboration to manage crosscutting risks;
- e) Program and Project Management – Effective management of integration activities between WRPS and BNI;
- f) System Planning – the System Plan reflects most current available information on WTP capabilities and demonstrates continued improvement to optimize the sequence of tank waste treatment for reduction of total mission risk;
- g) Closure of WRPS actions associated with external WTP reviews is timely and effective.

Conduct of Engineering:

- a) Reduction in Engineering Change Notices backlog;
- b) Maintain or improve availability of the critical systems operated by WRPS. These systems include Waste Transfer, Ventilation, Retrieval, Waste Storage, Electrical Distribution and Monitoring;
- c) Reduction in design errors resulting in Engineering or field rework;
- d) Improved consistency, format and content of Operations Specification Document Recovery Plans;
- e) Improve Ventilation System performance which includes double shell tanks and portable ventilation skid performance;

- f) Improvements in the Corrosion Control Program that result (or will result) in improved response (including a reduction in overall response time) to out of specification tank chemistry.

3) Quality Assurance Program

Target Fee Assigned to Functional Area: \$500,000.00

Desired Outcome: Continued improvement of the Quality Assurance (QA) program.

Areas of Focus for Quality Assurance Program Improvement:

Compliance with all Management Criteria of the QAP-including: Program Requirements, Training and Qualifications; Quality Improvement, Documents and Records; work processes; design; procurement; Inspection and Acceptance testing; Independent and Management Assessment; Software QA; Implementation of ASME NQA-1-2004 as the implementing standard to meet DOE requirements.

Evaluation criteria to measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

- a) Compliance with all management criteria of the QAP (TFC-PLN-02, "Quality Assurance Program Description") Contractor Performance Responsiveness to corrective action plans and issues;
- b) Improvement in the following areas previously identified as requiring improvement:
 1. Corrective action management; responsiveness to addressing issues, properly classifying problems, adequate assessment of cause, properly determining extent of condition, adequate corrective action planning (establishing of remedial actions to control the deficient condition, and adequate establishment of corrective actions to correct the problem), and adequate management of the NTS reporting process;
 2. Establishment of software and safety software QA processes; including software grading, establishment and implementation of software life cycle activities, installation and use of software, software baseline and configuration management, software change control, and software retirement;
 3. Records management process improvements to assure compliance with NQA-1-2004 (and addendums to 2007);
 4. Procurement management; management and oversight of sub-contractors.

4) Nuclear Safety

Target Fee Assigned to Functional Area: \$850,000.00

Desired Outcome: Improvements in the management of the Tank Farms safety basis, and required amendments.

Areas of Focus include Contract requirements and responsiveness to emerging issues, high visibility items, and any areas needing attention as identified by contractor self-assessments, ORP assessments, and external reviews.

Evaluation criteria to measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

- a) Completion of Planned Improvements identified in the Tank Farms Documented Safety Analysis (DSA);
- b) Timely declaration and management of Potential Inadequacies in the Safety Basis (PISA's);
- c) Upgrading of the 242-A Evaporator DSA to comply with DOE-STD-3009 CN3
- d) Unreviewed Safety Question process compliance with 10 CFR 830.203 and DOE G 424.1-1B, *Implementation Guide for Use in Addressing Unreviewed Safety Question Requirements*;
- e) Responsiveness to and management of performance and assessment areas needing attention as identified by contractor self-assessments, ORP assessments, and external reviews.

5) Environmental Regulatory Management

Target Fee Assigned to Functional Area: \$450,000.00

Desired Outcome: Demonstrated improvement in environmental stewardship..

Areas of Focus for environmental stewardship and compliance:

- a) Environmental Protection and Compliance Plan and performance metrics;
- b) Permitting documents and compliance to permits and licenses;
- c) Proactive assessment/evaluation program;
- d) Number and seriousness of any findings of noncompliance, infractions or violations, and timeframes and quality of related reporting and responses.

Evaluation criteria: measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

- a) Quality and implementation of the documented environmental protection program and the contractor's establishment and implementation of environmental performance metrics;
- b) early identification of issues and concerns through a proactive assessment/evaluation program;
- c) integration with Hanford Site regulatory compliance;
- d) quality, timeliness, completeness, and technical accuracy of environmental reports, permits, and licenses;
- e) quality, timeliness, completeness, and technical accuracy of permitting documents;
- f) number and seriousness of any non-compliances, infractions, or violations and the timeliness and quality of related reporting and responses; and
- g) implementation of waste minimization and pollution prevention practices.

6) Safety Program Implementation

Target Fee Assigned to Functional Area: \$850,000.00

Desired Outcome: Ensure focus is maintained on overall safety and efficiency of Tank Farm Project through improvements in Radiological Controls (Radcon), Industrial Health and Safety, and Emergency Preparedness.

Areas of Focus include Radcon, Industrial Health and Safety, Emergency Preparedness.

Evaluation criteria: to measure performance will include ORP's subjective evaluation of the contractor's performance based on the following:

- a) Radcon:
 1. Supervision (including non-Radcon supervision) routinely monitors the radiological performance of radiological protection technicians and workers, as well as, the effectiveness of corrective actions, to improve radiological work performance.
 2. Contaminated and potentially contaminated material and equipment is minimized in radiological areas, radioactive material areas, and radiological buffer areas. Such material that is necessary for operations is packaged and stored in a manner suitable for long term integrity in the environment that material is stored in, and waste is promptly managed.
 3. Reduction in the overall radiological areas (area and/or number of Contamination and High Contamination Areas, and High Radiation Areas).
 4. Reduction of litter/debris in and around the tank farm areas managed by the TOC.. The intent is to remove/minimize the perception that the Tank Farms has spread contamination to the areas adjacent, and to enhance the ability to be able to detect any actual spread of contaminated/potentially contaminated material from a Tank Farm.
 5. Effectively control vegetation within TOC radiologically posted areas, , which have potential to spread contamination through root take-up and transport mechanisms.
 6. PPE donning and doffing and exit survey monitoring stations are managed to reduce throughput time, and increase available room to don and doff and survey equipment, while maintaining compliant surveys. The intent is to improve work crew in field efficiency, reduce congestion that can more easily spread contamination, reduce perceived pressure to rush through an exit survey, reduce heat/cold stress by minimizing wait times.
 7. Create an environment where Rad workers actively monitor each other and, when necessary, coach each other to improve their radiological work performance.

b) Industrial Health and Safety:

1. Improvements in the hazard analysis process to ensure that hazards are identified and controls are developed as demonstrated by reduced work delays associated with work package problems.
2. Industrial Health practices and conditions are periodically evaluated using established metrics and industrial hygiene data analysis; and the results are used to make improvements.
3. Implementation of the Industrial Hygiene Independent Review Panel's recommendations of 2010, to completion by end of FY 2013.
4. Personnel use safe work practices and adhere to safety requirements. This includes adhering to safety briefing requirements, using proper personal protective equipment, ensuring equipment is in a safe condition prior to beginning work, and stop in the face of uncertainty.
5. Effective safety programs with clearly defined policies, procedures and responsibilities are implemented.
6. Personnel are cognitive of and avoid at-risk behaviors and conditions and are proactive in coaching co-workers or correcting conditions when such behaviors or conditions are observed.
7. A safe, orderly working environment is maintained.

c) Emergency Preparedness:

1. Demonstrate an effective improvement program and a sustained management commitment to continuous improvement in the EP program.
2. Conduct a minimum of one field drill a quarter and of those field drills a minimum of two for the year will activate the Facility Emergency Response Organization from their normal duty locations.
3. No later than the end of third quarter FY13, revise the applicable contractor procedures and implement a 365 day frequency for drill (or exercise) participation to demonstrate proficiency of check-listed FERO members in accordance with DOE-0223, RLEP 3.30.
4. Ensure that relevant tank farm and 222-S laboratory operations management supports and coordinates with the emergency preparedness organization by attending the bi-weekly EP/OP drill meeting.
5. In the area of drill participation and tracking: All personnel assigned to the central shift office for shift work will be required to participate annually (365 day frequency) in a Field Drill or ICP Limited Drill. (A Field Drill is the preferred option.) Where an ICP Limited Drill is used for field members (i.e., Radiological Control Technicians) assigned to the central shift office for shift work, supplemental participation in an operational drill (excluding a tabletop drill) will also be performed so emphasis can be placed on field performance.

Section J.4 Performance Evaluation and Measurement Plan (PEMP) FY 2010-2013

Performance Measures for Base Contract Period Effective FY 2010-2013

Summary Table of Performance Based Incentives

PBI No.	Scope	Payment Type	Value of Authorized PBI/Element	Value of On Hold PBI/Element	PBI Due Date
PBI 1.1	Waste Volume Reduction Via 242-A Evaporator	Terminal	\$2,800,000	\$800,000	Various
PBI 1.2	Submittal of SST Integrity Assurance review TPA Change Package	Terminal	\$200,000		8/30/2010
PBI 1.3	Project Upgrades and Life Extension Projects	Straight line	\$2,885,000	\$415,000	9/30/2013
PBI 1.4	222-S Upgrades and Life Extension Projects	Straightline	\$98,000		9/30/2013
PBI 1.5	Construction Management Complex with Shops	Deleted Mod 151			
PBI 1.6	Tank Sampling (Grab and Cores)	Straightline	\$2,820,000		9/30/2013
PBI 1.7	Tank Chemistry Control	Straightline	\$1,750,000		9/30/2013
PBI 1.8	SmartPlant Foundation Implementation	Straightline	\$500,000		9/30/2013
PBI 1.9	Increased Rated Maximum Tank Level AP-101 and AP105	Straightline	\$800,000		9/30/2013
PBI 1.10	AY-102 Recovery Actions	Terminal	\$700,000	\$100,000	9/30/2013
PBI 1.11	Side Wall Core Sample of Tank 241-A-106	Terminal		\$500,000	9/30/2013
PBI 1.12	AN Farm Readiness - Drain SN-264 Line of waste	Straightline	\$150,000		9/30/2013
PBI 1.13	C-107 Dome Core Analysis	Terminal	\$100,000		5/30/2013
PBI 1.14	SST Leak Inventory Assessment of T & TX Farms	Terminal		\$70,000	9/30/2013
PBI 1.15	242-A Documented Safety Analyses Upgrades	Terminal	\$250,000		9/30/2013
PBI 1.16	Perform Hydrostatic Testing of 242-A Slurry Line	Terminal	\$250,000		9/30/2013
PBI 1.17	Simulant Test for Safety Significant Isolation Valves	Terminal	\$150,000		9/30/2013
PBI 2.1	Vadose Zone/Barriers	Terminal	\$7,350,000	\$1,200,000	Various
PBI 2.2	Waste Management C Area Closure	Declining-\$500 per day after 12/2/10(#1,2,3,4)/Straightline	\$2,350,000		Various
PBI 2.3	Remove SX Tank Farm Exhauster Station(Sludge cooler)	Straightline	\$600,000		9/30/2013
PBI 2.4	Complete removal and Shipmnet to final disposition of expired hose-in-hose transfer lines (HIHTL)	Straightline	\$2,380,000		9/30/2013

PBI 2.5	Remove Ductwork and associated equipment associated with SX Farm	Straightline	\$600,000		9/30/2013
PBI 2.6	Completion of Retrieval Operations for Single Shell Tank 241-C-101	Straightline	\$5,500,000		9/30/2013
PBI 2.7	Completion of Retrieval Operations for Single Shell Tank 241-C-102	Straightline	\$2,000,000		9/30/2013
PBI 2.8	Completion of Retrieval Operations for Single Shell Tank 241-C-104	Straightline	\$4,000,000		9/30/2013
PBI 2.9	Completion of Retrieval Operations for Single Shell Tank 241-C-105	Straightline		\$2,000,000	9/30/2013
PBI 2.10.1	Completion of Retrieval Operations for Single Shell Tank 241-C-107	Straightline	\$8,250,000		9/30/2013
PBI 2.11	Completion of Retrieval Operations for Single Shell Tank 241-C-108	Straightline	\$1,600,000		9/30/2013
PBI 2.12	Completion of Retrieval Operations for Single Shell Tank 241-C-109	Straightline	\$1,500,000		9/30/2013
PBI No.	Scope	Payment Type	Value of Authorized PBI/Element	Value of On Hold PBI/Element	PBI Due Date
PBI 2.13	Completion of Retrieval Operations for Single Shell Tank 241-C-110	Straightline	\$1,500,000		9/30/2013
PBI 2.14	Completion of Retrieval Operations for Single Shell Tank 241-C-111	Straightline	\$4,500,000		9/30/2013
PBI 2.15	Completion of Retrieval Operations for Single Shell Tank 241-C-112	Straightline	\$5,000,000		9/30/2013
PBI 2.16	Complete stack extension field installation for POR-008 and turnover to Ops	Straightline	\$800,000		9/30/2013
PBI 2.17	A/AX Farm Retrieval Acceleration and 272-AW Facility Replacement	Straightline	\$1,040,000		9/30/2013
PBI 2.18	Articulating Mast System in 241-C-104	Straightline	\$1,000,000		9/30/2013
PBI 2.20	Replace 241-AN-106 HIHTL	Straightline	\$250,000		9/30/2013
PBI M 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
PBI M 2.1.3	C-104 Retrieval - 50% of Waste Volume, (\$100,000 incremental for each 5% between 25 and 50%)	incremental (MULTI-YEAR)	\$500,000		9/30/2010
PBI M2.8.10	A Retrieval Technology Review and roadmap will be completed and issued	Incremental (Multi-Year)	\$150,000		9/30/2010
PBI M2.8.11	Select two technologies 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

PBI M2.8.12	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 \$200K (MULTI-YEAR)	\$200,000		9/30/2011
PBI M2.8.13	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
PBI 3.1	Complete Submittal of CDR to support CD-1 for Interim IHSF (released Mod 151)	Straightline	\$350,000		9/30/2013
PBI 3.2	Complete Submittal of Prelim Design Doc. to support CD-2 for Interim IHSF	Deleted Mod 176			
PBI 3.3	Complete Submittal of CDR documentation to support CD-1 for Secondary waste	Straightline	\$350,000		9/30/2013
PBI 3.4	Complete Submittal of Prelim Design Doc. to support CD-2 for Secondary Waste Treatment Project	Deleted Mod 176			
PBI 3.5	AW-103 Feed Delivery System Design	Deleted Mod 167			
PBI 3.6	AZ-101 Feed Delivery System Design	Deleted Mod 176			
PBI No.	Scope	Payment Type	Value of Authorized PBI/Element	Value of On Hold PBI/Element	PBI Due Date
PBI 3.7	AY-102 Feed Delivery System Design	Deleted Mod ____			
PBI 3.8	AY/AZ Farm Infrastructure Design	Straightline	\$100,000		9/30/2013
PBI 3.9	AY/AZ Ventilation System Upgrade Design	Straightline	\$100,000		9/30/2013
PBI 3.10	SY Farm Infrastructure Design	Deleted Mod 167			
PBI 3.11	AW Farm Infrastructure Design	Straightline	\$125,000		9/30/2013
PBI 3.12	AP Farm Infrastructure Design	Deleted Mod 167			
PBI 3.13	Modeling and Planning to Establish RPP Technical Baseline	Terminal	\$1,650,000		Various
PBI 3.14	Issuance of the first Tank Waste Characterization Report	Straightline	\$250,000		9/30/2013
PBI 3.15	Data Quality Objective for Strategic Plan	Straightline	\$250,000		9/30/2013
PBI 3.16	Best Basis Database Management	Terminal	\$750,000	\$50,000	Various
PBI 3.17	Waste Treatment Plant Operational Readiness Evaluation	Terminal	\$1,000,000		Various
PBI 3.18	Complete Submittal of Documentation to Support Critical Decision 0 (CD-0) for the Supplemental Treatment Project	Straightline	\$300,000		9/30/2013

PBI 3.19	Submittal of Conceptual Design Report to Support Critical Decision 1 (CD-1) for the Supplemental Treatment Project	Straightline	\$750,000		9/30/2013
PBI 3.20	Develop preliminary flowsheets for Waste Feed Delivery, SST Retrieval and Supplemental Treatment	Terminal	\$127,500		9/30/2010
PBI 3.21	Complete Phase 1 of Life-cycle Cost Model Development	Terminal	\$67,500		9/30/2010
PBI 3.22	Document speciation of aluminum in saltcake and sludges in SST and DSTs not retrieved	Terminal	\$48,000		9/30/2010
PBI 3.23	Integrated Sample Analysis Plan for FY11	Terminal	\$41,500		9/30/2012
PBI 3.24	Revised RPP Mission Analysis Rpt	Terminal	\$37,500		9/30/2010
PBI 3.25	Submit Integrated Waste Feed Delivery Plan (IWFDP) Update	Terminal	\$150,000		9/30/2012
PBI 3.26	One System DNFSB 2010-2 Implementation	Terminal	\$400,000	\$700,000	9/30/2013
PBI 3.33	Mixing & Sampling Implementation Plan for DNFSB 2010-2	Straight-line	\$200,000		9/30/2013
PBI 3.35	Complete Pretreatment Engineering Platform Relocation	Terminal	\$200,000		9/30/2012
PBI 4.1	Supplemental Immobilization Project	Terminal	\$500,000		9/30/2013
ARRA					
PBI No.	Scope	Payment Type	Value of Authorized PBI/Element	Value of On Hold PBI/Element	PBI Due Date
PBI-7.1.1	Provide Quarterly Status Reports	8	\$869,649		
PBI-7.2.1.1.	Facility/Structure Upgrades	10	\$1,565,390		
PBI-7.2.1.2	System Upgrades	21	\$3,600,408		
PBI No.	Scope	Payment Type	Value of Authorized PBI/Element	Value of On Hold PBI/Element	PBI Due Date
PBI-7.2.1.3	Equipment/inst/Upgrades/Spares	384	\$3,913,344		
PBI-7.2.1.4	D & D	47	\$1,095,899		
PBI-7.2.1.5	System Demonstrations	6	\$2,817,696		
PBI-7.2.1.6	SY Transfer Line Replacements (8 lines)	8	\$1,200,000		
PBI-7.2.1.7	AZ Condensate Line Install	1	\$699,053		
PBI-7.2.1.8	Drawing Reconstitution	2,171	\$939,218		
PBI-7.2.1.9	Waste Feed Prep and proj.closeout	660	\$692,340		
PBI 7.3.1	AW-104 Corrosion Probe Design, Fabricate, install probe	1	\$253,000		
PBI -7.4.1	Complete Construction of Barrier	1	\$500,000		
PBI 7.4.2	Complete Construction of TY Farm Basin	1	\$200,000		

PBI 7.5.1	Proof of principal Testing of Mobile Arm Retrieval System Testing (MARS)	1	\$395,000		
PBI 7.5.2	Complete Testing of MARS Vacuum System	1	\$500,000		
PBI 7.6.1	AP Cathodic Protection Complete System Plan	1	\$248,000		

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.

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-1.2 CLIN 1 Submittal of the SST Integrity Assurance Review Tri-Party Agreement Change Package to Office of River Protection

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

Fee Structure: Terminal Method

Desired Endpoint/Outcome

The Office of River Protection desires to negotiate achievable milestones to implement Single-Shell Tank (SST) integrity recommendations provided by the SST Integrity Expert Panel. Timely implementation of these recommendations will improve the safe management of the SSTs until the waste can be retrieved and transferred to safer Double-Shell Tanks (DST). Submittal of these Tri-Party Agreement change packages fulfills a required regulatory milestone.

Fee Bearing Milestones

1. Prepare a Tri-Party Agreement Change Package per TPA milestone M-045-91 and submit to the Office of River Protection (ORP) based on the report for the Single-Shell Tank (SST) enforceable IA-4 integrity assurance review within 60 days of the SST Integrity Assurance Review Report issuance and no later than August 30, 2010. . The Contractor shall earn \$200,000 of incremental fee upon completion of work scope.

Work Scope/Completion Criteria: Tri-Party Agreement Change Package with interim milestones prepared and submitted to the ORP in accordance with TPA milestone M-045-91.

Completion Document: Letter transmitting Tri-Party Agreement Change Package to the ORP.

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

Performance Fee value is established at \$2,885,000. \$2,470,000 of the total base period fee pool has been allocated to this PBI and \$415,000 is not allocated and is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee.

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	\$ 150,000	Straight-Line	\$ 150,000	\$0
2	\$ 150,000	Straight-Line	\$ 150,000	\$0
3	\$ 300,000	Straight-Line	\$ 300,000	\$
4	\$1,635,000	Straight-Line	\$1,560,000	\$75,000
5	\$ 350,000	Straight-Line	\$ 310,000	\$40,000
6	\$ 300,000	Straight-Line	\$ 0	\$300,000
Total	\$2,885,000		\$2,470,000	\$415,000

Deleted: 0

Deleted: 0

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 three (3) systems in support of 242-A Evaporator Upgrades and Life Extension Projects. The Contractor shall earn \$50,000 of incremental fee upon completion of each system replaced (total of \$150,000 of incremental fee is available to be earned).

Work scope/completion criteria: Replace three (3) systems in support of the 242-A Evaporator upgrades and life extension projects. (1.Reboiler Condensate Piping System, 2. Manual Flush Valve, 3. DELETED (Mod 208), 4. DELETED (Mod 208), 5. Sanitary Drain Upgrades, 6. DELETED (Mod 208), and 7. DELETED (Mod 208).

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 three 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.

Work scope/completion criteria: Complete three DST upgrades: 1.) AY-101 ENRAFDensitometer, 2.) AZ-101 ENRAF Densitometer, 3.) DELETED Mod 208, 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 1 UT examination report 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 \$1,560,000 of incremental fee is available and a total of \$75,000 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 16 pipes and pit coating inspections by a qualified National Association of Corrosion Engineering qualified inspector of 19 pits (fee on 4 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 \$310,000 of incremental fee is available and a total of \$40,000 of incremental fee is not available to be earned).

Work scope/completion criteria: Perform transfer line encasement pressure checks of 16 transfer lines and pit coating inspections of 19 pits (fee on 4 pit coating is not available to be earned).

Deleted:

Deleted:

Deleted: r

Deleted:

Deleted:

Deleted: .

Deleted:

Deleted:

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.

Deleted:
Deleted: e
Deleted: .

6. Complete twelve (12) SST video assessments. The Contractor shall earn \$300,000 of incremental fee upon completion of the video assessments. (Fee for this milestone is not available to be earned.)

Deleted:
Deleted: t

Work scope/completion criteria: Perform twelve (12) SST video assessments and update RPP-RPT-50799, *Suspect Water Intrusion in Hanford Single-Shell Tanks* and transmit to the ORP.

Deleted:
Deleted: .

Completion Document: Letter transmitting performance expectation completion notice and update to RPP-RPT-50799 report with the twelve (12) SST video assessments.

Deleted:
Deleted: .

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.

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-1.5 CLIN 1 Construction Management Complex with
Shops**

PBI DELETED IN MOD 151

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

Performance Fee value is established at \$2,820,000. \$2,820,000 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.

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	\$2,100,000	Straight-Line	\$2,100,000	\$0
2	\$ 720,000	Straight-Line	\$ 720,000	\$0
Total	\$2,820,000		\$2,820,000	\$0

Deleted: 0

Deleted: 0

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 28 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 \$2,100,000 of incremental fee is available to be earned).

Deleted:

Deleted:

Deleted: .

Work scope/completion criteria: Completion of 28 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 sample 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).

Deleted:

Deleted:

Deleted:

Deleted: s

Deleted: p

Deleted:

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. For PBI milestones PBI-1.6.1.26 through PBI-1.6.1.28 completion document is: Letter transmitting performance expectation completion notice, copy of the chain of custody (COC), and copy of the Sampling Data sheet. These items document completion of the grab sample and transfer of ownership to the laboratory.

Deleted:

Deleted:

Deleted: n

Deleted:

Deleted: .

2. Complete 6 core or off-riser samples in support of the TOC mission. The Contractor shall earn \$120,000 of incremental fee upon completion of the each core or off-riser sample (total of \$720,000 of incremental fee is available to be earned).

Deleted:

Deleted:

Work scope/completion criteria: Completion of 6 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.

Deleted:

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.

Deleted:

PBI-1.7 CLIN 1 Tank Chemistry Control

Performance Fee value is established at \$1,750,000. \$1,750,000 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.

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	\$ 700,000	Straight-Line	\$ 700,000	\$0
2	\$ 500,000	Straight-Line	\$ 500,000	\$0
3	\$ 150,000	Straight-Line	\$ 150,000	\$0
4	\$ 100,000	Straight-Line	\$ 100,000	\$0
5	\$ 50,000	Straight-Line	\$ 50,000	\$0
6	\$ 50,000	Straight-Line	\$ 50,000	\$0
7	\$ 200,000	Straight-Line	\$ 200,000	\$0
Total	\$1,750,000		\$1,750,000	\$0

Desired Endpoint/Outcome

The maintenance of Double-Shell Tank (DST) integrity is crucial to cost-effective completion of the tank waste cleanup mission. The Contractor shall:

- maintain tank chemistry per Operations Specifications Documents to ensure long term integrity of tanks
- confirm data obtained from active portions of the corrosion probe and gain better understanding of actual corrosion and corrosion mechanisms within the double-shell tanks (DSTs)
- Obtain better understanding of the corrosion potential of the waste.
- Perform analyses of dynamic mixing, benchmark analysis, and ventilation flow modeling.

Fee-Bearing Milestones

1. Remove and replace corrosion probe coupons for three DST corrosion probes. The Contractor shall earn \$300,000 of incremental fee upon completion of the first each set of coupons removed and replaced (as required) to support the TOC mission, and \$200,000 for the remaining two sets of coupons replaced (total of \$700,000 of incremental fee is available to be earned). Note that replacement will only occur if required to support the Tank Operations Contract (TOC) mission.

Work scope/completion criteria: Removal and replacement (as required) of corrosion probe coupons.

Completion Document: Letter transmitting performance expectation completion notice and completed chain of custody form documenting receipt of the coupon(s) at the laboratory.

2. Remove corrosion probe coupon from tank AN-107 corrosion probe. Note: The AN-107 corrosion probe is thought to have failed and potentially contains waste within the corrosion probe. Special precautions will be required during removal to ensure worker safety. The Contractor shall earn \$500,000 of incremental fee upon completion of coupon removed.

Work scope/completion criteria: Removal of corrosion coupon.

Completion Document: Letter transmitting performance expectation completion notice and completed chain of custody form documenting receipt of the coupon(s) at the laboratory.

3. Design, fabricate, and install corrosion probe in AW-105. The Contractor shall earn \$150,000 of incremental fee each upon completion of the work scope.

Work scope/completion criteria: Design, fabricate, and install corrosion probe in AW-105.

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

4. Perform dynamic mixing analysis on AN-106 and AY-102. The Contractor shall earn \$50,000 of incremental fee upon completion of each report (total \$100,000 available of incremental fee).

Work scope/completion criteria: Perform dynamic mixing analysis on AN-106 and AY-102.

Completion Document: Letter transmitting performance expectation completion notice and dynamic mixing analysis report.

5. Perform ventilation flow modeling study on AZ-702. The Contractor shall earn \$50,000 of incremental fee upon completion of the study.

Work scope/completion criteria: Perform ventilation flow modeling study on AZ-702.

Completion Document: Letter transmitting performance expectation completion notice and the ventilation flow modeling report.

6. Perform dynamic mixing model benchmark analysis. The Contractor shall earn \$50,000 of incremental fee each upon completion of the work scope.

Work scope/completion criteria: Perform dynamic mixing model benchmark analysis and prepare report.

Completion Document: Letter transmitting performance expectation completion notice and the dynamic mixing model benchmark analysis study.

7. Perform slow strain rate (SSR) laboratory testing and prepare testing report. The Contractor shall earn \$200,000 of incremental fee each upon completion of the work scope.

Work scope/completion criteria: Perform SSR laboratory testing and prepare report.

Tank Operations Contract
| *Contract No. DE-AC27-08RV14800*

Section J
Modification No. 208

Completion Document: Letter transmitting performance expectation completion notice and the SSR laboratory testing report to the ORP.

PBI-1.8 CLIN 1 Smart-Plant Foundation Implementation

Performance Fee value is established at \$500,000. \$500,000 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.

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	\$100,000	Straight-Line	\$100,000	\$0
2	\$100,000	Straight-Line	\$100,000	\$0
3	\$300,000	Straight-Line	\$300,000	\$0
Total	\$500,000		\$500,000	\$0

Desired Endpoint/Outcome

Control of the configuration of structures, systems, and components (SSC) is essential to the safe, efficient management of the Hanford Tank Farms prior to and during tank waste treatment. This control requires the ability to readily identify the components of a given system or structure and the associated drawings and documents impacted by a change to the SSC. Identification of these impacts is difficult and inefficient with the systems in use in Tank Farms today, which contain information in separate disconnected systems. To resolve these issues, the TOC is implementing an integrated engineering information, document control, and configuration management system, based on the Smart-Plant Foundation enterprise engineering information management system. Site licenses for Smart-Plant Foundation have been procured to allow use of the software by both TOC and WTP. Software configuration and development will be completed to provide for the specific functionality required by the TOC for document and engineering information management and workflows for electronic creation, review, and approval of key work products.

Fee-Bearing Milestones

1. Completion of Factory Acceptance Testing of the Smart-Plant Foundation engineering information management system with specific features for integrated document control and configuration management for the Tank Operations Contract (TOC). The Contractor shall earn \$100,000 of incremental fee upon completion of the work scope.

Work scope/completion criteria: Factory Acceptance Testing (FAT) of the Smart-Plant Foundation engineering information management system shall be conducted at the software vendor's facilities in accordance with the System Test Plan. Testing shall demonstrate key functionality of the system including resolution of trouble reports and specific identified change requests from prior testing activities including testing revised functionality for interfacing with the Integrated Document Management System and for incorporation of vendor submittal work processes. Any new issues identified during testing shall be logged and prioritized for need to

resolve prior to Site Acceptance Testing and documented in a revision to the Smart-Plant Foundation Factory Acceptance Test Report.

Completion Document: Issued Smart-Plant Foundation System Test Plan, Requirements Traceability Matrix, and Factory Acceptance Test Report/s.

2. Completion of Site Acceptance Testing of the Smart-Plant Foundation engineering information management system with specific features for integrated document control and configuration management for the TOC. The Contractor shall earn \$100,000 of incremental fee upon completion of the work scope.

Work scope/completion criteria: Site Acceptance Testing (SAT) of the Smart-Plant Foundation engineering information management system shall be conducted with the software installed on the test server on the Hanford Local Area Network. Testing shall be in accordance with a documented System Test Plan/s. Testing shall demonstrate full functionality of the system in accordance with the test plan including resolution of trouble reports and specific identified change requests and will also test interfaces with existing Hanford Site systems that could not be fully tested at the software vendor's facilities. Any issues identified during testing shall be logged and prioritized for need to resolve prior to placing the software into production and documented in a Site Acceptance Test Report.

Completion Document: Issued Smart-Plant Foundation System Test Plan/s, Requirements Traceability Matrix, and Site Acceptance Test Report/s.

3. Implementation of the Smart-Plant Foundation engineering information management system as the integrated document control and configuration management system for the TOC. The Contractor shall earn \$300,000 of incremental fee upon completion of the work scope.

Work scope/completion criteria: The Smart-Plant Foundation engineering information management system will be configured and installed on the Hanford Local Area Network providing an integrated document control and configuration management system for TOC. The installed software shall include resolutions for any issues identified from SAT as needed for production deployment. The system will contain key data for installed equipment for TOC facilities based on the current master equipment list in the maintenance management system. The system will also contain TOC documents and associated files based on information in the current document control system. The deployed system will include workflows to facilitate electronic review and approval of documents for the key engineering work processes as defined in the Smart-Plant Foundation Functional Design Requirements Document, enabling critical relationships to be established and maintained between SSCs and related documents. Any issues identified as critical deficiencies in the Site Acceptance Test report shall be demonstrated to be resolved prior to declaring the software ready for production. The Version Description Document (VDD) in the Hanford Information System Inventory (HISI) shall be completed with reference to final documentation for the software and approval of the VDD by Quality Assurance, Chief Information Officer, and the Hanford Production Readiness Review Board (PRRB). Completion will be indicated by identification of the system status as operational in HISI.

Completion Document: Letter transmitting the performance expectation completion notice and copy of the printable view from HISI showing the system status as operational and providing the

approved Version Description Document indicating completion of and referencing required software quality assurance documents.

PBI-1.9 CLIN 1 Increase Rated Maximum Tank Level AP-101 and AP-105

Performance Fee value is established at \$800,000. \$800,000 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	\$400,000	Straight-Line	\$400,000	\$0
2	\$400,000	Straight-Line	\$400,000	\$0
Total	\$800,000		\$800,000	\$0

Desired Endpoint/Outcome

Increase the fill height in the AP farm tanks will provide the double shell tank space needed to support future single-shell tank retrievals.

Fee Bearing Milestones

1. Complete work to increase the rated maximum tank level in DST AP-101. The Contractor shall earn \$400,000 of incremental fee upon completion.

Work scope/completion criteria: Complete work to increase the rated maximum tank level in AP-101 in accordance with applicable requirements in RPP-19438, "Report of Expert Panel Workshop for Hanford Site Double-Shell Tank Waste Increase." The following identifies the work necessary to complete this evolution:

- a. Issue a Process Control Plan which provides direction to Operations during level rise activity in DST AP-101.
- b. Revise the Operating Specification Document to allow increase in operating limit for DST AP-101.
- c. Issue a technical operating procedure to perform level rise of DST AP-101.
- d. Perform the necessary transfer into and out of DST AP-101.

Completion document: Letter transmitting the Performance Expectation Completion Notice and completed Final Material Balance datasheets documenting the level rise test was successfully completed to increase the maximum level rating in DST AP-101.

2. Complete work to increase the rated maximum tank level in DST AP-105. The Contractor shall earn \$400,000 of incremental fee upon completion.

Work scope/completion criteria: Complete work to increase the rated maximum tank level in AP-105 in accordance with applicable requirements in RPP-19438, "Report of Expert Panel Workshop for Hanford Site Double-Shell Tank Waste Increase." The following identifies the work necessary to complete this evolution:

- a. Issue a Process Control Plan which provides direction to Operations during level rise activity in DST AP-105.
- b. Revise the Operating Specification Document to allow increase in operating limit for DST AP-105.
- c. Issue a technical operating procedure to perform level rise of DST AP-105.
- d. Perform the necessary transfer into and out of DST AP-105.

Completion document: Letter transmitting the Performance Expectation Completion Notice and completed Final Material Balance datasheets documenting the level rise test was successfully completed to increase the maximum level rating in DST AP-105.

PBI-1.10 CLIN 1 AY-102 Recovery Action

Performance Fee value is established at \$800,000. \$700,000 of the total base period fee pool has been allocated to this PBI and is available to be earned. \$100,000 is not allocated and is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee.

Fee Structure: Terminal 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	\$200,000	Terminal	\$100,000	\$100,000
2	\$600,000	Terminal	\$600,000	\$
Total	\$800,000		\$700,000	\$100,000

Desired Endpoint/Outcome

AY-102 recovery actions will provide component and procedures to: allow compliant pumping of AY-102 annulus to primary; maintain headspace isolation between annulus and primary; provide compliant capability to pump AY-102 primary; and provide 100 percent visual observation of six double-shell tank (DST) annulus spaces.

Fee-Bearing Milestones

1. Perform annulus video inspections under Riser 83, AY-102. Engineering will evaluate videos for change and issue results to the ORP on a quarterly basis (for fiscal year quarter 3 and 4). The Contractor shall earn \$100,000 upon completion of each quarterly submittal for total available fee of \$200,000 (total \$100,000 of incremental fee is available to be earned and a total of \$100,000 is not available to be earned).

Work scope/completion criteria: Commencing April 2013 through September 30, 2013, perform annulus video inspections under Riser 83, AY-102. Engineering will evaluate videos for change. Results will be emailed to the ORP point of contact on a monthly basis.

Completion Document: On a quarterly basis, transmit letter with performance expectation completion notice and copies of the monthly Engineering evaluations emailed to the ORP point of contact.

2. Design, fabricate, and install rigid jumpers to allow in parallel pumping of annulus space to primary tank and pumping of primary tank to DST system. The Contractor shall earn \$600,000 of incremental fee upon completion workscope.

Work scope/completion criteria: Design, fabricate, and install rigid jumpers to allow in parallel pumping of annulus space to primary tank and pumping of primary tank to DST system. Obtain receipt of fabricated components on site and work document(s) used in field will be approved through Field Work Supervisor (FWS).

Deleted: s

Deleted:

Deleted:

Deleted:)

Deleted: 0

Deleted: 0

Deleted: 0

Deleted: e

Deleted:

Deleted:

Deleted:

Deleted: .

Deleted:

Deleted: s

Deleted: l

Deleted:

Deleted: .

Deleted:

Deleted: .

Deleted:

Deleted: .

Deleted:

Deleted:

Deleted:

Deleted:

Deleted: n

Deleted:

Completion Document: Letter transmitting the performance expectation completion notice and work package signature page(s) approved through FWS installation acceptance, as well as copy(s) of the acceptance tags (green tags) for the jumpers.

Deleted:
Deleted:
Deleted: .

PBI-1.11 CLIN 1 Side Wall Concrete Core Sample of Single Shell Tank 241-A-10

Deleted: 6

Performance Fee value is established at \$500,000. \$0 of the total base period fee pool has been allocated to this PBI and is available to be earned. \$500,000 is not allocated and is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee.

Deleted: s

Deleted:

Deleted: .

Fee Structure: Terminal 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	\$500,000	Terminal	\$0	\$500,000
Total	\$500,000		\$0	\$500,000

Desired Endpoint/Outcome

Obtain a core sample of the concrete tank wall in Single-Shell Tank (SST) 241-A-106 to enhance the SST Integrity Program and RPP-RPT-43116, *Expert Panel Report for Hanford site Single-Shell Tank Integrity Project*, confirm tank structural integrity, assess the likelihood of future tank liner degradation, leak identification and prevention, and mitigation of contaminant migration.

Deleted:

Deleted:

Deleted:

Deleted: t

Fee-Bearing Milestones

1. Obtain side wall core sample at 241-A-106. The Contractor shall earn \$500,000 of incremental fee upon completion of the work scope. (Fee for this milestone is not available to be earned.)

Deleted:

Deleted: e

Work scope/completion criteria: Obtain a core sample(s) of the concrete wall in tank 241-A-106.

Deleted: .

Completion Document: Letter transmitting the performance expectation completion notice and copy of the work package signature page documenting 241-A-106 side wall core sample(s) obtained. Chain of Custody documentation showing the number, size, and location of sample shall also be required to ensure that samples have been taken from the tank wall are sufficient to be used for testing identified in RPP-PLAN-50181, Sidewall Coring Sampling and Analysis Plan (SAP).

Deleted:

Deleted:

Deleted: s

Deleted:

Deleted:

PBI-1.12 CLIN 1 AN Farm Process Readiness

Deleted:

Performance Fee value is established at \$150,000.

Deleted:

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

Deleted:)

Milestone	Fee Value	Method	Amount allocated and available to be earned	Amount not allocated and not available to be earned
1	\$150,000	Straight-Line	\$150,000	\$0
Total	\$150,000		\$150,000	\$0

Desired Endpoint/Outcome

The AN Farm is one of the main support farms for retrieval and success in all retrievals is highly dependent on the AN farm being fully functional. Additionally the Farm has planned capital and infrastructure upgrades planned in the near future. To support the retrieval and follow on WTP mission the farms must be in a state of readiness. Currently the farms have areas of improvement that will either reduce the risk of issues associated with maintaining the farms by increasing the farms ability to make a repeatable process and decrease legacy issues associated with failed or aging equipment. The desired outcome is to place the farm in a state that is ready to allow major upgrades and operational activities while minimizing any impacts associated with legacy equipment, labels, infrastructure, or housekeeping items.

Deleted:
 Deleted:
 Deleted:
 Deleted:
 Deleted: y
 Deleted:
 Deleted: e
 Deleted:

Fee-Bearing Milestones

1. Drain SN-264 line of waste containing material. The Contractor shall earn \$150,000 of incremental fee for completion of line draining.

Deleted:
 Deleted: .

Work scope/completion criteria: During the 241-AN-A valve pit upgrade work performed in June 2011, liquid tank waste was observed inside of the vertical Nozzle 15 which is the high point of transfer line SN-264. Transfer line SN-264 is a 3-inch line which begins at the 241-AN-A valve pit and terminates at the 241-AN-04A central pump pit. There is a process blank installed on the low point of the line in the 241-AN-04A central pump pit preventing liquid from draining into 241-AN-104 Double-Shell Tank. SN-264 is a noncompliant deferred use transfer line and the discovery of liquid in this line proposes additional risks to the transfer line itself for future uses. Draining of SN-264 will decrease risk associated with future potential uses of this transfer line in support transfers to WTP.

Deleted:
 Deleted:
 Deleted:
 Deleted:
 Deleted: o
 Deleted: e
 Deleted:
 Deleted: .

Completion Document: Letter to ORP transmitting the performance expectation completion notice and copy of the completed work package demonstrating drainage of SN-264 line.

Deleted:
 Deleted:

PBI-1.13 CLIN 1 C-107 Dome Core Analysis

Performance Fee value is established at \$100,000. \$100,000 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.

Fee Structure: Terminal Method (May 30, 2013)

Milestone	Fee Value	Method	Amount allocated and available to be earned	Amount not allocated and not available to be earned
1	\$100,000	Terminal	\$100,000	\$0
Total	\$100,000		\$100,000	\$0

Desired Endpoint/Outcome

Obtain concrete and rebar samples from the dome plug of Tank C-107, document results and interpretation of testing, and analysis for successful completion of TPA Target Date M-045-91D-T01.

Fee-Bearing Milestones

1. In completion of TPA Milestone M-045-91D-T01, transmit to the ORP a report containing the results and interpretation of testing, and analysis, performed on the concrete dome and rebar samples obtained from Tank C-107's dome plug. The Contractor shall earn \$100,000 of incremental fee upon completion of the work scope.

Work scope/completion criteria: Obtain concrete and rebar samples from Tank C-107's dome and transmit report containing the results and interpretation of testing and analysis to the ORP.

Completion Document: Letter transmitting the performance expectation completion notice and report containing the results and interpretation of testing and analysis, performed on the concrete and rebar samples obtained from Tank C-107's plug in order to complete the TPA Target date for M-045-91D-T01.

PBI-1.14 CLIN 1 Single Shell Tank Leak Inventory Assessment of T and TX Farm

Deleted:
 Deleted: s

Performance Fee value is established at \$70,000. \$0 of the total base period fee pool has been allocated to this PBI and is available to be earned. \$70,000 is not allocated and is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee.

Deleted: s
 Deleted:
 Deleted: .
 Deleted:)

Fee Structure: Terminal Method (09/30/13)

Milestone	Fee Value	Method	Amount allocated and available to be earned	Amount not allocated and not available to be earned
1	\$70,000	Terminal	\$0	\$70,000
Total	\$70,000		\$0	\$70,000

Desired Endpoint/Outcome

Deleted: e

Perform single-shell tank (SST) leak inventory assessment of T and TX farms in support of completion of TPA Milestone M-045-91F-T04.

Deleted:
 Deleted: .

Fee-Bearing Milestones

- In support of completion TPA Milestone M-045-91F-T04, perform SST leak inventory assessment of T and TX farms. The Contractor shall earn \$70,000 of incremental fee upon completion of the work scope. (Fee for this milestone is not available to be earned.)

Deleted:
 Deleted:
 Deleted:)

Work scope/completion criteria: Perform SST leak inventory assessment of T and TX farms in accordance with an interagency assessment process as described in RPP-32681, *Process to Assess Tank Farm Leaks in Support of Retrieval and Closure Planning*, Section 4.0. The report will include identification and evaluation of leak locations and leak causes (including chemistry stress corrosion cracking – SCC) for the T and TX farms tanks.

Deleted: n
 Deleted:
 Deleted:
 Deleted:
 Deleted:

Completion Document: Letter transmitting the performance expectation completion notice and SST leak inventory assessment of T and TX report to the ORP.

Deleted:
 Deleted: .

PBI-1.15 CLIN 1 242-A Documented Safety Analyses Upgrades

Deleted:

Performance Fee value is established at \$250,000. \$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.

Deleted:

Deleted: t

Deleted:

Deleted:)

Fee Structure: Terminal 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	\$250,000	Terminal	\$250,000	\$0
Total	\$250,000		\$250,000	\$0

Desired Endpoint/Outcome

Complete hardware upgrades required to implement new accident controls as driven by an update to the 242-A Facility Documented Safety Analyses (HNF-14755) in accordance with DOE-STD-3009.

Deleted:

Deleted:

Deleted:

Fee Bearing Milestones

1. Complete install of hardware upgrades for the 242-A Documented Safety Analyses Upgrades project. The Contractor shall earn \$250,000 of incremental fee upon completion of installation.

Deleted:

Deleted:

Work scope/completion criteria: Complete install of hardware upgrades for the 242-A Documented Safety Analyses Upgrades project.

Deleted:

Deleted:

Completion Document: Letter transmitting performance expectation completion notice and a copy of the Field Work Supervisor work package signature page indicating installation completion for Installation Work Package(s).

Deleted:

Deleted:

Deleted: .

PBI-1.16 CLIN 1 Perform Hydrostatic Testing of 242-A Evaporator Slurry Line SL-167 to Support 242-A FY 2013 Campaigns

Deleted:

Deleted:

Performance Fee value is established at \$250,000. \$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.

Deleted:

Deleted:

Fee Structure: Terminal 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	\$250,000	Terminal	\$250,000	\$0
Total	\$250,000		\$250,000	\$0

Desired Endpoint/Outcome

Plan and execute the removal and replacement of the B-3 pump and the 3-D diaphragm operated valve jumpers within the AW-02E pit.

Deleted:

Deleted:

Fee-Bearing Milestones

- Complete the removal and replacement of the B-3 Pump and 3-D jumpers in the AW-02E pit. The Contractor shall earn \$250,000 of incremental fee upon completion of the work scope.

Deleted:

Deleted:

Deleted:

Work scope/completion criteria: Plan and execute the removal and replacement of the B-3 pump and the 3-D diaphragm operated valve jumpers within the AW-02E pit.

Deleted:

Completion Document: Letter transmitting the completion of the jumper replacements within the AW-02E pit and a copy of the Field Work Supervisor work package signature page approved through installation of replacements.

Deleted: ¶

Deleted:

Deleted:

PBI-1.17 CLIN 1 Simulant Test for Safety Significant Double Isolation Valves

Deleted:

Performance Fee value is established at \$150,000. \$150,000 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; this does not prohibit the Contractor from performing and completing workscope identified in the PEMP having the potential to earn fee.

Deleted:

Deleted:

Deleted:

Fee Structure: Terminal 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	\$150,000	Terminal	\$150,000	\$0
Total	\$150,000		\$150,000	\$0

Desired Endpoint/Outcome

Plan and execute leakage testing of a representative sample of the safety-significant isolation valves used for Double Valve Isolation (DVI) in an environment simulating the abrasive characteristics of the Hanford Tank Farm Waste Transfer System. The testing will execute the scope of work as defined in RPP-PLAN-44556, *Simulant Test Plan for Safety Significant Isolation Valves for Double Valve Isolation* and is required to address the Documented Safety Analysis (DSA) "Design/Operational Improvement 2" commitment (DSA Section 3.3.2.3.5).

Deleted:

Deleted:

Deleted:

Deleted:

Fee-Bearing Milestones

1. Issue testing results of Safety Significant Double Valve Isolation tests and recommended service life of the individual DVIs based upon valve manufacturer and seating materials. The Contractor shall earn \$150,000 of incremental fee upon completion of the work scope.

Deleted:

Work scope/completion criteria: Issuance of a report documenting the results of the Safety Significant Double Valve Isolation tests.

Deleted:

Completion Document: Letter transmitting the performance expectation completion notice and issued report.

Deleted:

PBI-2.1 CLIN 2 Vadose Zone/Barriers

Performance Fee value is established at \$8,550,000. \$7,350,000 of the total base period fee pool has been allocated to this PBI and is available to be earned. \$1,200,000 is not allocated and is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee.

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	\$ 400,000	Terminal	\$ 400,000	\$0
5 Deleted (Mod 151)	\$ 0		\$ 0	\$0
6 Deleted (Mod 176)	\$ 0		\$ 0	\$0
7	\$2,200,000	Terminal	\$2,200,000	\$0
8	\$1,000,000	Terminal	\$1,000,000	\$0
9	\$ 300,000	Terminal	\$ 300,000	\$0
10 Deleted (Mod <u>208</u>)	\$0		\$ 0	\$0
11	\$ 200,000	Terminal	\$ 200,000	\$0
12	\$ 150,000	Terminal	\$ 150,000	\$0
13	\$ 400,000	Terminal	\$ 400,000	\$0
14	\$ 150,000	Terminal	\$ 0	\$ 150,000
15	\$ 350,000	Terminal	\$ 0	\$ 350,000
16	\$ 400,000	Terminal	\$ 0	\$ 400,000
17	\$ 300,000	Terminal	\$ 0	\$ 300,000
Total	\$8,550,000		\$7,350,000	\$1,200,000

Desired Endpoint/Outcome

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

Interim Measures/Barriers: Field work will be completed to allow performance of proof of principle soil desiccation/contaminant removal test at SX tank farm, per a work plan provided as a TPA primary document. Characterization of six high priority sites for possible future interim measures or 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 direct push logging and placement of deep electrodes near the 200- tanks in support of future electrical resistivity work, and 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 two Tank Farm Interim Surface Barriers. The Contractor shall earn \$200,000 of incremental fee upon completion of the SX farm southern barrier design by June 30, 2011, \$200,000 of incremental fee upon completion of the SX farm northern barrier design by June 30, 2012 (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 (HDSCS).

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

5. DELETED (Mod 151)
6. DELETED (Mod 176).
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. DELETED (Mod 208).

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.

13. Implement direct push technology to perform probe hole logging and deep electrode placement in WMA C by September 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, Rev. 2). The Contractor shall earn \$400,000 of incremental fee upon completion.

Deleted:

Deleted:

Deleted:

Work scope/Completion Criteria: Perform direct push to a depth of approximately 200 feet below ground surface (or to refusal, whichever is less), perform probe-hole logging, probe-hole decommissioning, and placement of strings of 2 or more deep electrodes at each of 4 locations

Deleted:

near the 241-C-200 tank as identified in the WMA C work plan. No samples will be obtained at these locations.

Deleted:

Completion document: A letter report will be submitted to the ORP providing direct push probe-hole locations, probe-hole logging results, and depth of each electrode placed for subsequent electrical resistivity measurements.

Deleted:

Deleted:

14. Perform electrical resistivity measurements using deep electrodes, supplemented with surface electrodes and drywells (as appropriate) in WMA C, near the C-200 tanks by September 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, Rev. 2). The Contractor shall earn \$150,000 of incremental fee upon completion. Fee for this milestone is not available to be earned.

Deleted:

Deleted:

Deleted:

Deleted:

Work/scope/completion criteria: Develop an electrical resistivity data collection and analysis plan for the area around the C-200 tanks, which employs the deep electrodes placed near the C-200 tanks. Place additional surface electrodes as needed by the plan, collect data as dictated by the plan. Ensure that the digital data collected is archived for subsequent analysis. (Analysis of the digital data and reporting is planned for fiscal year 2014.)

Deleted:

Deleted:

Deleted:

Completion document: Submit to the ORP the electrical resistivity data collection and analysis plan for the area around the C-200 tanks, and a digital copy of the collected data for subsequent analysis.

Deleted:

Deleted:

15. In support of TPA target milestone M-045-22-T02, perform electrical resistivity measurements using deep electrodes, supplemented with surface electrodes and drywells (as appropriate) in 241-U Farm, as described in the work plan submitted under TPA Milestone M-45-20. The Contractor shall earn \$350,000 of incremental fee upon completion. Fee for this milestone is not available to be earned.

Deleted:

Deleted:

Deleted:

Deleted:

Work/scope/completion criteria: Develop an electrical resistivity field data collection and analysis plan for U farm, which employs the existing deep electrodes in U farm and surface electrodes/drywells as needed. Place additional surface electrodes as dictated by the plan, collect data as dictated by the plan. Ensure that the digital data collected is archived for subsequent analysis. (Analysis of the digital data and reporting is planned for fiscal year 2014.)

Deleted:

Deleted:

Completion document: Submit to the ORP the electrical resistivity data collection and analysis plan for the 241-U tank farm, and a digital copy of the collected data for subsequent analysis.

Deleted:

Deleted:

16. In support of TPA target milestone M-045-22-T01, perform vadose zone direct push characterization in 241-TX farm, as described in the work plan submitted under TPA Milestone M-45-20. The Contractor shall earn \$400,000 of incremental fee upon completion. Fee for this milestone is not available to be earned.

Deleted:

Deleted:

Deleted:

Work scope/completion criteria: Use the hydraulic hammer/direct push technology to perform logging and sampling for 6 locations (of the approximately 12 included in the work plan submitted under TPA Milestone M-45-20). Field work shall include: placement of 6 direct push probes (probes pushed to refusal), geophysical logging of direct push probe holes, obtaining up

Deleted:

Deleted:

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 of additional analysis per the sampling and analysis plan submitted under TPA Milestone M-45-21 is not required for this PBI. (Additional sample analysis and reporting is planned for fiscal year 2014.)

Deleted:

Deleted:

Completion document: Provide to the ORP a letter report documenting completion of direct push probe-holes at 6 locations in TX Farm, logging results, placement of deep electrodes, sample depths, and summary of analytical results for technetium and nitrate, and chain of custody forms for samples.

Deleted:

Deleted:

Deleted:

17. In support of TPA target milestone M-045-22-T03, perform field preparation for desiccation/contaminant removal proof-of-principal testing at 241-SX tank farm. The Contractor shall earn \$300,000 of incremental fee upon completion. Fee for this milestone is not available to be earned.

Deleted:

Work scope/completion criteria: Perform placement of direct push-probe holes to support the testing, as identified in the work plan provided under TPA Milestone M-45-20. Complete the probe-holes as needed to perform the testing. Identify and obtain field test equipment. Develop a detailed field test plan.

Deleted:

Deleted:

Deleted:

Completion document: Provide to the ORP a field test plan, a description of the probe hole locations and configurations, and a description of the field test equipment that will be employed in the desiccation/contaminant removal proof-of-principal testing at 241-SX tank farm.

Deleted:

PBI-2.2 CLIN 2 Waste Management C Area Closure

Performance Fee value is established at \$2,350,000. \$2,350,000 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.

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 Deleted (Mod <u>208</u>)	\$0		\$0	\$0
14 Deleted (Mod 167)	\$0		\$0	\$0
Total	\$2,350,000		\$2,350,000	\$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.

Deleted: ¶

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)
11. Deleted (Mod 151)
12. Deleted (Mod 151)
13. Deleted (Mod 208)
14. Deleted (Mod 167)

Tank Operations Contract
| *Contract No. DE-AC27-08RV14800*

Section J
Modification No. 208

PBI-2.3 CLIN 2 Removal of SX Tank Farm Exhauster Station (Sludge Cooler)

Performance Fee available and assigned to this PBI: \$600,000

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

Milestone	Fee Value
1	\$500,000
2	\$100,000
Total	\$600,000

Desired Endpoint/Outcome

SX Tank Farm Exhauster Station (Sludge Cooler) Removed.

Fee Bearing Milestones

1. Remove SX Tank Farm Exhauster Station (Sludge Cooler). The Contractor shall earn \$500,000 of incremental fee upon completion of work scope.

Work scope/completion criteria: SX Tank Farm Exhauster Station (Sludge Cooler) removed and packaged for disposal.

Completion document: Letter transmitting the work package coversheet documenting completion and acceptance by Operations.

2. Complete shipping of waste package(s) generated by removal of SX Tank Farm Exhauster Station (Sludge Cooler). The Contractor shall earn \$100,000 of incremental fee upon completion of work scope.

Work scope/completion criteria: The waste package(s) generated by the removal activity have been shipped to the appropriate Treatment Storage Disposal (TSD) facility.

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

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 \$2,380,000. \$2,380,000 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.

Deleted:

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	\$1,880,000	Straight-Line	\$1,880,000	\$0
2	\$ 500,000	Straight-Line	\$ 500,000	\$0
Total	\$2,380,000		\$2,380,000	\$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

- Complete removal of the following twenty-two (22) interim stabilization Hose-in-Hose Transfer Lines (HIHTL). The Contractor shall earn \$80,000 for each of the HIHTL removed in incremental fee for the first 16 and \$100,000 of incremental fee for each of the remaining 6 HIHTLs removed. A total of \$1,880,000 of incremental fee is available to be earned.

Deleted:

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)
I-05555-0-1	Outside C-03B	AN-106 (1)
I-05555-0-2	Outside C-03B	AN-106 (2)
I-19643-0-1	POR104	AN-106 P Pit

I-19643-0-3	POR104	AN-106 P Pit
I-68511-0-01	POR104	AN-106 P Pit
I-68511-0-02	POR104	AN-106 P Pit

2. Complete shipping of the following twenty-two (22) HIHTLs. The Contractor shall earn \$20,000 for each of the HIHTL waste shipment in incremental fee for the first 16 and \$30,000 of incremental fee for each of the remaining 6 HIHTLs shipped. A total of \$500,000 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)
I-05555-0-1	Outside C-03B	AN-106 (1)
I-05555-0-2	Outside C-03B	AN-106 (2)
I-19643-0-1	POR104	AN-106 P Pit
I-19643-0-3	POR104	AN-106 P Pit
I-68511-0-01	POR104	AN-106 P Pit
I-68511-0-02	POR104	AN-106 P Pit

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-2.5 CLIN 2 Remove ducting and associated equipment associated with SX Farm

Performance Fee available and assigned to this PBI: \$600,000

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

Milestone	Fee Value
1	\$500,000
2	\$100,000
Total	\$600,000

Desired Endpoint/Outcome

Disconnect, remove, and dispose of the ductwork in SX Tank Farm associated with the following tanks: 241-SX-107, -108, -109, -110, -111, -112, and -114.

Fee Bearing Milestones

1. Remove ductwork associated with SX Exhauster system (from tanks listed above to the Exhauster Vent Station/Sludge Cooler) and package waste for disposal. The Contractor shall earn \$500,000 of incremental fee upon completion of work scope.

Work scope/completion criteria: Ductwork removed and packaged for disposal.

Completion document: Letter transmitting completed work package coversheet documenting completion and acceptance by Operations.

2. Ship waste to appropriate disposal facility based upon characterization of the waste. The Contractor shall earn \$100,000 of incremental fee upon completion of work scope.

Work scope/completion criteria: The waste packages have been shipped to the waste TSD facility.

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

PBI-2.6 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-101

Performance Fee value is established at \$5,500,000. \$5,500,000 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.

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	\$2,000,000	Straight-Line	\$2,000,000	\$0
2	\$1,000,000	Straight-Line	\$1,000,000	\$0
3	\$2,500,000	Straight-Line	\$2,500,000	\$0
Total	\$5,500,000		\$5,500,000	\$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 waste retrieval system construction for Tank 241-C-101 and turnover to operations. The Contractor shall earn \$2,000,000 of incremental fee upon completion of construction of Tank 241-C-101 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 I a, will be completed.

Completion Document: Contractor approved, Construction Completion Document through Section I a, with exceptions listing for completion of Tank 241-C-101 waste retrieval system construction and the ORP FPD/COR's concurrence on the exceptions listing.

2. The Contractor shall earn \$1,000,000 of incremental fee upon completing retrieval of 50% of the Waste by Volume in Tank 241-C-101.

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: Submittal of material balance data and engineering calculations summary information demonstrating retrieval of 50% of the initial waste volume.

3. Complete retrieval of Tank 241-C-101. The Contractor shall earn \$2,500,000 of incremental fee upon completion of Tank 241-C-101 to the limits of the first and second technology that are defined in the approved Tank Waste Retrieval Work Plan.

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 a practicability evaluation in accordance with Appendix B of the Consent Decree and Tri-Party Agreement Modifications for Hanford Tank Waste Treatment or submit a recommendation for a third technology.

PBI-2.7 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-102

Performance Fee value is established at \$2,000,000. \$2,000,000 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.

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	\$2,000,000	Straight-Line	\$2,000,000	\$0
2	Deleted Mod <u>208</u>		\$0	\$0
3	Deleted Mod <u>208</u>	Straight-Line	\$0	\$0
Total	\$2,000,000		\$2,000,000	\$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 waste retrieval system construction for Tank 241-C-102 and turnover to operations. The Contractor shall earn \$2,000,000 of incremental fee upon completion of construction of Tank 241-C-102 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 I a, will be completed.

Completion Document: Contractor approved, Construction Completion Document through Section I a, with exceptions listing for completion of Tank 241-C-102 waste retrieval system construction and the ORP FPD/COR's concurrence on the exceptions listing.

2. Deleted Mod 208.
3. Deleted Mod 208.

PBI-2.8 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-104

Performance Fee value is established at \$4,000,000. \$4,000,000 of the total base period fee pool has been allocated to this PBI and is available to be earned.

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	\$2,500,000	Straight-Line	\$2,500,000	\$0
2	\$1,500,000	Straight-Line	\$1,500,000	\$0
Total	\$4,000,000		\$4,000,000	\$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 bulk retrieval of Tank 241-C-104. The Contractor shall earn \$2,500,000 incremental fee upon completion of bulk retrieval of Tank 241-C-104. 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-2.8.

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

2. Complete heel retrieval of Tank 241-C-104. The Contractor shall earn \$1,500,000 of incremental fee upon completion of Tank 241-C-104 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 a practicality evaluation in accordance with appendix B of the Consent Decree and Tri-Party Agreement Modifications for Hanford Tank Waste Treatment.

PBI-2.9 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-105

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

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	\$2,000,000	Straight-Line	\$0	\$2,000,000
2	Deleted (Mod 176)			
3	Deleted (Mod 176)			
Total	\$2,000,000		\$0	\$2,000,000

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 waste retrieval system construction for Tank 241-C-105 and turnover to operations. The Contractor shall earn \$2,000,000 of incremental fee upon completion of construction of Tank 241-C-105 and turnover to operations. Fee for this milestone is not available to be earned.

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 1a, will be completed.

Completion Document: Contractor approved, Construction Completion Document through Section 1a, with exceptions listing for completion of Tank 241-C-105 waste retrieval system construction, and the ORP FPD/COR's concurrence on the exceptions listing.

2. Deleted (Mod 176).

3. Deleted (Mod 176).

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 a practicality evaluation in accordance with appendix B of the Consent Decree and Tri-Party Agreement Modifications for Hanford Tank Waste Treatment.

PBI-2.11 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-108

Performance Fee available and assigned to this PBI: \$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.

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	\$1,500,000	Straight-Line	\$1,500,000	\$0
2	\$ 100,000	Straight-Line	\$ 100,000	\$0
Total	\$1,600,000		\$1,600,000	\$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 Bearing Milestones

1. Complete heel retrieval of Tank 241-C-108. The Contractor shall earn \$1,500,000 of incremental fee upon completion of Tank 241-C-108 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.

2. In partial completion of TPA Milestone M-45-86, provide a Retrieval Data Report for 241-C-108 in C Farm that have completed retrieval under the Consent Decree. The Contractor shall earn \$100,000 of incremental fee upon completion of Retrieval Data Report.

Deleted:

Deleted:

Work scope/completion criteria: Each Retrieval Data Report shall include the following elements:

Deleted:

- Residual tank waste volume measurement, including associated calculations;
- The results of residual tank waste characterization;
- Retrieval technology performance documentation;

- The updated post-retrieval risk assessment;
- Opportunities and actions being taken to refine or develop tank waste retrieval technologies based on lessons learned and,
- Leak detection monitoring and performance results.

The tank residual characterization and residual volume estimate shall be based on the version of RPP-23403 (*Single-Shell Tank Component Closure Data Quality Objectives*) in effect at the time of retrieval completion certification for the tank in question, modified by any specific changes agreed to in the applicable Tank Sample Analysis Plan. The post-retrieval risk assessment shall be based on the risk model used in DOE/ORP-2005-01 (*Initial Single-Shell Tank System Performance Assessment for the Hanford Site*). A draft of the Retrieval Data Report shall be provided to ORP for review, and all written comments submitted to the contractor on the draft, within 15 calendar days of providing the draft to ORP, will be addressed in the final Retrieval Data Report.

Completion documents: For each tank, provide to the ORP a formally released Retrieval Data Report addressing the elements described above, following certification of completion of retrieval for that tank.

PBI-2.12 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-109

Performance Fee available and assigned to this PBI: \$1,500,000

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

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 Bearing Milestones

1. Complete heel retrieval of Tank 241-C-109. The Contractor shall earn \$1,500,000 of incremental fee upon completion of Tank 241-C-109 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 a practicality evaluation in accordance with appendix B of the Consent Decree and Tri-Party Agreement Modifications for Hanford Tank Waste Treatment.

PBI-2.13 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-110

Performance Fee available and assigned to this PBI: \$1,500,000

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

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 Bearing Milestones

1. Complete heel retrieval of Tank 241-C-110. The Contractor shall earn \$1,500,000 of incremental fee upon completion of Tank 241-C-110 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 a practicality evaluation in accordance with Appendix B of the Consent Decree and Tri-Party Agreement Modifications for Hanford Tank Waste Treatment.

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

Performance Fee value is established at \$4,500,000. \$4,500,000 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.

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	\$2,000,000	Straight-Line	\$2,000,000	\$0
2	Deleted (Mod 102)	Deleted (Mod 102)	Deleted (Mod 102)	Deleted (Mod 102)
3	\$2,000,000	Straight-line	\$2,000,000	\$0
4	Deleted (Mod <u>208</u>)	Deleted (Mod <u>208</u>)	Deleted (Mod <u>208</u>)	Deleted (Mod <u>208</u>)
5	\$150,000	Straight-Line	\$150,000	\$0
6	\$150,000	Straight-Line	\$150,000	\$0
7	\$200,000	Straight-Line	\$200,000	\$0
Total	\$4,500,000		\$4,500,000	\$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 waste retrieval system construction for Tank 241-C-111 and turnover to operations. The Contractor shall earn \$2,000,000 of incremental fee upon completion of construction of Tank 241-C-111 and turnover to operations.

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 1a, will be completed.

Completion Document: Contractor approved, Construction Completion Document through Section 1a, with exceptions listing for completion of Tank 241-C-111 waste retrieval system construction and the ORP FPD/COR's concurrence on the exceptions listing.

2. Deleted (Mod 102)
3. Complete bulk retrieval of Tank 241-C-111. The Contractor shall earn \$2,000,000 incremental fee upon completion of bulk retrieval of Tank 241-C-111. In the event the initially deployed retrieval technology meets or exceeds the performance requirements of the Consent Decree and Tri-Party Agreement Modifications for Hanford Tank Waste Treatment then additional fee in accordance with PBI-2.14, Milestone 4 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.

4. Deleted (Mod 208).
5. Complete installation of in situ rapid measurement of the hard pan waste heel in 241-C-111 using Telescopic Raman Spectrometer technology. The Contractor shall earn \$150,000 of incremental fee upon completion of Telescopic Raman Spectrometer technology installation in 241-C-111.

Work scope/completion criteria: Complete installation of in situ rapid measurement of 241-C-111 hard pan heel using a Telescopic Raman Spectrometer (Raman) prototype. As part of the WRPS Waste Retrieval Technology Development Program a telescopic (Raman) system was fabricated and successfully tested under laboratory conditions as documented in RPP-RPT-50925. The telescopic (Raman) methodology represents a relatively low-cost method to identify components in tank heels. Use of telescope (Raman) techniques may reduce cost and radiation exposure to personnel during single-shell tank retrieval and closure by eliminating the collection of waste samples from tanks needed for hard heel removal.

Completion document: Submit work record entry documenting completion of Raman system installation in 241-C-111 to the ORP.

6. After installation of the Raman Probe, complete in situ rapid measurement field data collection of the hard pan waste heel in 241-C-111 using Telescopic Raman Spectrometer technology. The Contractor shall earn \$150,000 of incremental fee upon completion of the field data collection in 241-C-111.

Work scope/completion criteria: Completion of the in-situ rapid measurement field data collection of 241-C-111 hard pan heel using a Telescopic Raman Spectrometer (Raman) prototype.

Completion document: Submit work record entry documenting completion of field data collection in 241-C-111 to the ORP.

7. Issue a technical report documenting results in in-situ rapid measurement of the hard pan heel in 241-C-111. The Contractor shall earn \$200,000 of incremental fee upon approval

and release of a technical report documenting results of telescopic Raman Spectrometer technology deployment in 241-C-111.

Work scope/completion criteria: Complete scientific analysis of spectra data collected in 241-C-111 using a prototype telescopic Raman spectrometer. Prepare, review, approve, and issue a technical report documenting the results. The report should include recommendations for further development and/or use of Raman technology in the characterization of single-shell tank hard pan waste heels.

Completion document: Submit WRPS-approved and released technical report documenting data analysis results and recommendations to the ORP.

PBI-2.15 CLIN 2 Completion of Retrieval Operations from Single-Shell Tank 241-C-112

Performance Fee value is established at \$5,000,000. \$5,000,000 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	\$2,000,000	Straight-Line	\$2,000,000	\$0
2	\$1,000,000	Straight-Line	\$1,000,000	\$0
3	\$2,000,000	Straight-Line	\$2,000,000	\$0
4	Deleted Mod (208)		\$0	\$0
Total	\$5,000,000		\$5,000,000	\$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 waste retrieval system construction for Tank 241-C-112 and turnover to operations. The Contractor shall earn \$2,000,000 of incremental fee upon completion of construction of Tank 241-C-112 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-112 waste retrieval system construction, and the ORP FPD/COR's concurrence on the exceptions listing.

2. The Contractor shall earn \$1,000,000 of incremental fee upon completing retrieval of 50% of the Waste by Volume in Tank 241-C-112.

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: Submittal of material balance data and engineering calculations summary information demonstrating retrieval of 50% of the initial waste volume.

3. Complete bulk retrieval of Tank 241-C-112. The Contractor shall earn \$2,000,000 incremental fee upon completion of bulk retrieval of Tank 241-C-112.

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

4. Deleted (Mod 208).

PBI-2.16 CLIN 2 Complete Ventilation Stack Extensions on POR-008 and POR-003

Performance Fee available and assigned to this PBI: \$800,000

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

Milestone	Fee Value
1	\$400,000
2	\$400,000
Total	\$800,000

Desired Endpoint/Outcome

Completion of design, field work, and turnover of the Single-Shell Tanks POR-008 and POR-003 exhaust stack extensions.

Although tank vapor exposure levels are significantly below action levels, the stack extension projects will improve the ability of the workers to do their jobs by increasing the height of the exhaust stack to improve dispersion of tank vapors during tank waste retrieval activities.

Fee Bearing Milestones

1. Complete tank stack extension system field installation for POR-008 and turnover to operations. The Contractor shall earn \$400,000 of incremental fee upon field completion and turnover to operations.

Work scope/completion criteria: The exhaust stack extension shall be constructed and turned over to Operations.

Completion Document: Letter transmitting the work package coversheet documenting completion and acceptance by Operation.

2. Complete tank stack extension system field installation for POR-003 and turnover to operations. The Contractor shall earn \$400,000 of incremental fee upon field completion and turnover to operations.

Work scope/completion criteria: The exhaust stack extension shall be constructed and turned over to Operations.

Completion Document: Letter transmitting the work package coversheet documenting completion and acceptance by Operation.

PBI-2.17 CLIN 2 A/AX Farm Retrieval Acceleration and 272-AW Facility Replacement

Performance Fee available and assigned to this PBI: \$1,040,000

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

Milestone	Fee Value
1	\$400,000
2	\$250,000
3	\$250,000
4	\$140,000
Total	\$1,040,000

Desired Endpoint/Outcome

Complete significant work scope towards accelerating A-Farm and AX-Farm retrieval activities.

Fee Bearing Milestones

1. Complete portable ventilation exhauster system refurbishment and vendor acceptance testing for two exhausters. Two exhausters are targeted for use in A-Farm and AX-Farm. The Contractor shall earn \$200,000 of incremental fee for each exhauster for a total fee potential of \$400,000 upon completing refurbishment and vendor acceptance testing.

Work scope/completion criteria: The ventilation exhausters shall be refurbished, tested, and accepted prior to deployment.

Completion Document: Letter report documenting successful acceptance testing.

2. Complete design of the HIHTL, Valve Box, Diversion Box retrieval systems for both A-Farm and AX-Farm. The Contractor shall earn \$250,000 of incremental fee upon issuing design documentation.

Work scope/completion criteria: The Contractor shall complete final design of the HIHTL, Valve Box, Diversion Box retrieval systems for both A-Farm and AX-Farm.

Completion Document: A letter report submitted to ORP, demonstrating completion of final design.

3. Complete design of the A-Farm and AX-Farm infrastructure upgrades necessary for accelerating retrieval including electrical supplies, lighting upgrades, and water/utility systems. The Contractor shall earn \$250,000 of incremental fee upon issuing design documentation.

Work scope/completion criteria: The Contractor shall complete final design of the A-Farm and AX-Farm infrastructure upgrades including electrical supplies, lighting upgrades, and water/utility systems.

Completion Document: A letter report submitted to ORP, demonstrating completion of final design.

4. Complete procurement and installation of the office infrastructure for use as replacement to the 272-AW Facility. The Contractor shall earn \$140,000 of incremental fee upon delivery and installation of the office infrastructure.

Work scope/completion criteria: The Contractor shall complete procurement and installation of office infrastructure for use as a replacement for the 272-AW Facility.

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

PBI-2.18 CLIN 2 Articulating Mast System in 241-C-104

Performance Fee available and assigned to this PBI: \$1,000,000

Fee Structure: Straight-Line Method

Desired Endpoint/Outcome

An obstruction under the slurry pump has impacted the completion of 241-C-104 retrieval. Install a second retrieval technology to aid in the removal of the obstruction.

Fee Bearing Milestones

1. Complete modification design, physical modifications, and factory acceptance testing for installation of the Articulating Mast System (AMS) in 241-C-104 by September 30, 2013. The Contractor shall earn \$500,000 of incremental fee upon completion of the modification design, physical modifications and factory acceptance testing of the AMS.

Work Scope/Completion Criteria: Complete modification design, modifications and factory acceptance testing for installation of the AMS in 241-C-104.

Completion Document: Letter transmitting copy of factory acceptance testing.

2. Install the AMS into 241-C-104 to aid in the removal of an obstruction under the slurry pump, and assist completion of the sludge retrieval. Install an AMS in 241-C-104 by September 30, 2013. The Contractor shall earn \$500,000 of incremental fee upon completion of the AMS installation and turnover to operations.

Work Scope/Completion Criteria: Complete installation of the AMS into 241-C-104. Field work packages will be approved through Operations Acceptance.

Completion Document: Letter transmitting completed field work packages through Operations Acceptance.

PBI-2.20 CLIN 2 Replace 241-AN-106 HIHTL

Performance Fee value is established at \$250,000.

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	\$250,000	Straight-Line	\$250,000	\$0
Total	\$250,000		\$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 Bearing Milestones

1. Complete layout and replacement of AN-106 Hose-In-Hose Transfer Lines (HIHTLs). The HIHTL from POR104 to Double Shell Tank (DST) Receiver tank 241-AN-106 will be replaced with new HIHTLs. Replaced HIHTLs include:
 - Slurry line Hose-in-Hose Transfer Line (HIHTL) segments (Serial # I-19643-1 and I-19643-3).
 - Supernate HIHTL segments (I-68511-01 and I-68511-02).

New replacement of HIHTL is necessary to replace existing expiring (8/31/12) HIHTLs. Replacement of HIHTL allows performance of retrieval operations in Tank 241-C-110 and 241-C-105. Install replacement HIHTL to 241-AN-106 by September 30, 2013. The Contractor shall earn \$250,000 of incremental fee upon completion of the HIHTL replacement.

Work Scope/Completion Criteria: Complete new HIHTL layout replacement of POR104 to AN-106 hose-in-transfer lines. Field work packages will be approved through Operations Acceptance.

Completion Document: Transmit PECN, completed work packages through Operations Acceptance, and Independent Qualified Registered Professional Engineer letter to the ORP.

PBI-3.1 CLIN 3 Complete Submittal of Conceptual Design Report Documentation to Support Critical Decision 1 (CD-1) for the Interim Hanford Storage Facility (IHSF)

Performance Fee value is established at \$350,000. \$350,000 of the total base period fee pool has been allocated to this PBI and is available to be earned.

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

Desired Endpoint/Outcome

Complete and submit to the U.S. Department of Energy, Office of River Protection (ORP), the IHSF Contractor-approved Conceptual Design Report in support of CD-1 documentation prescribed in DOE O 413.3B, Program and Project Management for the Acquisition of Capital Assets. The IHSF is a project that will provide for receipt and interim onsite storage of immobilized high-level waste (IHLW) canisters produced by the Waste Treatment Plant (WTP). Without this interim onsite canister storage capability, the WTP will not be able to process high-level waste.

Fee Bearing Milestones

1. Submit a Contractor-approved Conceptual Design Report in support of CD-1 documentation package for IHSF to ORP. The Contractor shall earn \$350,000 incremental fee upon completion of this milestone.

Work Scope/Completion Criteria: Complete a Contractor-approved Conceptual Design Report in support of CD-1 documentation submittal package for IHSF.

Completion Document: Letter transmitting Conceptual Design Report to ORP.

**PBI-3.2 CLIN 3 Complete Submittal of Preliminary Design
Documentation to Support Critical Decision 2 (CD-2) for the
Interim Hanford Storage Facility (IHSF)**

PBI DELETED (Mod 176)

PBI-3.3 CLIN 3 Complete Submittal of Conceptual Design Report Documentation to Support Critical Decision 1 (CD-1) for the Secondary Waste Treatment Project

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

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

Desired Endpoint/Outcome

Complete and submit to the U.S. Department of Energy, Office of River Protection (ORP), the Secondary Waste Treatment project contractor approved Conceptual Design Report in support of CD-1 documentation prescribed in DOE O 413.3B, Program and Project Management for the Acquisition of Capital Assets.

The Secondary Waste Treatment project will provide the capability to receive and treat secondary liquid waste produced by the Waste Treatment Plant (WTP). Without this secondary liquid waste treatment capability, the WTP will not be able to process high-level waste.

Fee Bearing Milestones

1. Submit a Contractor-approved Conceptual Design Report in support of CD-1 documentation package for the Secondary Waste Treatment project to ORP. The Contractor shall earn \$350,000 incremental fee upon completion of this milestone.

Work Scope/Completion Criteria: Complete a contractor approved Conceptual Design Report in support of CD-1 documentation submittal package for the Secondary Waste Treatment project.

Completion Document: Letter transmitting a Conceptual Design Report to ORP.

**PBI-3.4 CLIN 3 Complete Submittal of Preliminary Design
Documentation to Support Critical Decision 2 (CD-2) for the
Secondary Waste Treatment Project**

PBI DELETED (Mod 176)

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

PBI DELETED (Mod 167)

PBI-3.6 CLIN 3 AZ-101 Feed Delivery System Design

PBI DELETED (Mod 176)

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

| **PBI DELETED (Mod 208).**

PBI-3.8 CLIN 3 AY/AZ Farm Infrastructure Design

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

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

Desired Endpoint/Outcome

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

Fee Bearing Milestones

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

Work Scope/Completion Criteria: Complete design documents for the AY/AZ Farm Infrastructure Design (Work Breakdown Structure 5.01.04.02.20.02). The documents will include the appropriate procurement/construction specifications, design drawings, and engineering change notices.

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

PBI-3.9 CLIN 3 AY/AZ Ventilation System Upgrade Design

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

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

Desired Endpoint/Outcome

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

Fee Bearing Milestones

1. AY/AZ Ventilation System Upgrade Design

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

Work Scope/Completion Criteria: Complete Design documents for the AY/AZ Ventilation System Upgrade Design. The documents will include the appropriate procurement/construction specifications, design drawings, and engineering change notices.

Completion Document: Letter transmitting the AY/AZ Ventilation System Upgrade Design to the ORP.

PBI-3.10 CLIN 3 SY Farm Infrastructure Design

PBI DELETED (Mod 167)

PBI-3.11 CLIN 3 AW Farm Infrastructure Design

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

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

Desired Endpoint/Outcome

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

Fee Bearing Milestones

1. AW Farm Infrastructure Design

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

Work Scope/Completion Criteria: Complete Design documents for the AW Farm Infrastructure Design (Work Breakdown Structure 5.03.02.09.07.01). The documents will include the appropriate procurement/construction specifications, design drawings and engineering change notices.

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

PBI-3.12 CLIN 3 AP Farm Infrastructure Design

PBI DELETED (Mod 176)

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

Performance Fee value is established at \$1,650,000. \$1,650,000 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.

Deleted:

Deleted:

Deleted:

Fee Structure: Terminal (September 30, 2013)

Desired Endpoint/Outcome

Complete and submit to the U.S. Department of Energy, Office of River Protection (ORP), two (2) annual updates of the RPP System Plan to reflect directions provided by the ORP and Hanford Tank Waste Operations Simulator modeling results for FY 2010 and FY 2011 and one (1) FY 2013 update, which will be an 18-month update. The FY 2013 scenario selection and update will support decision making by the ORP through evaluation of at least three (3) scenarios including, but not limited to, such scope as 241-AY-102 IPT/Double-Shell Tank waste volume impact.

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 Contractor shall earn \$750,000 per submittal of incremental fee upon completion of each annual update for FY 2010 and FY 2011 and \$150,000 for the 18-month update in FY 2013 (total of \$1,650,000 of incremental fee is available to be earned).

Work scope/completion criteria: Annual/18-month updates of the RPP System Plan to reflect direction provided by the ORP and Hanford Tank Waste Operations Simulator modeling results. The 18-month update in a FY 2013 will evaluate at least 3 scenarios including, but not limited to, 241-AY-102 IPT/Double-Shell Tank waste volume impact.

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

PBI-3.14 CLIN 3 Issuance of the first Tank Waste Characterization Report

Performance Fee available and assigned to this PBI: \$ 250,000

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

Desired Endpoint/Outcome

Completion of the initial release of the Tank 241-C-107 Waste Characterization Report will provide an expert engineering evaluation of the waste characteristics by combining process knowledge and available waste sample results. The short and long term strategic planning and support activities are completed in a manner that incrementally improves mission performance.

Fee Bearing Milestones

1. Issuance of the first tank waste characterization report (Tank 241-C-107 Waste Characterization Report). The Contractor shall earn \$250,000 of incremental fee upon completion.

Work Scope/Completion Criteria: Complete the initial release of the Tank 241-C-107 Waste Characterization Report. The Waste Characterization Report will provide an expert engineering evaluation of the waste characteristics by combining process knowledge and available waste sample results. The report (along with the BBI derivation document for the tank) will become the single-point reference for the current knowledge of waste in a tank. This report is the first of this series, so this report will set the standard for future tank characterization reports.

Completion Document: The Tank 241-C-107 Waste Characterization Report released as a WRPS technical document.

PBI-3.15 CLIN 3 Data Quality Objective for Strategic Plan

Performance Fee available and assigned to this PBI: \$250,000

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

Desired Endpoint/Outcome

Complete and submit to the U.S. Department of Energy, Office of River Protection (ORP), the Data Quality Objectives to Support Strategic Planning. The data quality objects supports the data collection needed for strategic planning and mission analysis.

Fee Bearing Milestones

1. Data Quality Objectives to Support Strategic Planning. The Contractor shall earn \$250,000 of incremental fee upon completion.

Work Scope/Completion Criteria: Complete Revision 0 of the data quality objective document that supports the data collection needed for strategic planning and mission analysis.

Issues, including uncertainties and risks, associated with tank waste composition were identified during the waste treatment complex mission analysis and strategic planning process. These issues may have significant impacts on operations and efficiencies in the waste treatment complex. This document is important to ensure appropriate data (type, quantity, and quality) are collected to address the identified issues requiring existing tank waste data to evaluate and to project the future condition of the staged waste.

Completion Document: Letter transmitting completion and release of the document *Data Quality Objectives to Support Strategic Planning*.

PBI-3.16 CLIN 3 Best Basis Database Management

Performance Fee value is established at \$800,000. \$750,000 of the total base period fee pool has been allocated to this PBI and is available to be earned. \$50,000 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 (due 15 days after the end of each Quarter through September 30, 2013)

Desired Endpoint/Outcome

Complete and submit to the U.S. Department of Energy, Office of River Protection (ORP), the best basis inventory reports to support strategic planning. The data quality objects supports the data collection needed for strategic planning and mission analysis.

Fee Bearing Milestones

1. Prepare and submit best basis inventory update reports on a quarterly basis. The last (1) quarterly update report is not available to be earned. The Contractor shall earn \$50,000 of incremental fee upon completion of each quarterly update report (total of \$750,000 of incremental fee is available and a total of \$50,000 of incremental fee is not available to be earned).

Work Scope/Completion Criteria: Complete quarterly update of the best basis inventory report.

Completion Document: Letter transmitting the best basis inventory update reports.

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-3.18 CLIN 3 Complete Submittal of Documentation to Support Critical Decision 0 (CD-0) for the Supplemental Treatment Project

Performance Fee available and assigned to this PBI: \$300,000

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

Desired Endpoint/Outcome

Submit to the U.S. Department of Energy, Office of River Protection (ORP), a Justification of Mission Need (JMN) document to support the CD-0 review and approval process for the Supplemental Treatment Project. The JMN shall be written in accordance with the requirements of DOE G 413.3-17, Mission Need Statement Guide. The Supplemental Treatment Project will provide additional processing capability for low activity waste (LAW).

Fee Bearing Milestones

1. Submit JMN for Supplemental Treatment Project to ORP. The Contractor shall earn \$300,000 incremental fee upon completion of this activity.

Work Scope/Completion Criteria: Complete submittal of a JMN document, written in accordance with the requirements of DOE G 413.3-17, Mission Need Statement Guide, to ORP for their use in the CD-0 review and approval process.

Completion Document: Letter transmitting the Supplemental Treatment Project Justification of Mission Need (JMN) to ORP.

PBI-3.19 CLIN 3 Complete Submittal of Conceptual Design Report Documentation to Support Critical Decision 1 (CD-1) for the Supplemental Treatment Project

Performance Fee available and assigned to this PBI: \$750,000

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

Desired Endpoint/Outcome

Definition: Supplemental Treatment Program consists of the Supplemental Treatment Project and the Supplemental Immobilization Project.

Complete and submit to the U.S. Department of Energy, Office of River Protection (ORP), the Supplemental Treatment Project Contractor-approved Conceptual Design Report in support of CD-1 documentation prescribed in DOE O 413.3B, Program and Project Management for the Acquisition of Capital Assets. The Supplemental Treatment Project will provide additional treated low level activity waste to support a supplemental immobilization process.

Fee Bearing Milestones

1. Submit a Contractor-approved Conceptual Design Report in support of CD-1 documentation package for Supplemental Treatment Project to ORP. The Contractor shall earn \$750,000 incremental fee upon completion of this milestone.

Work Scope/Completion Criteria: Complete a Contractor-approved Conceptual Design Report in support of CD-1 documentation submittal package for the Supplemental Treatment Project.

Completion Document: Letter transmitting Conceptual Design Report to the ORP.

PBI-3.20 CLIN 3 Flowsheet Development

Performance Fee available and assigned to this PBI: \$127,500

Fee Structure: Terminal Method (09/30/2010)

Desired Endpoint/Outcome

Develop preliminary flowsheets for Waste Feed Delivery, Single-Shell Tank (SST) Retrieval, and Supplemental Treatment.

Fee Bearing Milestones

1. Develop preliminary flowsheets for Waste Feed Delivery and SST Retrieval and perform a feed variability analysis for Supplemental Treatment by September 30, 2010. The Contractor shall earn \$127,500 of incremental fee.

Work Scope/Completion Criteria: Complete a flowsheet for delivery of HLW and LAW Hot Commissioning feed from double-shell tank AY-102 to the Waste Treatment Plant (WTP), a preliminary retrieval flowsheet that identifies potential flowsheet risks and risk mitigation activities for the next SST farms to be retrieved (A Farm and AX Farm), and a fluidized bed steam reformer feed variability analysis to support the WTP mission.

Completion Document: Letter transmitting the reports for the Waste Feed Delivery, Single-Shell Tank (SST) Retrieval, and Supplemental Treatment.

PBI-3.21 CLIN 3 Life-Cycle Cost Model

Performance Fee available and assigned to this PBI: \$67,500

Fee Structure: Terminal Method (09/30/2010)

Desired Endpoint/Outcome

Complete Phase 1 of the Life-cycle Cost Model development.

Fee Bearing Milestones

1. Complete Phase 1 of the Life-cycle Cost Model development by September 30, 2010. The Contractor shall earn \$67,500 of incremental fee.

Work Scope/Completion Criteria: Complete Phase 1 of the Life-cycle Cost Model (LCM) development. This model is required to support the revised TPA milestones for System Planning in FY2011 and beyond. Phase 1 will develop a database for importing and exporting schedule and cost data from the HTWOS model and develop requirements in a Model Modification Request for implementing the LCM. The database will establish the initial crosstalk between Primavera P6 scheduling software and the HTWOS model.

Completion Document: Letter transmitting a Model Modification Request for implementing the Life-cycle Cost model into HTWOS.

PBI-3.22 CLIN 3 Solid-Phase Aluminum Speciation

Performance Fee available and assigned to this PBI: \$48,000

Fee Structure: Terminal Method (09/30/2010)

Desired Endpoint/Outcome

The speciation of aluminum in saltcake and sludges in all single-shell and double-shell tanks except those tanks where retrieval is complete is documented.

Fee Bearing Milestones

1. By September 30, 2010, estimate the aluminum species in sludge and saltcakes in the double-shell and single-shell tanks and submit report documenting the specific of aluminum in salt cake and sludges in all Single-shell and Double-shell tanks (except those tanks where retrieval is complete). The Contractor shall earn \$48,000 of incremental fee upon completion of the report.

Work Scope/Completion Criteria: This task will be to estimate the aluminum species in sludge and salt cakes in the double-shell and single-shell tanks. Specifically, this task will be to write a report that divides aluminum in solid phases between three different pools. These pools are: "easy to leach" aluminum, Boehmite (AlOOH), and refractor aluminum. These three pools correspond to aluminum fractions that behave differently during retrieval and leaching. "Easy to Leach" aluminum corresponds to aluminum that will be assumed to obtain solid-liquid chemical equilibrium during waste processing time frame. The "Boehmite" pool is defined as aluminum that only dissolves during caustic leaching process and never re-precipitates (consistent with the known behavior of the mineral Boehmite in the waste). The "Refractory Aluminum" pool is aluminum that is expected to always remain in the solid phase during aqueous processing of the waste. This report will provide the speciation of the aluminum into pools, and will provide the methodology for doing so. This work is needed to provide a basis for predicting the partitioning of aluminum during waste treatment processes.

Completion Document: Letter transmitting a report documenting the speciation of aluminum in salt cake and sludges in all Single-shell and Double-shell tanks except those tanks where retrieval is complete.

PBI-3.23 CLIN 3 Integrated Sample Analysis Plan

Performance Fee available and assigned to this PBI: \$41,500

Fee Structure: Terminal Method (09/30/2010)

Desired Endpoint/Outcome

An integrated sample analysis plan for Fiscal Year (FY) 2011 for the double-shell, single-shell, and miscellaneous waste storage tanks is developed.

Fee Bearing Milestones

1. Submit an Integrated Sample Analysis Plan for FY 2011 by September 30, 2010. The Contractor shall earn \$41,500 of incremental fee upon completion of the plan.

Work Scope/Completion Criteria: This task will be to develop an integrated sample analysis plan for FY 2011 for the double-shell, single-shell, and miscellaneous waste storage tanks. This plan will include the samples required for FY 2011, their drivers, applicable data quality objectives (DQOs), and associated schedule. The plan will also include a forecast of the sampling requirements for FY 2012 through 2016. These sampling events include grab samples, core samples, off-riser samples, vapor samples, and solids level measurements. Any new DQOs required for the post 2011 sampling events will also be listed and the schedule for their completion also provided.

Completion Document: Letter transmitting an Integrated Sample Analysis Plan for FY 2011.

PBI-3.24 CLIN 3 Mission Analysis Report Updated

Performance Fee available and assigned to this PBI: \$37,500

Fee Structure: Terminal Method (09/30/2010)

Desired Endpoint/Outcome

Issue a revised RPP Mission Analysis Report that provides assurance that the new initiatives are properly integrated into the baseline RPP mission architecture.

Fee Bearing Milestones

1. Submit the annual update of the RPP Mission Analysis Report, RPP-RPT-41742 by September 30, 2010. The Contractor shall earn \$37,500 of incremental fee upon completion of the report.

Work Scope/Completion Criteria: Complete the annual update of the RPP Mission Analysis Report, RPP-RPT-41742. The initial revision of the RPP Mission Analysis Report was completed in September 2009. Subsequent to that, significant new initiatives have been proposed to complete the RPP mission earlier and at a lower cost. An update to the RPP Mission Analysis Report is required to incorporate those initiatives as they are approved for implementation. This provides assurance that the new initiatives are properly integrated into the baseline RPP mission architecture.

Completion Document: Letter transmitting a revised RPP Mission Analysis Report (RPP-RPT-41742, Revision 1).

PBI-3.25 CLIN 3 Submit Integrated Waste Feed Delivery Plan (IWFDP) Update for Approval

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

Fee Structure: Terminal Method (September 30, 2012)

Milestone	Fee Value	Method	Amount allocated and available to be earned
1	\$150,000	Terminal	\$150,000
Total	\$150,000		\$150,000

Desired Endpoint/Outcome

Prepare and submit to the U.S. Department of Energy, Office of River Protection (ORP), the required updates of the Integrated Waste Feed Delivery Plan (IWFDP) for approval (Contract Deliverable C.2.3.1-2). The IWFDP “shall include the needs of commissioning, near-term, and long-term operations; necessary studies, testing, and infrastructure installation; and projected waste transfer/pretreatment operations” and will describe both the strategy for the preparation and delivery of feed and the campaign plans for the initial feed deliveries.

Fee Bearing Milestones

1. Submit an update of the Integrated Waste Feed Delivery Plan, integrated with RPP System Plan Revision 6. The Contractor shall earn \$150,000 incremental fee upon submittal of this update.

Work Scope/Completion Criteria: Prepare and submit an Integrated Waste Feed Delivery Plan which has dispositioned all prior ORP and Contractor comments, to ORP for approval.

Completion Document: Letter transmitting the draft Integrated Waste Feed Delivery Plan to ORP for approval.

PBI-3.26 CLIN 3 One System DNFSB 2010-2 Implementation Plan Commitments

Performance Fee value is established at \$1,100,000. \$400,000 of the total base period fee pool has been allocated to this PBI and is available to be earned. \$700,000 is not allocated and is not available to be earned. The Contractor is not entitled to this unallocated and unavailable fee.

Deleted:

Fee Structure: Terminal 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	\$ 400,000	Terminal	\$400,000	\$0
2	\$ 700,000	Terminal	\$0	\$700,000
Total	\$1,100,000		\$400,000	\$700,000

Desired Endpoint/Outcome

Complete and submit to the U.S. Department of Energy, Office of River Protection (ORP), an Initial Gap Analysis Report between WTP WAC and Tank Farm sampling and transfer capability; A Remote Sampler Demonstration (RSD) Test Report; and a Tank Farm Performance Testing Report. These reports will help define the impact on the waste retrieval, feed delivery, and feed certification processes due to any limitations of the WTP mixing and transfer systems, and demonstrate the ability to obtain adequately representative samples from the waste feed tanks to ensure the WTP waste acceptance criteria can be reliably enforced.

Fee-Bearing Milestones

1. In support of DNFSB 2010-2, issue Remote Sampler Demonstration Test results by September 30, 2013. The Contract shall earn \$400,000 of incremental fee upon completion of the work scope.

Work scope/completion criteria: Conduct testing with an alternative sampling and measurement approach using an Isolok sampler to obtain representative samples of simulated slurry from transfer pump discharge line and to validate a previously developed critical velocity measurement technique (i.e., Ultrasonic Pulse Echo -UPE). The testing is designed to identify the different components of possible sampling errors and assess the viability of a sample bottle remote handling system. The results of the Isolok/ Mechanical handling and UPE demonstrations will be documented in a Final RSD Results Report.

Completion Document: WRPS letter transmitting the Remote Sampler Demonstration Testing results to the ORP to include documentation of Large Scale Integrated Mixing System Expert Review Team comment resolution concurrence.

2. In support of DNFSB 2010-2, issue testing results from the three different tank mixing and transfer platforms that were used to define the capabilities of the double-shell tank mixing and transfer capability by September 30, 2013. The Contractor shall earn \$700,000 of incremental fee upon completion of the work scope. Fee for this milestone is not available to be earned.

Work scope/completion criteria: Conduct testing to determine the range of waste physical properties that can be retrieved and transferred to WTP and determine the capability of tank farm staging tank sampling systems to provide samples that will characterize waste and determine compliance with the WAC. The results of this testing will be documented in a Tank Farm Performance Testing Report.

Completion Document: WRPS letter transmitting the Tank Farm Performance Testing Report to ORP to include documentation of Large Scale Integrated Mixing System Expert Review Team comment resolution concurrence.

PBI-3.33 CLIN 3 Mixing and Sampling Implementation Plan Activities for DNFSB Recommendation 2010-2

Performance Fee value is established at \$200,000

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

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

Desired Endpoint/Outcome

Successful demonstration of small scale mixing including remote sampler collection concept such that tank farms mixing, sampling, and transfer capabilities are adequately understood to support WTP feed delivery gap analysis evaluations as described by the Implementation Plan for DNFSB Recommendation 2010-2.

Fee-Bearing Milestones

1. Complete construction of Remote Sampler Demonstration (RSD) loop mechanical handling systems. The Contractor shall earn \$200,000 of incremental fee upon completion.

Work scope/completion criteria: RSD Phase II construction includes completion of sample bottle mechanical handling systems as documented in design drawings. Completion of this construction phase will allow for demonstrations of sample container loading, filling, transfer to sample container shielded shipping cask, and transfer of the shipping cask to a simulated field operator interface point.

Completion Document: Completion of construction will be confirmed by a field walk down and acceptance signatures on subcontractor final construction punch list documenting satisfactory closure of all open construction punch list items.

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-4.1 CLIN 4 Supplemental Immobilization Project – One Time Report

Performance Fee value is established at \$500,000. \$500,000 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.

Fee Structure: Terminal 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	\$500,000	Terminal	\$500,000	\$0
Total	\$500,000		\$500,000	\$0

Desired Endpoint/Outcome

Upon completion of these PBI activities, the U.S. Department of Energy (DOE) will have completed work elements to support TPA milestone M-062-40ZZ. TPA Milestone M-062-45 describes the process for the State of Washington Department of Ecology and the DOE to complete a negotiated Low Activity Waste immobilization technology selection process. These reports and testing activities represent work elements that are part of the overall project workflow.

Fee-Bearing Milestones

1. Complete testing of statistically-based matrix for low temperature Low-Activity Waste (LAW) waste forms by September 30, 2013. The Contractor shall earn \$500,000 of incremental fee upon completion of the work scope.

Work scope/completion criteria: The scope is part of the maturation process to evaluate Cast Stone as a potential alternative for the immobilization of Low Activity Waste for Hanford and helps provide supporting data for the application of Cast Stone for secondary liquid wastes. The work involves detailed laboratory tests involving a matrix of 26 test conditions involving 8 different waste form formulation variables to evaluate primary and secondary effects of the 8 variables and selected variable combinations to help narrow in on the optimum cast stone formulation for Hanford LAW. The overall goal is to narrow in on the formulation parameters that are best suited for processing a wide range of LAW streams with respect to achieving the best combination of processing requirements such as pourability, mixing, set/cure time, minimize excessive heat generation, cracking, and performance requirements (leach resistance, compressive strength) at the highest practical waste loading. Completion criteria include completing the test conditions, analyzing the data, and identifying effects to be incorporated in improved low temperature waste form formulations.

Tank Operations Contract
| *Contract No. DE-AC27-08RV14800*

Section J
Modification No. 208

| Completion Document: Letter transmitting performance expectation completion notice and report from vendor with results of testing and analyses reviewed by the Contractor.

PBI-Reserved - Unallocated Base Period Fee

The Total Unallocated Base Period Fee value is \$12,531,479. The Total Available Unallocated Base Period Fee value is \$0. The Total Unavailable Unallocated Base Period Fee value is \$12,531,479. 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:	\$	0	(Mod <u>208</u>)
Available Unallocated ARRA Fee:	\$	0	
Total Available Unallocated Fee:	\$	0	(Mod <u>208</u>)

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.

PBI-7.1 CLIN 7 ARRA Program Reporting

Performance Fee available and assigned to this PBI: \$869,652 (5% of Available ARRA Fee Pool for FY 2010 and FY 2011)

Fee Structure: Terminal Method (Periodic deliverables through 9/30/2011)

Desired Endpoint/Outcome:

Accurate and timely reporting of ARRA activities. Delivery of the weekly, monthly, and quarterly ARRA Program Reports.

Fee Payment Schedule

The formula for applying this method is shown below:

Fee to be paid quarterly with the completion and submittal of

- Twelve (12) weekly reports,
- Six (6) monthly reports and
- Two (2) quarterly reports.

Fee calculation for each quarter payment is the FY 2010/FY 2011 ARRA Fee Pool dollars times 5% divided by eight quarters. (\$108,706 per quarter)

Fee earning per quarter is weighted as

- 20% Weekly Reports (\$21,741/12 weekly reports = \$1811.75 per report)
- 60% Monthly Reports (\$65,224/6 monthly reports = \$10,870.75 per report)
- 20% Quarterly Reports (\$21,741/2 Quarterly reports = \$10,870.50 per report)

Fee Bearing Milestones

Weekly reports include:

- WRPS ARRA Weekly Performance Report submitted on Wednesday of each week, except for Thanksgiving and Christmas weeks.

Monthly reports include:

- WRPS Monthly ARRA Performance Report submitted the last Tuesday of each month.
- EM RA Status and Projected Site Headcount and Full-Time Equivalent (FTE) Information.

Quarterly reports include:

- WRPS Quarterly ARRA Performance Report submitted the last calendar day of the following month.
- Input to the federal reporting.gov website by the tenth calendar day of the month following the end of the quarter.

Work Scope/Completion Criteria: Submittal of weekly, monthly and quarterly reports to the ORP as outlined above.

Completion Document: Completion documentation will be the weekly, monthly and quarterly reports.

PBI-7.2 CLIN 7 ARRA Key Performance Parameters

Performance Based Incentive (PBI) Title: Completion of Key Performance Parameters (KPP) associated with ARRA scope work for FY 2010 through FY 2011

Performance Fee available and assigned to this PBI: \$16,523.348

Milestone	Total
See Attachment	\$16,523,348
Total	\$16,523,348

Fee Structure: Terminal and Provisional Dependent

KPPs 1 through 8 are Terminal Method, with periodic deliverables through September 30, 2011, KPP 9 is Provisional Dependent, upon completion of KPPs 1 through 8

Desired Endpoint/Outcome

ARRA funded activities and defined work packages are successfully completed within approved cost and schedule. The successful completion of each KPP.

Fee Payment Schedule

KPP groupings are defined in the KPP American Recovery and Reinvestment Act (ARRA) Rate Schedule. The fee unit rate is defined by the Total Fee Value divided by the quantity identified in the KPP ARRA Rate Schedule. Fee calculation will be based on the completed performance measure/metric quantity(s) for that quarter multiplied by the fee unit rate. On a quarterly basis a milestone completion document for each of the performance measure/metric quantity(s) completed will be submitted for review and approval by the Office of River Protection (ORP).

Fee associated with KPP 9, Waste Feed Preps and Project Closeout, cannot be earned until all other KPPs specified in the KPP ARRA Rate Schedule have been completed.

Fee Bearing Milestones

1. Complete the KPPs identified in the attached KPP ARRA Rate Schedule and performance measure/metric quantity(s). Contractor shall earn incremental fee for each unit of work completed during the quarter.

Work Scope/Completion Criteria: For each performance measure/metric quantity the completion criterion is defined in the "Completion Evidence" column of the KPP ARRA Rate Schedule. When the completion criterion for a performance measure/metric quantity is completed, the PBI for that performance measure/metric quantity is complete

Completion Document: Submittal of Work Completion packages, as specified in the "Completion Evidence" column of the KPP ARRA Rate Schedule, and visual inspection by ORP.

Attachment

KPP ARRA Rate Schedule

Key Performance Parameter (KPP)	Completion Evidence	Performance Measure/Metric	QTY	Total Fee Value (1,000)
1. Facility/Structure Upgrades	Upgrades installed in the field	Each facility/structure will be received/ installed/upgraded	10	\$1,565,390
2. System Upgrades	Upgrades installed in the field	Each system will be received/ installed/upgraded	21	\$3,600,408
3. Equipment/instrument upgrades/Spares	Equipment/Instruments/Upgrades/Spares are installed or received into warehouse (spares)	Each equipment upgrade will be received, refurbished or installed except spare parts will be received into warehouse	384	\$3,913,344
4. D&D	System/Component Removed	Items will be removed/demolished	47	\$1,095,899
5. System Demonstrations	Test Completion Report Issued	Individual Demonstrations are completed	6	\$2,817,696
6. SY Farm Transfer Line Replacements	New Transfer Lines installed and construction complete (SL-180, SN-280, S1-177, SN-277, SN-278, SN-279, SN 285 and SN-286)	Replace 8 transfer lines	1	\$1,200,000
7. AZ Condensate Line Installation	New Condensate Line installed and construction complete	New line Installed	1	\$699,053
8. Drawing Reconstitution	Updated drawings electronically stored in IDMS system	Drawings field walked down, open ECN incorporated, and drawings revised and checked.	2171	\$939,218
9. Waste Feed Preps and Project Closeout	Equipment, Instruments, Upgrades, Demos, Drawings and tests are complete, installed and reports/drawings issued	Installations, reports and drawing are issued	660	\$692,340
				\$16,523,348

PBI-7.3 CLIN 7 ARRA AW-104 Corrosion Probe

Performance Fee available and assigned to this PBI: \$253,000

Fee Structure: Terminal Method (September 30, 2011)

Desired Endpoint/Outcome

ARRA funded activities and defined work scope are successfully completed within approved cost and schedule, and the successful completion of each ARRA PBI milestone.

Fee Bearing Milestones

1. Design, fabricate, and install a corrosion probe in AW-104 by September 30, 2011. The Contractor shall earn \$253,000 of incremental fee upon completion of installation of the corrosion probe in AW-104.

Work Scope/Completion Criteria: Design, fabricate, and install corrosion probe in AW-104.

Completion Document: Letter transmitting performance expectation completion notice and copy of operations acceptance checklist from the installation work package documenting successful installation.

PBI-7.4 CLIN 7 ARRA TY Farm Barrier

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

Fee Structure: Terminal Method (September 30, 2011)

Desired Endpoint/Outcome

ARRA funded activities and defined work scope are successfully completed within approved cost and schedule, and the successful completion of each ARRA PBI milestone.

Fee Bearing Milestones

1. Complete construction of the TY farm barrier. The Contractor shall earn \$500,000 of incremental fee upon completion of construction of the barrier.

Work Scope/Completion Criteria: Complete construction of the TY farm barrier. The Complete Construction Completion Document approved through Section 1a, "Completion of Construction and Construction Acceptance Testing," will be issued.

Completion Document: Letter transmitting the Construction Completion Document approved through Section 1a, "Completion of Construction and Construction Acceptance Testing."

2. Complete construction of the TY farm basin. The Contractor shall earn \$200,000 of incremental fee upon completion of construction of the TY farm basin.

Work Scope/Completion Criteria: Complete construction of the TY farm basin. The Complete Construction Completion Document approved through Section 1a, "Completion of Construction and Construction Acceptance Testing," will be issued.

Completion Document: Letter transmitting the Construction Completion Document approved through Section 1a, "Completion of Construction and Construction Acceptance Testing."

PBI-7.5 CLIN 7 ARRA Mobile Arm Retrieval System Testing

Performance Fee available and assigned to this PBI: \$895,000

Fee Structure: Terminal Method (September 30, 2011)

Desired Endpoint/Outcome

ARRA funded activities and defined work scope are successfully completed within approved cost and schedule, and the successful completion of each ARRA PBI milestone.

Fee Bearing Milestones

1. Complete the proof of principal testing of the Mobile Arm Retrieval System (MARS) to validate performance of key components and demonstrate systems unique to the vacuum configuration can be run in a sustained manner by September 30, 2010. The Contractor shall earn \$395,000 of incremental fee upon completion of the proof of principal testing.

Work Scope/Completion Criteria: Complete test report documenting completion of the proof of principal testing to validate performance of key components and systems. This testing will demonstrate the control system is capable of maintaining simulant levels in the separation tank during sustained operation.

Completion Document: Letter transmitting the proof of principal testing test report.

2. Complete the integrated testing of the MARS vacuum system by September 30, 2011. The Contractor shall earn \$500,000 of incremental fee upon completion of the integrated testing.

Work Scope/Completion Criteria: Complete the integrated testing of the MARS vacuum system and issue a final test report.

Completion Document: Letter transmitting the final test report issued.

PBI-7.6 CLIN 7 ARRA AP Cathodic Protection

Performance Fee available and assigned to this PBI: \$248,000

Fee Structure: Terminal Method (September 30, 2011)

Desired Endpoint/Outcome

ARRA funded activities and defined work scope are successfully completed within approved cost and schedule, and the successful completion of each ARRA PBI milestone.

Fee Bearing Milestones

1. Complete AP cathodic protection program system plan by September 30, 2011. The Contractor shall earn \$248,000 of incremental fee upon completion of the plan.

Work Scope/Completion Criteria: Complete AP cathodic protection program system plan.

Completion Document: Letter transmitting performance expectation completion notice and copy of the work package signature page documenting successful completion of the AP cathodic protection.