

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE	PAGE OF PAGES 1   2
2. AMENDMENT/MODIFICATION NO. 0350	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (if applicable)
6. ISSUED BY Office of River Protection U.S. Department of Energy Office of River Protection P.O. Box 450 Richland WA 99352	CODE 00603	7. ADMINISTERED BY (if other than Item 6) Office of River Protection U.S. Department of Energy Office of River Protection P.O. Box 450 MS: H6-60 Richland WA 99352	CODE 00603
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) WASHINGTON RIVER PROTECTION SOLUTIONS LLC Attn: BRIAN THOMAS C/O URS ENERGY & CONSTRUCTION, INC. PO BOX 73 / 720 PARK BLVD BOISE ID 837290073		9A. AMENDMENT OF SOLICITATION NO.	9B. DATED (SEE ITEM 11)
CODE 806500521	FACILITY CODE	X 10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AC27-08RV14800	10B. DATED (SEE ITEM 13) 05/29/2008

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

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

12. ACCOUNTING AND APPROPRIATION DATA (if required)

See Schedule

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

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) FAR 52.243-2 Changes-Cost Reimbursement (AUG 1984)

**E. IMPORTANT:** Contractor  is not  is required to sign this document and return \_\_\_\_\_ 0 \_\_\_\_\_ copies to the issuing office.

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

See continuation pages.

Payment:

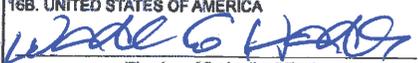
OR for ORP

U.S. Department of Energy  
Oak Ridge Financial Service Center  
P.O. Box 4307

Oak Ridge TN 37831

Period of Performance: 06/20/2008 to 09/30/2016

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

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
		Wade E. Hader	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)			30 SEP 2015
		(Signature of Contracting Officer)	

**Purpose of Modification:**

1. The purpose of this modification is to incorporate the updated Performance Evaluation and Measurement Plan (PEMP) for Fiscal Year (FY) 2016. The FY 2016 fee pool is incorporated into Section J-*List of Attachments*, Attachment J.4-*PEMP* of the contract under the authority of contract clauses B.4-*Contract Cost and Fee* and B.5-*Changes to Contract Cost and Fee*. This modification replaces Section J, Attachment J.4 in its entirety.
2. Attached to this modification is Section J, Attachment J.4, FY 2016 Performance Evaluation and Measurement Plan, pages A-i through A-58.
3. All other Terms and Conditions remain unchanged.

**Attachment**

**DE-AC27-08RV14800, MODIFICATION 350**

**Fiscal Year 2016 Performance Evaluation Measurement Plan**

**Replacement Pages**

**(Total: Sixty-Eight (68) including this Cover Page)**

- **Section J, Attachment J.4, Performance Evaluation and Measurement Plan, Pages A-i thru A-58**

**Section J, Attachment J.4**  
**Performance Evaluation and Measurement**  
**Plan**

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**Fiscal Year 2016**

**Performance Evaluation and Measurement Plan**  
**For**  
**Washington River Protection Solutions LLC**

**Performance Period:**  
**October 1, 2015, through September 30, 2016**



\_\_\_\_\_  
Kevin W. Smith, Fee Determination Official  
U.S. Department of Energy, Office of River Protection

**SEP 24 2015**

\_\_\_\_\_  
Date

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## ACRONYMS AND ABBREVIATIONS

CAM	Corrective Action Management
CM	corrective maintenance
DFLAW	direct-feed low-activity waste
DOE	U.S. Department of Energy
DSA	Documented Safety Analysis
DST	double-shell tank
Ecology	Washington State Department of Ecology
ETF	Effluent Treatment Facility
EVMS	Earned Value Management System
FDO	fee determination official
FERO	Facility Emergency Response Organization
FY	fiscal year
HFFACO	<i>Hanford Federal Facility Agreement and Consent Order</i>
HIHTL	hose-in-hose transfer line
IDF	Integrated Disposal Facility
LAWPS	Low-Activity Waste Pretreatment System
LERF	Liquid Effluent Retention Facility
ORC	Operational Readiness Checklist
ORP	U.S. Department of Energy, Office of River Protection
PA	Performance Assessment
PBI	Performance Based Incentive
PEB	Performance Evaluation Board
PEMP	Performance Evaluation and Measurement Plan
P&IDs	pipng and instrumentation diagrams
PM	performance Monitor
QA	quality assurance
RLEP	Richland Operations Office Emergency Preparedness
SEA	special emphasis area
SST	single-shell tank
TBD	to be determined
TOC	Tank Operations Contract
TPA	Tri-Party Agreement
TSAP	tank sampling and analysis plan
WMA	Waste Management Area
WRPS	Washington River Protection Solutions LLC
WTP	Waste Treatment and Immobilization Plant

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## 1.0 INTRODUCTION

Contract No. DE-AC27-08RV14800 uses multiple performance based incentives (PBI) and special emphasis area (SEA) award fee components to drive Contractor excellence in performing the operations, construction, and maintenance of the Hanford tank farms. This Performance Evaluation and Measurement Plan (PEMP) gives the U.S. Department of Energy (DOE), Office of River Protection (ORP) a tool to identify and reward superior performance.

In the execution of the contract, Washington River Protection Solutions LLC (WRPS) is expected to provide comprehensive, effective management as conscientious stewards of all tank farm facilities and activities through:

- Demonstrate safety leadership and risk-informed, conservative decision-making.
- Anticipate project challenges and providing timely resolution.
- Open communication with the workforce fostering a questioning attitude and an environment free from retribution.
- Aggressive self-discovery of project issues to ORP through critical self-analysis, performance monitoring, and comprehensive extent of condition reviews.

This PEMP also defines the ORP approach in evaluating, documenting, and providing performance fee to WRPS, in the execution of requirements defined in Contract No. DE-AC27-08RV14800. This PEMP is for the second year of the contract option period of performance from October 1, 2015, through September 30, 2016.

### 1. PEMP Objectives

- Provide ORP with a mechanism to achieve its highest priority objectives.
- Provide incentive to WRPS to accomplish ORP's management and program objectives through the establishment of critical performance objectives and measures.
- Reward WRPS with fee commensurate with the achievement of the specific ORP performance requirements.
- Create an administratively efficient process to assess WRPS performance.
- Provide a fair and reasonable basis for determining the amount of fee earned.
- Create a process that ensures WRPS work efforts are executed in a manner that provides high value and high quality deliverables to ORP.

### 2. Definitions

- Award Fee—The subjective fee component of Performance Fee.
- Expected Performance Level—Meets agreed upon requirements and performance objectives.
- Fee Determination Official (FDO)—The final authority in determination of fee awarded to WRPS.

- Office of River Protection—ORP is a U.S. Department of Energy Environmental Management field office.
- Performance Evaluation Board (PEB)—For the purpose of this PEMP, designated ORP senior managers and contracting officer are chartered with recommending WRPS earned fee to the FDO.
- Performance Evaluation and Measurement Plan (PEMP)—A plan that defines an approach in evaluating, documenting, and providing performance fee against specified PBIs and award fee incentives.
- Performance Evaluation Period—The period for which the PEB evaluates contractor's overall performance: October 1 through September 30.
- Performance Fee—That portion of the total available fee, which is tied exclusively to the contractor's performance of the contract. The performance fee amount will consist of an incentive fee component for objective performance requirements and an award fee component for subjective performance requirements or both.
- Performance Based Incentive (PBI)—A performance incentive represents a reward or consequences that may be employed to motivate a contractor to achieve baseline or higher levels of performance of a requirement. In most instances, the incentive represents an amount of fee tied to the accomplishment of a performance objective.
- Performance Measure—The quantitative method for characterizing performance.
- Performance Monitor (PM)—Designated by the PEB as responsible individuals monitoring and evaluating the contractor's performance.
- Performance Objective—A statement of desired results from an organization or activity.
- Provisional Payment of Fee—Any payments paid on a provisional basis may be reclaimed.
- Special Emphasis Area—An area that is extremely important to DOE and ORP and the fee associated with each area represents an incentive based on a graded approach and is a subjective determination by the PM for calculation of possible earned fee.
- Straight-line Method—This method provides a 100 percent incremental fee for completion of the performance measure prior to the expiration of the performance evaluation period.
- Terminal Method—This method provides 100 percent incremental fee for completion of the performance measure prior to a specific date and/or milestone; however, the Contractor will forfeit 100 percent 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.

### **3. Fee Concept**

Performance-based management contracting principles emphasize results-oriented work statements, and performance objectives and measures to incentivize contractors to achieve excellent performance. ORP implements performance-based management contracting principles

through processes associated with *Strategic Planning, Budget Formulation, Budget Execution, and Performance Evaluation.*

WRPS is responsible for the furnishing of safe, compliant, cost-effective and energy-efficient services to further the ORP mission to store, retrieve and treat Hanford tank waste, store and dispose of treated waste, and to close the Tank Farm waste management areas to protect the Columbia River. Because of the nature of this work, ORP uses performance fee to incentivize and reward WRPS for performance. Performance fee consists of two components: an incentive fee component which provides management focus and emphasis on ORP's few critical program objectives and an award fee component which provides management focus on all other aspects of WRPS's performance of the overall Tank Farm operations, construction, and maintenance programs.

- Performance Based Incentive

The PBI performance measures and fee measures are delineated in Attachment 1 of this PEMP. Emphasis will be placed on development of objective incentives based on definition of the desired outcome (the "what") and expect the contractor to compliantly and safely determine "how" the work is performed to achieve the desired outcome within the established funding constraints. These incentives are identified as PBIs and typically carry more performance risk and higher fee earning opportunities.

- Award Fee SEA Incentives

The SEA performance objectives and measures are delineated in Attachment 1 of the PEMP. In certain instances, the contractor must provide support and/or deliverables that are required to accomplish the project objectives but are not objectively measurable in all cases. These efforts are therefore measured subjectively under incentives identified as SEAs and typically carry reduced performance risk and moderate fee earning opportunities and the FDO may use discretionary factors in determining fee. Consideration will also be given to complete and accurate technical information/products delivered in mutually agreed time frames that meet all applicable codes, standards, rules, regulations and orders.

## 2.0 REFERENCES

ORP contract with WRPS; Contract DE-AC27-08RV14800.

## 3.0 METHOD FOR DETERMINING PERFORMANCE FEE

### 1. Communication with WRPS during the Evaluation Period

One important consideration for evaluation will be discussions between the PM and their WRPS counterpart. It is a management expectation that PMs meet with their WRPS counterpart at least monthly to review, discuss, and provide interface on WRPS' performance against the performance-based and award fee incentives and overall contract performance.

Regular communication with WRPS at the PM level will contribute to the success of the fee process. PM should discuss performance which may not currently meet performance objectives and measures, and thereby keep WRPS informed as to achievements and deficiencies that may appear in the final evaluation for the period.

ORP will use this separate color-coded table for informal monthly performance evaluations (see Attachment 5). The final evaluation will reflect the adjectival rating scale in Attachment 1.

## **2. WRPS Self-Assessment**

WRPS shall provide the ORP Contracting Officer with a critical self-assessment within 10 working days after the end of an award fee evaluation period. WRPS must also provide an electronic copy of its critical self-assessment of performance to ORP Contracting Officer for distribution to ORP PMs.

WRPS shall critically assess progress in meeting deliverables within cost, schedule and scope, including meeting the specified acceptance criteria. WRPS shall identify issues potentially affecting the completion of individual PBIs and SEAs and the overall success of the program, and actions taken or recommended to resolve those issues. WRPS's critical self-assessment shall propose and justify the amount of performance based incentive and award fee earned, and include a discussion of fee reductions warranted by any failure to meet performance expectation. In the event the contractor self-discloses a situation that falls within the support of a special emphasis area, and appropriately self-corrects the situation in a timely manner, fee reduction may be waived by the FDO.

## **3. ORP Assessment**

ORP PMs shall prepare and submit to ORP PEB Chair Person, an independent assessment of WRPS's performance within 20 calendar days upon receipt of the WRPS end of the year self-assessment. The ORP PM shall consider WRPS's input with respect to completing the SEA performance criteria and with respect to the quality. Where significant disagreement exists between WRPS's self-assessment and ORP's assessment, the responsible ORP PM shall raise such disagreements to the PEB for resolution. WRPS may be requested to attend a Board meeting to assure their view is understood.

ORP PMs shall also consider the additional input received during monthly operating reviews. Such reviews will enable program-wide understanding of progress, an integrated assessment of impacts, and the identification of corrective actions. Assessments shall also document the rationale for any reduction in the amount of award fee earned.

ORP PEB Chair Person will consolidate ORP PM Evaluation Reports and submit a written evaluation report to the PEB members (see Attachment 4 for the list of PEB members) with recommendations for final approval from the FDO.

**4. Performance Evaluation Process**

Performance Evaluation Process		
Activity	Duration	Evaluation Period
Award fee evaluation period	365 days	October 1, 2015 to September 30, 2016
WRPS Monthly list of completed PBIs and supporting documentation are provided to the ORP Contracting Officer	10 days	10 working days after each calendar month
WRPS third quarter and end of year self-assessment of award fee performance objectives and measures are provided to the ORP Contracting Officer	10 days	10 working days after each the end of the quarter
ORP PMs will prepare and submit Independent Assessment of WRPS performance to ORP PEB Chair	20 days	20 working days after each calendar month for PBIs and 20 days after third and fourth quarters for award fee assessment
ORP consolidate performance monitor evaluation reports and submit to ORP PEB members for review	30 days	~ 30 days after receipt of monthly PBI completion letter and third quarter or end of year award fee self-assessment.
PEB will review, validate and prepare evaluation report with recommendation to the FDO	60 days	~ 60 days after receipt of monthly PBI completion letter and end of year award fee self-assessment.
FDO determines amount of PBI fee earned (monthly) and award fee earned (annually)	70 days	70 days after receipt of monthly PBI completion letters and 70 days after receipt of end of year award fee self-assessment.

- Within 10 working days after the end of a calendar month, WRPS shall provide the ORP Contracting Officer with a list of the PBIs completed in that month and supporting documentation demonstrating the performance based incentives have been earned. Within 10 days after the end of the third quarter, WRPS shall provide the Contracting Officer with a self-assessment of their performance towards achievement of the award fee performance objectives and measures during the first three quarters. The contractor will provide an electronic copy of its monthly PBI completion report and third quarter award fee self-assessment report to the ORP Contracting Officer for distribution to ORP PMs.
- Within 20 working days upon receipt of the monthly WRPS PBI completion letter, and 20 working days upon receipt of the third quarter award fee self-assessment report ORP PMs will prepare and submit an independent assessment of WRPS's performance, with respect to quality and schedule, against the PBI completion criteria and/or award fee performance objectives and measures to the ORP PEB Chair Person for consolidation. The ORP PM shall consider WRPS's input with respect to payments of fee. Where

significant disagreement exists between WRPS's self-assessment and ORP's assessment, the responsible PM shall raise such disagreements to the ORP PEB for resolution.

- The ORP assessment must be submitted on the PM Evaluation Report form, Attachment 2 of the Plan, and will only be accepted by the ORP PEB Chair Person upon the approval of the ORP PM.
- Within approximately 30 calendar days upon receipt of the monthly WRPS PBI completion letter, and third quarter award fee evaluation period, the ORP PEB Chair Person will consolidate PM Evaluation Reports and submit to the PEB members for review.
- Within approximately 60 calendar days upon receipt of the monthly WRPS PBI completion letter, and end of year award fee evaluation period, the PEB will review, validate, and prepare an evaluation report and submit a fee recommendation to the FDO.
- Within 70 calendar days upon receipt of the monthly WRPS PBI completion letter, and end of year award fee self-assessments, the FDO will make a determination of the fee earned.

#### **5. Evaluation and Discussion Documentation**

Where meetings or discussions are held by the PM (with WRPS, DOE Headquarters, or others) that significantly impact award fee evaluations, it is necessary that appropriate documentation be created. This documentation can be in the form of signed and dated notes, minutes, or correspondence. Copies of the PM documentation should be maintained by the PM in support of the PM Evaluation Report.

Rationale for fee payments will be documented by the PEB for the FDO. The final PEB Fee Recommendation and FDO Fee Determination reports along with supporting rationale will be maintained by the ORP Contracts and Property Management organization in the official "contract file."

#### **4.0 METHOD FOR CHANGING PLAN COVERAGE**

Proposed changes to the PEMP may be initiated by ORP. Proposed changes to the PEMP may be initiated on the official PEMP Change Form (Attachment 4). The respective PM will review and concur on proposed changes prior to any changes being made to the PEMP. The FDO will either approve or disapprove any proposed changes to the PEMP.

The government may unilaterally revise the criteria and/or the amount of fee available prior to the start of the evaluation period. The Contracting Officer will notify the contractor in writing of such changes before the next evaluation period begins and the award fee plan will be modified accordingly. Once the evaluation period begins, neither the criteria nor the amount of award fee available may be unilaterally changed; changes must be agreed to by both ORP and WRPS.

**ATTACHMENT 1  
 PERFORMANCE BASED INCENTIVES**

<b>PERFORMANCE BASED INCENTIVES</b>	<b>VALUE</b>	<b>PERFORMANCE MONITOR</b>
PBI-15.1 CLIN 1 222-S Laboratory Upgrades	\$760,000	Tank Farms
PBI-15.2 CLIN 1 Waste Volume Reduction	\$1,216,000	Tank Farms
PBI-15.3 CLIN 1 Complete Readiness Activities and Restart ETF	\$1,596,000	Tank Farms
PBI-15.5 CLIN 1 Double-Shell Tank Integrity Program	\$494,000	Tank Farms
PBI-15.6 CLIN 1 Core Sampling	\$266,000	Tank Farms
PBI-15.7 CLIN 1 DST Infrastructure Upgrades	\$1,748,000	Tank Farms
PBI-15.8 CLIN 1 SST Intrusion Management	\$494,000	Tank Farms
PBI-16.0 CLIN 2 AX Farm Retrieval Activities	\$5,016,000	Tank Farms
PBI-16.1 CLIN 2 AY-102 Retrieval	\$3,002,000	Tank Farms
PBI-16.3 CLIN 2 C Farm Retrieval Activities	\$3,002,000	Tank Farms
PBI-17.0 CLIN 5.1 Low Activity Waste Pretreatment System	\$2,394,000	Tank Farms
PBI-17.1 CLIN 5.1 One System	\$1,178,000	Tank Farms
PBI-18.0 CLIN 2 Tank Farm Closure Activities	\$2,090,000	Tank Farms
PBI-19.0 CLIN 1 Vapors Management	\$2,964,000	Tank Farms
<b>Total PBI Fee Available</b>	<b>\$26,220,000</b>	

**AWARD FEE SPECIAL EMPHASIS AREAS**

<b>SPECIAL EMPHASIS AREAS</b>	<b>VALUE</b>	<b>PERFORMANCE MONITOR</b>
SEA 1: Management of Single-Shell (SST) and Double-Shell Tank (DST) System	\$760,000	Tank Farms
SEA 2: Performance of Tank Farm Project Operations – Conduct of Operations	\$760,000	Tank Operations
SEA 3: Cost and Management Performance	\$5,700,000	Tank Farms
SEA 4: Quality Assurance Program	\$760,000	Quality Assurance
SEA 5: Nuclear Safety	\$760,000	Nuclear Safety
SEA 6: Environmental Regulatory Management	\$760,000	Environmental
SEA 7: Safety Program Implementation	\$760,000	Safety and Health
SEA 8: Support for DFLAW and WTP Commissioning	\$1,520,000	Tank Farms
<b>Total SEA Fee Available</b>	<b>11,780,000</b>	

The PBIs are for specific scopes of work to be performed during the annual evaluation period. Each PBI will be evaluated on a pass/fail basis.

The available fee for both the PBIs and the SEAs combined is to be determine \$38,000,000. Unearned fee is not available to be earned in any subsequent evaluation period.

**PBI-15.1 CLIN 1 222-S Laboratory Upgrades**

**Performance Fee value is established at \$760,000 of Fiscal Year (FY) 2016 fee pool.**

**Fee Structure:** Straight-Line Method

<b>Milestone</b>	<b>Method</b>	<b>Fee Value</b>	<b>Due Date</b>
1	Straight-Line	\$266,000	September 30, 2016
2	Straight-Line	\$114,000	September 30, 2016
3	Straight-Line	\$266,000	September 30, 2016
4	Straight-Line	\$114,000	September 30, 2016
<b>Total</b>		<b>\$760,000</b>	

**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 demolish the existing room and design/install new systems in support of 222-S Laboratory upgrades described in the Life Cycle plan completed in 2009 and updated in 2012.

**Fee Bearing Milestones**

1. Procure and install three 222-S Laboratory Analytical Instruments. The Contractor shall earn fee of \$266,000 upon completion of installation.

Work scope/completion criteria: Procure and install three of four analytical instruments in support of the 222-S Laboratory: (1) Cold Vapor Atomic Adsorption Spectrophotometer, (2) Liquid Scintillation Counter, (3) Gas Chromatograph Mass Spectrometer, and (4) Multipotentiostat.

Completion document: Letter transmitting the performance expectation completion notices and copy of work order signature pages approved through Operations acceptance.

2. Complete design of a new Non-RAD Laboratory to replace the facility of the same type that was demolished in FY 2015. The Contractor shall earn a fee of \$114,000 upon completion.

Work scope/completion criteria: Complete design of a new Non-RAD Laboratory.

Completion document: Letter transmitting the performance expectation completion notice and copy of design documentation for the new Non-RAD Laboratory.

3. Upgrade the 222-S Laboratory Freight Elevator, which was installed in 1950. The Contractor shall earn \$266,000.

Work scope/completion criteria: Complete installation and turnover to operations a newly designed 222-S Laboratory Freight Elevator.

Completion document: Letter transmitting the performance expectation completion notices and copy of work order signature pages for the completed work scope approved through Operations acceptance.

4. Demolish and removal of MO-037. The Contractor shall earn fee of \$114,000.

Work scope/completion criteria: Completion design modifications, disconnection of utilities, and MO-037 trailer removal and disposal.

Completion document: Letter transmitting the performance expectation completion notice and copy of work order signature pages approved through Operations acceptance.

**PBI-15.2 CLIN 1 Waste Volume Reduction**

**Performance Fee value is established at \$1,216,000 of FY 2016 fee pool.**

**Fee Structure:** Straight-Line Method

Milestone	Method	Fee Value	Due Date
1	Straight-Line	\$608,000	September 30, 2016
2	Straight-Line	\$418,000	September 30, 2016
3	Straight-Line	\$190,000	September 30, 2016
<b>Total</b>		<b>\$1,216,000</b>	

**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 457,000 gallons of waste retrieved from the SSTs. In addition, all prior year campaigns must be complete prior to earning fee for the current year.

**Fee Bearing Milestones**

1. Upon completion of 217,000 gallons (after flush) of 242-A Evaporator waste volume reduction during FY 2016, the Contractor shall earn \$608,000 of 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 will process the waste to the parameters determined by Process Engineering. The after-flush waste 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 217,000 gallons (after flush) during FY 2016 of free DST volume achieved.

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. Upon completion of 130,000 gallons (after flush total cumulative 347,000 gallons) of 242-A Evaporator waste volume reduction during FY 2016, the Contractor shall earn \$418,000 of 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 will process the waste to the parameters determined by Process Engineering. The after-flush Waste 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 130,000 gallons (after flush) during FY 2016 of free DST volume achieved. Assumes the evaporator campaign volumes can be combined to achieve milestones, (e.g., Item 1's campaign has volume reduction of

217,000 gallons, and Item 2's campaign has a volume reduction of 130,000 gallons with a total volume of 347,000 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. Upon completion of 110,000 gallons (after flush total cumulative 457,000 gallons) of 242-A Evaporator waste volume reduction during FY 2016, the Contractor shall earn \$190,000 of 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 will process the waste to the parameters determined by Process Engineering. The after-flush waste 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 110,000 gallons (after flush) during FY 2016 of free DST volume achieved. Assumes the evaporator campaign volumes can be combined to achieve milestones, (e.g., Item 1's campaign has volume reduction of 217,000 gallons, and Item 2's campaign has a volume reduction of 130,000 gallons with a total volume of 347,000 gallons and Item 3s campaign has a volume reduction of 110,000 gallons for a total waste volume reduction of 457,000 gallons) and all 3 milestones 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-15.3 CLIN 1 Complete Readiness Activities and Restart Effluent Treatment Facility**

**Performance Fee value is established at \$1,596,000 of FY 2016 fee pool.**

**Fee Structure:** Straight-Line Method

Milestone	Method	Fee Value	Due Date
1	Straight-Line	\$266,000	June 30, 2016
2	Straight-Line	\$342,000	September 30, 2016
3	Straight-Line	\$988,000	September 30, 2016
<b>Total</b>		<b>\$1,596,000</b>	

**Desired Endpoint/Outcome**

Effluent Treatment Facility (ETF)/Liquid Effluent Retention Facility (LERF)/Treated Effluent Disposal Facility receives, treats, and disposes of liquid effluents and facilitates treating 242-A Evaporator condensate and future WTP secondary liquid waste. Startup of the facilities is essential for providing waste treatment capabilities to meet future need.

**Fee Bearing Milestones**

1. Complete the Operational Readiness Checklist (ORC) in support of restart of operations at the ETF. The Contractor shall earn \$266,000 of fee upon completion.

Work scope/completion criteria: The Contractor will ensure that plant systems, operating and maintenance procedures, and training and qualification of staff are ready to support operations. Signed ORC for ETF Restart demonstrating that the facility, staff, and processes are ready for operations

Completion document: Letter transmitting performance expectation completion notice and copy of the signed ORC to ORP.

2. Perform sequenced operations demonstrating operability of major systems/components of the ETF treatment systems. The Contractor will ensure that plant systems, operating and maintenance procedures, and training and qualification of staff are ready to support full scope operations by processing liquid through the evaporator system, the thin film dryer system and the main treatment train. Existing waste inventory or verification water can be used for demonstrations as appropriate. The Contractor shall earn \$342,000 of fee upon completion of the Milestone.

Work scope/completion criteria: Submit operational datasheets and logs demonstrating completion of system operability.

Completion Document: Letter transmitting the performance expectation completion notice including operational datasheets demonstrating completion of system operability and applicable corrective actions to ORP.

3. Perform Operational startup of the ETF and reduce LERF inventory by 4,000,000 gallons. The Contractor shall earn \$494,000 for LERF inventory reduction of 2,000,000 gallons, and \$494,000 for an additional 2,000,000 gallons, for a total available fee of \$988,000 upon completion.

Work scope/completion criteria: Demonstrate ETF operations by processing 4,000,000 gallons of waste through the following cycle: transfer of waste from LERF to the ETF Surge Tank; processing waste through the main treatment train; operation of the ETF Evaporator and thin film dryer; and discharge of verification water to SALDS.

Completion document: Letter transmitting the performance expectation completion notice and letter report and evidence of completion documenting that the full ETF Operations has been achieved.

**PBI-15.5 CLIN 1**

**Comprehensive Double-Shell Tank Integrity Program**

**Performance Fee value is established at \$494,000 of FY 2016 fee pool.**

**Fee Structure:** Straight-Line Method (September 30, 2016)

<b>Milestone</b>	<b>Method</b>	<b>Fee Value</b>	<b>Due Date</b>
1	Straight-Line	\$494,000	September 30, 2016
<b>Total</b>		<b>\$494,000</b>	

**Desired Endpoint/Outcome**

Support DST Integrity Project. The visual inspection results will be documented in a WRPS report and submitted to ORP. The results will inform future project decisions regarding tank integrity.

**Fee Bearing Milestones**

1. Complete 10 DST enhanced annulus visual inspections for 10 distinct DSTs (excluding AY-102) and issue report for DST integrity. The Contractor shall earn TBD of fee upon completion of the report for the 10 annulus visual inspections.

Work scope/completion criteria: Perform 10 DST enhanced annulus visual inspections. An enhanced annulus visual inspection consists of  $\geq 95\%$  inspection of the annulus floor. In addition, the visual inspection will included the primary tank dome, upper and lower haunches, sidewall, and insulating refractory visible from the annulus inspection risers.

Completion document: Letter transmitting performance expectation completion notice and applicable DST annulus visual inspection report(s).

**PBI-15.6 CLIN 1 Core Sampling**

**Performance Fee value is established at \$266,000 FY 2016 fee pool.**

**Fee Structure:** Straight-Line Method (September 30, 2016)

<b>Milestone</b>	<b>Method</b>	<b>Fee Value</b>	<b>Due Date</b>
1	Straight-Line	\$266,000	September 30, 2016
<b>Total</b>		<b>\$266,000</b>	

**Desired Endpoint/Outcome**

Tank waste sampling is essential to maintaining required tank waste chemistry, for maintaining tank integrity. Tank core sampling is high-risk work that requires extensive planning and preparation in order to be completed safely.

**Fee Bearing Milestones**

1. Complete one core sample in support of the Tank Operations Contract (TOC) mission. The Contractor shall earn a total of \$266,000 of fee upon completion of the core sample.

Work scope/completion criteria: Completion of core sample as described in the applicable Tank Sampling and Analysis Plan (TSAP). The plan shall identify; the type of sample, the technical need for the sampling activity, the location of the sample, and the sampling requirements.

Completion Document: Letter transmitting performance expectation completion notice and copy of the chain of custody documenting completion of core sample and delivery of the sample to the 222-S Laboratory.

**PBI-15.7 CLIN 1 DST Infrastructure Upgrades**

**Performance Fee value is established at \$1,748,000 of the FY 2016 fee pool**

**Fee Structure:** Straight-Line Method (September 30, 2016)

<b>Milestone</b>	<b>Method</b>	<b>Fee Value</b>	<b>Due Date</b>
1	Straight-Line	\$988,000	September 30, 2016
2	Straight-Line	\$266,000	September 30, 2016
3	Straight-Line	\$494,000	September 30, 2016
<b>Total</b>		<b>\$1,748,000</b>	

**Desired Endpoint/Outcome**

Make significant progress towards installing safety significant flow instruments in the ventilation system for the 28 DSTs.

DOE provided the Implementation Plan for Defense Nuclear Facilities Safety Board Recommendation 2012-2, Hanford Tank Farms Flammable Gas Safety Strategy which established a plan for reducing the potential risk posed by flammable gas events at the Hanford tanks farms. As part of this implementation plan, Action 2-2 installs safety significant instrumentation for real time monitoring of the ventilation exhaust flow from each DST.

Significant progress made towards infrastructure upgrades in the double-shell Tank Farms. Upgrading aging infrastructure provides safe, reliable systems which are necessary to support the mission. Replacing the aging primary ventilation system in the 241-AP Tank Farm will support future projects such as the retrieval of waste from AY-102 and direct feed of low-activity waste to the waste treatment and immobilization plant.

**Fee Bearing Milestones**

1. Complete construction, testing and turnover of the new 241-AP primary ventilation system. The Contractor shall earn \$988,000 fee upon completion by September 30, 2016.

Work scope/completion criteria: Complete necessary construction, testing and turnover to operations of the new 241-AP primary ventilation system and demonstrate operability of the system.

Completion document: Letter transmitting performance expectation completion notice and Operations acceptance of the installation work package(s) and proof of operability of the system as documented via surveillance rounds.

2. Complete Defense Nuclear Facilities Safety Board 2012-2 Recommendation, Action 2-2 airflow instrumentation installation. The Contractor shall earn \$266,000 of fee upon completion of the installation of instrumentation in one tank farm by September 30, 2016.

Work scope/completion criteria: Complete installation of the safety significant flow instruments and associated infrastructure modifications in for all tanks in one tank farm.

Completion Document: Letter transmitting performance expectation completion notice and Operations acceptance of the installation Work Package(s).

3. Complete installation and testing of wireless infrastructure upgrades in AY/AZ, AP, and AW Farms. The Contractor shall earn \$494,000 of fee upon installation of the wireless infrastructure upgrades.

Work scope/completion criteria: The Contractor shall complete installation and testing of wireless infrastructure upgrades in AY/AZ, AP, and AW Farms.

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

**PBI-15.8 CLIN 1 Single-Shell Tank Intrusion Management**

**Performance Fee value is established at \$494,000 of FY 2016 fee pool.**

**Fee Structure:** Straight-Line Method (September 30, 2016)

<b>Milestone</b>	<b>Method</b>	<b>Fee Value</b>	<b>Due Date</b>
1	Straight-Line	\$494,000	September 30, 2016
<b>Total</b>		<b>\$494,000</b>	

**Desired Endpoint/Outcome**

Support SST Integrity Project. Operate the portable exhauster POR06 at tank 241-T-112 to evaporate free liquid.

**Fee Bearing Milestones**

1. Complete required design, construction, and modifications needed for operation of the portable exhauster skid POR06 at Tank 241-T-112. Document the performance of the exhauster in evaporating the remaining free surface liquid and perform a video camera inspection after a minimum 30 days of operation or upon completion of surface liquid removal. The Contractor shall earn \$494,000 of fee upon completion.

Work scope/completion criteria: Documented performance of the portable exhauster including evaporation rates and operability after a minimum 30 days of operation or upon completion of liquid removal and performance of an in-tank video inspection.

Completion document: Letter transmitting the performance expectation completion notice and applicable documentation to ORP.

**PBI-16.0 CLIN 2 AX Farm Retrieval Activities**

**Performance Fee value is established at \$5,015,000 of FY 2016 fee pool.**

**Fee Structure:** Straight-Line Method

<b>Milestone</b>	<b>Method</b>	<b>Fee Value</b>	<b>Due Date</b>
1	Straight-Line	\$2,508,000	September 30, 2016
2	Straight-Line	\$532,000	September 30, 2016
3	Straight-Line	\$988,000	September 30, 2016
4	Straight-Line	\$494,000	September 30, 2016
5	Straight Line	\$494,000	September 30, 2016
<b>Total</b>		<b>\$5,015,000</b>	

**Desired Endpoint/Outcome**

The work outlined in this performance metric is required to prepare and retrieve tanks in AX Farms for waste retrieval following the C Farm retrievals. Completion of tank waste retrieval activities to meet or exceed performance requirements in the Consent Decree – Appendix B and C.

**Fee Bearing Milestones**

1. Complete equipment removal from two AX Farm tanks in preparation for installation of retrieval technologies. The Contractor shall earn \$1,254,000 of incremental fee for each tank for a total of \$2,508,000.

Work scope/completion criteria: The Contractor shall remove equipment from two AX farm tanks to prepare the two tanks for installation of the waste retrieval systems. The equipment to be removed from each AX Farm tank is identified in RPP-RPT-57187, *241-AX Farm Riser Utilization Evaluation*. This work scope will be completed when equipment has been removed from two of the four tanks in accordance with RPP-RPT-57187.

Completion document: Letter transmitting the performance expectation completion notices and work completed engineering change notice(s).

2. Complete procurement of Extended Reach Sluicer Systems for Tanks AX-102 and AX-104. Three sluicers will be procured for each tank. The Contractor shall earn \$266,000 of incremental for each tank for a total of \$532,000 in total fee.

Work scope/completion criteria: Each set of sluicers shall be received and green tagged.

Completion document: Letter transmitting the performance expectation completion notice and a copy of the green tags for each set of sluicers.

3. Complete POR-126 installation, testing, and operation. The Contractor shall earn \$988,000 of fee for turnover to operations and operation of POR-126.

Work scope/completion criteria: Declare exhauster skid POR-126 ready to operate. Prestart outstanding issues shall be resolved prior to letter transmittal.

Completion document: Letter transmitting the performance expectation completion notice and copy of the completed ORC, Prestart outstanding issues shall be resolved prior to letter transmittal, and copy of work order signature page(s) for the completed work scope approved through Operations acceptance.

4. Complete procurement and installation of the Water Service Building 241-A-285, including the hot and cold water skids. The Contractor shall earn \$494,000 of fee upon completion of installation.

Work scope/completion criteria: The Contractor shall install Building 241-A-285 including hot and cold water skids.

Completion document: Letter transmitting the performance expectation completion notice and work completed engineering change notice(s).

5. Complete installation of new ingress and egress trailers (MO-2249 and MO-2250), including ARGOS units and ACES Station and place into service. The Contractor shall earn \$494,000 of fee upon completion.

Work scope/completion criteria: The Contractor shall install MO-2249 and MO-2250 and place into service.

Completion document: Letter transmitting the performance expectation completion notice and work completed engineering change notice(s).

**PBI-16.1 CLIN 2 AY-102 Retrieval**

**Performance Fee value is established at \$3,002,000 of FY 2016 fee pool.**

**Fee Structure:** Terminal Method

<b>Milestone</b>	<b>Method</b>	<b>Fee Value</b>	<b>Due Date</b>
1	Terminal	\$494,000	January 31, 2016
2	Declining	\$2,014,000	March 4, 2016
3	Terminal	\$494,000	September 30, 2016
<b>Total</b>		<b>\$3,002,000</b>	

**Desired Endpoint/Outcome**

This work supports timely completion of critical AY-102 Settlement Agreement milestones to ensure readiness to operate the waste retrieval system is achieved by March 4, 2016, and retrieval to the limit of technology using two standard sluicers is accomplished by September 30, 2016, including:

- Major equipment installation complete
- Start of retrieval operations by March 4, 2016; and
- Complete sluicing operations using two standard sluicers or enter the outage to install ERSSs.

**Fee Bearing Milestones**

1. Complete the installation of two standard sluicers in AY-102 and two slurry transfer pumps, one each in AY-102 and AP-102. The Contractor shall earn a total of \$494,000 of fee for completion of equipment installation by January 31, 2016.

Work scope/completion criteria: Installation will be considered complete when the sluicers and slurry transfer pumps are installed, connected to hose-in-hose transfer lines and new pit covers are in place.

Completion Document: Letter transmitting performance expectation completion notice and copy of the completed work packages.

2. Start retrieval operations by initiating waste retrieval from AY-102 by March 4, 2016. The Contractor shall earn a total of \$2,014,000 of fee upon completion of initiation of waste retrieval by March 4, 2016 (Declining method milestone).

Work scope/completion criteria: Transfer equipment has been installed, readiness activities required for initiation of retrieval have been completed and the retrieval of waste from AY-102 has commenced on or before March 4, 2016. The Declining method penalty calculation date for this milestone shall be \$1,007,000 for the period March 5, 2016, through

March 18, 2016; and \$1,510,500 total reduction for the period March 19, 2016, through April 4, 2016. Thereafter, no fee will be eligible to be earned.

Completion document: Letter transmitting performance expectation completion notice, a copy of the completed ORC for AY-102 waste retrieval and proof of the initiation of waste retrieval from AY-102.

3. Complete retrieval of AY-102 sludge to the limits of the standard sluicing technology using two sluicers or enter the outage for installation of additional sluicing capability by September 30, 2016. The Contractor shall earn a total of \$494,000 of fee upon completion retrieval to the limit of technology using two standard sluicers or enter the outage for installation of additional sluicing capability by September 30, 2016.

Work scope/completion criteria: Sludge retrieval is completed to the limit of technology using the two standard sluicers.

Completion document: Letter transmitting performance expectation completion notice and documentation demonstrating the limit of technology for the two standard sluicers has been met, or documentation demonstrating that the sludge retrieval rate has diminished to the point that additional sluicers will be required to comply with the consent decree and that all preparations are complete to enable entering the outage to install additional sluicers and that the outage has been initiated.

**PBI-16.3 CLIN 2 C Farm Retrieval Activities**

**Performance Fee value is established at \$3,002,000 of FY 2016 fee pool.**

**Fee Structure:** Straight-Line Method

Milestone	Method	Fee Value	Due Date
1	Straight-Line	\$152,000	September 30, 2016
2	Straight-Line	\$2,850,000	September 30, 2016
<b>Total</b>		<b>\$3,002,000</b>	

**Desired Endpoint/Outcome**

The performance objectives in these fee bearing milestones must be completed upon the end of tank waste retrieval activities as required in the *Hanford Federal Facility Agreement and Consent Order* (HFFACO.)

Hose-in-hose transfer lines (HIHTL) that are used in the tank farms for the temporary movement of waste for retrieval are required to be removed from the Hanford Tank Farms once retrieval activities in a Farm are complete in accordance with the schedule in the temporary HIHTL Management Plan.

**Fee Bearing Milestones**

1. In partial completion of Tri-Party Agreement (TPA) Milestone M-45-86, provide retrieval data report for Tank 241-C-102 in C Farm that has completed retrieval under the Consent Decree. The Contractor shall earn a total of \$152,000 of fee upon completion of the report.

Work scope/completion criteria: Each retrieval data report shall include the following elements:

- 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
- 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 TSAP. 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. Note: Development of a retrieval data report does not require Washington State Department of Ecology (Ecology) approval of completion of retrieval.

Completion documents: Provide to the ORP a formally released retrieval data report addressing the elements described above.

2. Complete removal and ready to ship up to 38 interim stabilization HIHTLs. The Contractor shall earn \$75,000 of fee for each HIHTL completed for a total available fee of \$2,850,000:

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. The HIHTL waste package is ready to ship to the waste TSD facility.

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

**PBI-17.0 CLIN 5.1 Low Activity Waste Pretreatment System**

**Performance Fee value is established at \$2,394,000 of the FY 2016 fee pool**

**Fee Structure:** Straight-Line Method

Milestone	Method	Fee Value	Due Date
1	Straight-Line	\$1,102,000	September 30, 2016
2	Straight-Line	\$494,000	September 30, 2016
3	Straight-Line	\$266,000	September 30, 2016
4	Straight-Line	\$532,000	September 30, 2016
<b>Total</b>		<b>\$2,394,000</b>	

**Desired Endpoint/Outcome**

Approval of Critical Decision 1 has allowed the Low Activity Waste Pretreatment System (LAWPS) Project to continue into preliminary design. The completion of the Piping and Instrumentation Diagrams (P&IDs), Preliminary Safety Design Report, Ion exchange and filter specifications, and set up of the scale integrated testing will further solidify the LAWPS design and safety features to complete the combined Critical Decision 2/3.

**Fee Bearing Milestones**

1. Complete LAWPS P&IDs, Rev. 0, by September 30, 2016. The Contractor shall earn \$1,102,000 upon submittal to ORP.

Work scope/completion criteria: The architect/engineer shall complete the LAWPS Preliminary Design P&IDs with the review team (AECOM/WRPS) and ORP comments dispositioned and issued as revision 0 drawings. Assumes ORP 30-day concurrent review cycle. The P&IDs will comprise approximately 30 drawings and will provide the basis for the preliminary and final design.

Completion document: Letter transmitting the performance expectation completion notice and LAWPS P&IDs, Rev. 0 to ORP.

2. Submit Preliminary Safety Design Report by September 30, 2016. The Contractor shall earn \$494,000 upon submittal.

Work scope/completion criteria: WRPS shall complete the LAWPS Preliminary Safety Design Report with the review team (AECOM/WRPS) and ORP comments dispositioned and issued for ORP approval. Assumes concurrent 30-day review cycle.

Completion document: Letter submitting the performance expectation completion notice and preliminary safety design report to ORP for approval.

3. Complete procurement specifications for the Ion Exchange Column and Filters by September 30, 2016. The Contractor shall earn \$266,000 upon completion of the procurement specifications.

Work scope/completion criteria: The architect/engineer shall complete the LAWPS Preliminary Design Ion Exchange Column and Filter procurement specification with the review team (AECOM/WRPS) comments incorporated and issued as revision 0 procurement specification. The specification will provide sufficient detail to allow vendors to provide the detailed design necessary for fabrication.

Completion document: Letter transmitting the performance expectation completion notice and procurement specifications for the Ion Exchange Column and Filters to ORP.

4. Complete set up of the Engineering Scale Integrated Test by September 30, 2016. The Contractor shall earn \$532,000 upon completion.

Work scope/completion criteria: The scope of the Engineering Scale Integrated Test comprises an integrated engineering-scale prototypic test of the equipment (as specified in the Integrated Test Proposal, transmitted via WRPS-1500020) during preliminary design to test interactions between equipment on a small-scale to inform/validate the preliminary design and inform the final design of the permanent plant. Specifically, the project will complete the following tests: Resin Dump System Proof-of-concept Test, Cross-flow Filter Test, Filter Corrosion Test, and complete set-up for the Engineering-scale Integrated Test.

Completion document: Letter transmitting the performance expectation completion notice and WRPS issued Test Report(s) and Test Set-up Memo.

**PBI-17.1 CLIN 5.1 One System**

**Performance Fee value is established at \$1,178,000 of the FY 2016 fee pool**

**Fee Structure:** Straight-Line Method

Milestone	Method	Fee Value	Due Date
1	Straight-Line	\$304,000	September 30, 2016
2	Straight-Line	\$760,000	September 30, 2016
3	Straight-Line	\$114,000	September 30, 2016
<b>Total</b>		<b>\$1,178,000</b>	

**Desired Endpoint/Outcome**

The completion of these activities contribute to increased schedule confidence that direct-feed low-activity waste (DFLAW) processing will start by December 2021. This includes providing critical support to major elements of the program such as the Integrated Disposal Facility (IDF) Performance Assessment and continuing to narrow in on an optimum set of processing strategies such as the option report for ETF

**Fee Bearing Milestones**

1. Complete development of the PCP-ETF-01, Option 3 Report – Offsite Treatment-Onsite IDF Disposal for Secondary Liquids from ETF to support DFLAW Operations by September 30, 2016. The Contractor shall earn \$304,000 upon submittal to ORP.

Work scope/completion criteria: Complete the development of the option report by September 30, 2016:

Completion document: Letter transmitting the performance expectation completion notice and the project report.

2. Complete testing and laboratory studies to enable preparation and submission of comprehensive waste form data packages for the Integrated Disposal Facility performance assessment by September 30, 2016. The Contractor shall earn \$760,000 upon submittal.

Work scope/completion criteria: Complete the testing and laboratory studies to enable the preparation and submission of the comprehensive waste form data packages for the Integrated Disposal facility performance assessment. The data packages will include (1) the secondary liquid waste form development-mature cast stone waste form and provide the performance data in the data package; (2) ILAW glass testing – develop performance data on new glasses in data package; and (3) Secondary solid waste form technology maturation (DFLAW) – develop report documenting analysis and/or testing on secondary solid waste form.

Completion document: Letter submitting the performance expectation completion notice and the comprehensive waste form data packages.

3. Complete Isolok accuracy testing and laboratory sample analysis to demonstrate the effectiveness of an improved sample chamber configuration. The Contractor shall earn a total of \$114,000 of fee for completion of the test and submittal of the final test report by September 30, 2016.

Work scope/completion criteria: Define the modified Isolok sample chamber configuration, modify the test platform, develop test plan, complete the Isolok accuracy testing and laboratory sample analysis, and submit the final test results report by September 30, 2016.

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

**PBI-18.0 CLIN 2 Tank Farm Closure Activities**

**Performance Fee value is established at \$2,090,000 the FY 2016 fee pool**

**Fee Structure:** Straight-Line Method

Milestone	Method	Fee Value	Due Date
1	Straight-Line	\$304,000	September 30, 2016
2	Straight-Line	\$418,000	September 30, 2016
3	Straight-Line	\$608,000	September 30, 2016
4	Straight-Line	\$760,000	September 30, 2016
<b>Total</b>		<b>\$2,090,000</b>	

**Desired Endpoint/Outcome**

Complete the initial human health and environmental risk assessment/performance assessment for Waste Management Area (WMA) C Performance Assessment (PA). Perform initial modeling for the development of the PA for WMA A/AX and for the development of the PA for the ID.

**Fee Bearing Milestones**

1. Complete the WMA C PA documentation in accordance with HFFACO Appendix I and DOE O 435.1. The Contractor shall earn \$304,000 of incremental fee upon completion.

Work scope/completion criteria: The documentation will support the development of closure decisions for WMA C in accordance with HFFACO Appendix I and DOE O 435.1. The WMA C PA will incorporate any revisions required to address comments from the Low Level Waste Disposal Facility Federal Review Group review.

Completion document: Letter transmitting the performance expectation completion notice and publically released WMA C PA documentation for review by regulators and outside organizations.

2. Complete initial modeling for the IDF PA, and provide a summary of the initial results. The Contractor shall earn \$418,000 of incremental fee upon completion.

Work scope/completion criteria: Develop and implement IDF PA base case model:

- Develop and implement near-field models using appropriate software.
- Initiate the development of sensitivity analysis cases.
- Provide summary documentation of basis for selection of software tools and modeling approaches, and results of initial modeling.

Completion document: Letter transmitting the performance expectation completion notice and summary documentation of basis for selection of software tools and modeling

approaches, and results of initial modeling. The documentation will be an internal, unreleased technical report.

3. Complete up to four draft WMA C Closure Support Documents: DOE O 435.1 Tier 1 Closure Plan, RCRA Tier 2 Closure Plan, WIR Basis, and Corrective Measures Study. The Contractor shall receive \$152,000 for each completed draft document for total available fee of 608,000 upon completion.

Work scope/completion criteria: Complete up to four draft WMA C Closure Support Documents for DOE's review prior to finalization and submittal. Provide a draft Tier 1 Closure Plan that meets the requirements of DOE O 435.1. Provide a draft RCRA Tier 2 Closure Plan that meets the requirements of TPA Appendix I; Provide draft Basis documents for the WMA C Waste Incidental to Reprocessing (WIR) decision that meet the requirements of DOE O 435.1; provide a draft update to the RCRA Facility Investigation Report and a Corrective Measures Study to meet the requirements of TPA appendix I and TPA milestone M-056-61A.

Completion document: Letter transmitting the performance expectation completion notice and up to four draft WMA C Closure Support Documents for DOE's review prior to finalization and submittal. 1) A draft WMA C DOE O 435.1 Tier 1 Closure Plan; 2) A draft WMA C RCRA Tier 2 Closure Plan; 3) Draft Basis documents for the WMA C WIR determination; 4) A draft update to the RCRA Facility Investigation Report and a draft Corrective Measures Study for WMA C.

4. Obtain post-retrieval waste samples to support Tank Closure in accordance with an approved TSAP for tanks 241-C-102, 241-C-105, and 241-C-111 in C-Farm. The Contractor shall earn a total of \$253,333 upon completion for each tank post-retrieval sample for total available fee of \$760,000.

Work scope/completion criteria: Completion of sampling per the approved TSAP and delivery to 222-S Analytical Laboratory for Analysis. The plan shall identify; the type of sample, the technical need for the sampling activity, the location of the sample, and the sampling requirements.

Completion document: Letter transmitting performance expectation completion notice and copy of the chain of custody documenting completion of core sample and delivery of the sample to the 222-S Laboratory.

**PBI-19.0 Vapors Management**

**Performance Fee value is established at \$2,964,000 of FY 2016 fee pool.**

**Fee Structure:** Straight-Line Method

Milestone	Method	Fee Value	Due Date
1	Straight-Line	\$988,000	September 30, 2016
2	Straight-Line	\$494,000	September 30, 2016
3	Straight-Line	\$494,000	September 30, 2016
4	Straight-Line	\$988,000	September 30, 2016
<b>Total</b>		<b>\$2,964,000</b>	

**Desired Endpoint/Outcome**

Evaluate chemical vapor management elements necessary to enable achievement of Tank Farm mission objectives. Complete key evaluations and decisions during Phase 1 of the Implementation Plan. Decisions will lead to defensible institutionalized improvements.

**Fee Bearing Milestones**

1. Complete the Chemical Vapor Implementation Plan activities for the Technology Readiness pilot scale demonstration phase for vapor monitoring and detection equipment by September 30, 2016. The Contractor shall earn a total of \$988,000 of fee upon completion.

Work scope/completion criteria: The Contractor shall complete phased testing and provide the documented basis (final test report) for vapor monitoring and detection equipment system(s).

Completion document: Letter transmitting a final test report for recommended vapor monitoring and detection equipment system(s).

2. Complete chemical cartridge effectiveness evaluation for bounding tanks (four) based upon tank vapor mixtures. The Contractor shall earn a total of \$494,000 of fee upon completion.

Work scope/completion criteria: Based upon the cartridge evaluation final report, the Contractor shall provide objective data supporting maximum use concentrations (time) of chemical cartridges, and chemical concentration. This data will determine the cartridge change scheduled necessary to be able to use air purifying respirator cartridges in compliance with 10 CFR 851, Worker Safety and Health requirements.

Completion document: Letter transmitting the performance expectation completion notice and a documented basis for the use of air purifying respirator cartridges.

3. Complete Draft Chemical Vapor Guidance Manual development. The Contractor shall earn a total of \$494,000 of fee upon completion.

Work scope/completion criteria: The Contractor shall prepare the draft Chemical Vapor Guidance Manual. The key attributes of the manual will provide Work Planning and Control of Chemical Vapors (as low as reasonably achievable), Work Planning, Performance Indicators, Communications (internal, external risk), training, Industrial Hygiene Routines and Enhanced Characterization (sampling-headspace/personnel/area, monitoring).

Completion document: Letter transmitting the performance expectation completion notice and the Draft Chemical Vapor Guidance Manual. NOTE: the policies, procedures, etc., would be developed from the recommended program manual once ORP approves the recommendation.

4. Complete 20 head space gas samples in support of the Tank Operations Contact Tank Vapors Assessment Team Vapor Project. The Contractor shall earn a total of \$988,000 of fee upon completion.

Work scope/completion criteria: Complete the head space gas sample as described in the applicable TSAP. The plan shall identify; the type of sample, the technical need for the sampling activity, and location of the sample, and the sampling requirements.

Completion document: Letter transmitting the performance expectation completion notice and copy of the chain of custodies documenting completion of head space samples and delivery of the samples to the 222-S Laboratory. Letter will include the list of tanks and the dates samples were obtained.

**SPECIAL EMPHASIS AREA  
 OVERALL GRADES & ASSOCIATED PERCENTAGES OF EARNED FEE**

<b>Award-Fee Adjectival Rating</b>	<b>Award-Fee Pool Available To Be Earned</b>	<b>Description</b>
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: The period of performance is October 1, 2015, through September 30, 2016. The total available fee is split between the PBIs and SEAs. At the conclusion of the 12-month evaluation period DOE will determine the award fee associated with the SEAs. ORP's evaluation of the contractor's performance in the SEAs will be combined to an overall rating. Failure in any of the SEAs could result in a change to the overall rating as determined by the Fee Determination Official.

To be minimally acceptable, all contractor formal products by contract, DOE order, regulation, procedure, plan, or DOE written direction shall be complete, accurate, and on schedule.

Requirements shall clearly flow down and be transparent within the product and ensure compliance with ES&H and quality assurance (QA) requirements. Evidence of unsatisfactory performance on the part of the contractor is (1) technical errors or omissions in contractor developed products, (2) performance not completed by close of business on the agreed upon date scheduled, and (3) noncompliance with designated Completion Criteria.

## **SEA 1: Management of Single-Shell Tank (SST) and Double-Shell Tank (DST) System**

**Performance Fee value is established at \$760,000 of FY 2016 fee pool**

### **Desired Outcome:**

In the execution of the contract, WRPS is expected to provide holistic, comprehensive, and effective management as conscientious stewards of all Tank Farm facilities and activities through:

- Demonstrating safety leadership and risk-informed, conservative decision-making
- Anticipating project challenges and providing timely resolution
- Open communication with the workforce – fostering a questioning attitude and an environment free from retribution
- Aggressive self-discovery of project issues to ORP through critical self-analysis, performance monitoring, and comprehensive extent of condition reviews

Additionally, WRPS will provide management focus on maintenance, compliance, surveillance and integrity of the Tank Farms facility.

**Areas of focus** include overall WRPS management of the Hanford Tank Farm facilities and systems including SST and DST infrastructure, DST Chemistry, SST and DST Integrity, and Support for WTP Commissioning.

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

- **Overall Tank Farm Management**

Demonstrate effective long-term stewardship of the entire Hanford Tank Farm project facilities and processes through

- Demonstrating safety leadership and risk-informed, conservative decision-making
- Anticipating project challenges and providing timely resolution
- Open communication with the workforce – fostering a questioning attitude and an environment free from retribution
- Aggressive self-discovery of project issues to ORP through critical self-analysis, meaningful performance monitoring, comprehensive extent of condition reviews, and effective risk identification and management
- Ensure spares are on hand to reduce delays in mission operations due to procurement or construction.

- **SST and DST Infrastructure**

General maintenance of all SST and DST Infrastructure, to include but not limited to:

- Maintain pumps and other critical infrastructure not frequently used to reduce delays to operations
- Maintain DST ventilation.
- Prioritize and perform necessary infrastructure upgrades such as but not limited to: waste transfer system pit modifications, transfer pump and jumper replacements.

- **DST Chemistry and Integrity**

The maintenance of DST and waste transfer system piping and associated containment system (waste transfer fitness for service) 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
- Obtain better understanding of the corrosion potential of the waste.
- Support work done by Pacific Northwest National Laboratories in order to automate updating of the Monthly Tank Waste Summary Report.

- **Single-Shell Tank Integrity**

Maintain the SST Integrity program.

- Continue routine SST video inspections and dome reflection surveys in support of SST structural integrity and SST intrusion investigations.
- Ensure prompt and thorough review of monitoring data.
- Evaluate ways to reduce the resources required to verify and validate monitoring data as well as reduce the required time in field to obtain monitoring data.

## **SEA 2: Performance of Tank Farm Project Operations – Conduct of Operations**

**Performance Fee value is established at \$760,000 of FY 2016 fee pool.**

**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, general Conduct of Operations improvements and integration of chemical as low as reasonably achievable principles.

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

- DOE oversight indicate WRPS self-identification of event precursors and resolution of causal factors prior to significant issues or consequential ( $\geq$ SC-2) events;
- Personnel are cognitive of and avoid at-risk behaviors and conditions. Senior Managers (Level 0, 1, and 2) are proactive in identifying these behaviors and correcting conditions in the field through established WRPS processes (Problem Evaluation Request, Management Observation Program/Worksite Visits, etc.);
- WRPS assessment and investigation processes proactively identify noncompliances and opportunities for improvement that result in improved WRPS performance in accordance with the contract.
- Additional trending data such as Occurrence Reporting and 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 to both normalize and evaluate the safety significance of trending data and WRPS management takes actions to mitigate performance deficiencies;
- 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;
- 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;
- The 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, senior management field presence, Conduct of Operations/Mentors/Senior Technical Engineer ownership of Conduct of Operations initiatives and issues, additional Human Performance Improvement Lab response to abnormal events or lessons learned, or drill program improvement;

- Production Operations Transfer and Single-Shell Retrieval and Closure Transfer processes, where applicable, demonstrate continuous improvement and consistency between the two line organizations for increased safety or more efficient transfer process.
- Sustained performance and continuous improvement in the Corrosion Control Program that result in proactive management of out of specification tank chemistry.
- WRPS conduct of operations principles are effectively applied in operational, maintenance, and upgrade activities incorporating practices that result in an effective hierarchy of controls being implemented to mitigate Tank Farm hazards which include chemical hazards.
- **Conduct of Engineering** – Improvement in effectiveness, consistency of Engineering systems and programs.
  - Identify, evaluate and provide solutions to emerging Tank Farms technical issues. Examples may include developing a path forward to separable organics in waste feed solids, evaluating plutonium particulate strategic processing alternative, etc. ;
  - Develop an Operations Research model for DFLAW.
  - Establish the Code of Record for vital Tank Farms systems in preparation for planned FY-17 & FY-18 efforts.
  - Provide efficient and sound Process Engineering support to on-going or new Tank Farms projects.
  - Maintain the Engineering Change Notices backlog > 3 years old below 50;
  - Deployment of improved design change process and evidence of increased rigor in planning and field execution.
  - Using establish metrics, monitor and demonstrate to improved A&E subcontractor performance.
  - Monitor and continue to reduce design errors resulting in Engineering or field rework;
  - Improve Ventilation System performance while maintaining a 90 percent availability, with a focus on deployment of additional portable ventilation skid capability and availability of portable systems. Support successful installation and operation of the new AP farm primary exhauster;
  - Using established metrics, demonstrate consistent use of latest edition of consensus codes and standards when performing design/modification work where an appropriate code of record does not exist. This includes the development and issuance of up-to-date M-codes (i.e. piping specifications to ensure appropriate application of B31.3) for TOC facilities.
  - Provide innovative engineering solutions that result in improved safety performance (e.g. IAS84.01 implementation).
  - Effective transition of existing document control and configuration management

systems to support effective hazard identification and control;

- Shift Technical Engineers are deployed and effectively integrated into the shift team as demonstrated by increase rigor/consistency in navigating TSR, supporting equipment operability determination, and providing effective technical oversight.
- Effective rollout (procedures and training) of an enhanced ignition control and flammable gas monitoring program incorporating lessons learned from general industry and consistent with the formal causal analysis and corrective action plan.
- **Conduct of Maintenance** –
  - Establish a technical basis for what constitutes steady state level for corrective maintenance (CM) backlog and a 50% reduction in prioritized repairs. Maintain CM backlog less than the established range within priorities for CM of equipment critical to Documented Safety Analysis (DSA)/Technical Safety Requirement and environmental compliance
  - Establish deferred maintenance processes and achieve a 50% reduction in delinquent items to support the long term goal of zero delinquent preventive maintenances; Establish a technical basis for what constitutes steady state level for preventive maintenance backlog and maintain preventive maintenance backlog less than the established range within priorities for preventive maintenance of equipment critical to DSA/Technical Safety Requirement and environmental compliance;
  - Identification and implementation of at least two improved stewardship opportunities (i.e., Tool Crib equipment tracking), including metrics to demonstrate improvement;
  - Infrastructure Surveillance and Maintenance. Provide a listing, description of condition, and needs/issues of the facilities as documented in the stewardship plan.
- **Work Processes** –
  - Measure performance of work scheduling versus work execution effectiveness and evaluate the causes for cancelation of planned work and response to trends.
  - 900 (75/month) Management oversight observations of work execution.
  - Evaluate work packages for appropriate level of planning, including use of “skill of the craft” and effective integration of controls into work instructions.
- **Inventory Improvement**
  - Documentation of improvements to the inventory issues that the Office of Inspector General (OIG) identified in 2015.

### **SEA 3: Cost and Management Performance**

**Performance Fee value is established at \$5,700,000 of FY 2016 fee pool.**

**Desired Outcome:** Contractor's cost and schedule performance is in alignment with the negotiated estimated costs and milestone dates contained in the contract. Contractor maintains a fully integrated cost, schedule and risk/opportunity management program.

**Areas of Focus:** Includes Contractor's Cost/Schedule, Earned Value Management System (EVMS)/Reporting, and Risk/Opportunity Management Performance.

**Evaluation Criteria:** To measure performance based on ORP's evaluation of the following criteria:

**Cost/Schedule Management** – ORP will evaluate the Contractor's cost and schedule management based upon Contractor's actual incurred costs and performance compared to the contract costs estimated completion dates of that work under active CLINs and Sub-CLINs (identified in Table B.4-1 of the Contract) within the award fee evaluation period. The analysis of cost and schedule control performance will give consideration to changed programmatic requirements, changed statutory requirements, and/or changes beyond the Contractor's control. ORP will rely on objective and/or subjective cost and schedule performance elements to evaluate the Contractor's performance, which includes, but is not limited to the following:

- Cost/Schedule Performance Indices – Evaluate and utilize cost and schedule performance indices in support of sound project management practices including implementation of cost and schedule recovery initiatives as appropriate.
- EAC Realism – Current month EAC to actual cost within 5% of forecast.
- Acumen Fuse 14 Point Schedule Check – Complete Acumen Fuse 14 point schedule check evaluation on TOC Baseline schedule and track/trend schedule health improvement.
- Effective Change Control Process and Baseline Management – Includes monthly evaluation of MR utilization and effective implementation of Authorized unpriced scope. Timely implementation of baseline changes in support of effective execution plan management.
- Funds Management – Optimize utilization of funds while planning for an appropriate amount of carryover to cover outstanding year-end commitments. Provide the Contract Funds Status Report on a monthly basis to communicate contract funding needs for duration of contract.
- Cost Savings/Avoidance – Perform 2 Lean/Rapid Improvement Events on a quarterly basis. Document and provide potential cost savings/avoidance opportunities to ORP.
- Portfolio Management – Establish a disciplined Portfolio Management process including development of a fiscal year work plan with above/below the line scope that maintains alignment of budget and funds and ensures EACs are consistent with funding targets. Supports reinvestment of identified cost savings to perform additional work scope.

- Estimate Bench-Marking – Develop benchmarking information for 10 significant recurring activities. The benchmarking information will include a reasonable number of data points for each recurring activity. It will also include a narrative describing the scope of the activity and the specific characteristics of each data point to allow the data points to be normalized. Examples of significant recurring activities are SST retrieval total costs, SST retrieval design costs, SST retrieval PM costs, SST waste transfer pump replacement costs, trailer installation costs, etc.
- GAO 12 Step Estimating Guide – Perform gap analysis on DOE Environmental Management Cost Estimate Development Handbook and implement process improvements as necessary.
- Improved Corrective Action Management (CAM) Training – Develop and implement CAM qualification program in support of improved training. CAMs to earn qualification card by September 30, 2016.
- Lifecycle Cost/Schedule Report – Issue Lifecycle cost/schedule report based on approved version of reference operating scenario. Due July 2016.
- LAWPS Lifecycle EAC Review – Perform internal LAWPS Lifecycle EAC review to ensure forecast is in alignment with remaining scope to be performed. Due September 2016.

**EVMS/Reporting** – ORP will evaluate the Contractor’s effective use of EVMS in managing their projects to ensure that sound management actions are taken when negative variances and/or cost overruns are projected. Development and submittal of the TOC Monthly Report shall meet contract requirements, be submitted on time, and of high quality. ORP will rely on objective and/or subjective cost and schedule performance elements to evaluate the Contractor’s performance, which includes, but is not limited to the following:

- OAPM EVMS Lines of Inquiry – Perform quarterly internal/joint surveillance of at least 50 OAPM EVMS Lines of Inquiry, specific to the DOE O 413.3B and EIA-748 compliance expectations.
- TOC Monthly Report – Prepare and submit TOC Monthly Report on time and with high quality. Revise current report format to include Integrated Program Management Report requirements for March 2016 reporting period.
- Corrective Action Tracking/Closeout – Demonstrate proactive identification of variance conditions requiring corrective action and effective use of PER system to manage corrective actions to closure.
- Reporting Tools/Systems – Demonstrate effective implementation of Cobra and Empower. Development of project management tools and reports in support of performance analysis and recovery plan actions.
- Program Log Reconciliation – Management Reserve, Undistributed Budget, and Authorized Unpriced Work tracking and aging and submittal of monthly “Project Change Summary” report.

**Risk/Opportunity Management** – DOE will evaluate the Contractor’s Risk and Opportunity Management performance within the award fee period based upon 1) the Contractor’s ability to accurately predict the total actual Contractor cost incurred due to Contractor risk realization or risk avoidance or opportunity likelihood enhancement during the execution of their field work and 2) the timeliness of Contractor register updates. ORP will rely on other objective and/or subjective risk/opportunity performance elements to evaluate the Contractor’s performance, which includes but is not limited to the following monthly metrics:

- The total cost to date spent by the contractor to mitigate contractor realized risks, avoid contractor risks, enhance the likelihood of opportunity realization, or the benefit of realized opportunities, compared to that planned (estimated or expected) as determined by the contractor (i.e., actual management reserve used to date versus planned use of management reserve).
- The frequency of contractor risk register updates (i.e., the number of registers beyond the 90 day update cycle required by the WRPS risk management procedure).

#### **SEA 4: Quality Assurance Program**

**Performance Fee value is established at \$760,000 of FY 2016 fee pool.**

**Desired Outcome:** Continued improvement of the contractor's QA program.

#### **Areas of Focus for Quality Assurance Program Improvement:**

Effectiveness of the contractor's QA program in providing products and services that are satisfactory for their intended function. Effectiveness will be measured by the ability of the products and services to be used as originally produced or provided, versus the need for rework to reach an acceptable status. Self-identification of quality-related problems, as well as prompt, effective corrective actions, is required rather than having those problems identified by ORP or by external organizations.

Evaluation Criteria for measuring the contractor's QA program performance will include ORP's subjective evaluation of the contractor's progress based on the following:

- Adequate flow-down and effective application of TOC QA program management criteria (TFC-PLN-02, *Quality Assurance Program Description*);
- Improved efficiency and timely reporting in the performance of the independent QA audit process, including adequate auditor and auditee resources to support scheduled QA audits;
- Improved self-identification of conditions adverse to quality, including proper recognition and control of nonconforming items;
- Improved procurement quality implementation, as demonstrated through effective subcontractor administration (i.e., quality engineering support) and QA oversight, in support of the LAW-PS project;
- Improved Software Quality Assurance implementation and supporting documentation;
- Improved Corrective Action management; and,
- Effective implementation of Commercial Grade Dedication as a procurement strategy.

**SEA 5: Nuclear Safety**

**Performance Fee value is established at \$760,000 of FY 2016 fee pool.**

**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:

- Completion of Planned Improvements identified in the Tank Farms DSA;
- Timely declaration and management of Potential Inadequacies in the Safety Basis;
- Unreviewed Safety Question process compliance with 10 CFR 830.203 and DOE G 424.1-1, Implementation Guide for Use in Addressing Un-reviewed Safety Question Requirements;
- Responsiveness to and management of performance and assessment areas needing attention as identified by contractor self-assessments, ORP assessments, and external reviews.
- Proactive development of DSA amendments and Justifications for Continued Operations to identify and resolve implementation challenges prior to transmittal to ORP for approval.

## **SEA 6: Environmental Regulatory Management**

**Performance Fee value is established at \$760,000 of FY 2016 fee pool.**

**Desired Outcome:** Demonstrated improvement in environmental stewardship

### **Areas of Focus for environmental stewardship and compliance:**

- Environmental Management System and performance metrics;
- Permitting documents and compliance to permits and licenses and environmental reporting;
- Proactive assessment/evaluation program;
- 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 ORP's subjective evaluation of the contractor's performance based on the following:

- Quality and implementation of the documented environmental protection program and the contractor's establishment and implementation of environmental performance metrics;
- Early identification of issues and concerns through a proactive assessment/evaluation program;
- Data and regulatory approaches are prepared in a timely manner and integration with Hanford Site regulatory compliance to support annual reports and compliance activities;
- Quality, timeliness, completeness, and technical accuracy of environmental reports, and permitting and licensing documents. Permit and license documents are of high quality, have been integrated into project schedules which reflect adequate and appropriate timeframes for DOE and regulatory review. Permit and license documents are technically accurate, with minimal revisions needed and fast track approval of submittals is not needed. This includes:
  - Complete clean-up of remaining FF-01 license requirements which have been consolidated into the Tank Farms diffuse and fugitive license.
  - Complete a review of FF-01 License and Toxic Permit conditions to ensure that the conditions accurately reflect the current configuration and activities for DST and SST powered and passive ventilation systems and other emission units.
  - Provide draft State Waste Discharge permit renewal(s) to DOE for review not less than 120 days prior to scheduled submittal to the regulators.
- 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; Coordination of environmental activities across WRPS (e.g., areas such as permitting actions amongst One-System, WRPS Environmental, and Retrieval and Closure, and direct contracting with other site contractors to ensure proper implementation of requirements) and effective use of resources;
- Develop an integrated permitting strategy supporting the DFLAW Project (LAWPS, DST upgrade, LERF/ETF) which includes a schedule for delivery of draft permit application materials for review by ORP. Identify specific information required to develop draft DFLAW permitting/licensing materials (e.g., LAWPS, DST upgrades, LERF/ETF) to support the permitting plans agreed to with Ecology. Provide draft permitting/licensing materials for the required submittal to Ecology.
- Submit a closure plan to ORP for negotiation with Ecology for the LERF/ETF. The Contractor shall earn TBD upon submittal to the ORP. Submit a closure plan to ORP for negotiation with Ecology for the ETF tanks 107, 109, and associated ancillary equipment. ORP will provide comments on the plan, ORP comments will be dispositioned, and the closure plan will be submitted to ORP for transmittal to Ecology. ORP has a 30-day review cycle from initiating review.
- Complete ETF purge water tank integrity assessment by September 30, 2016. The Contractor shall earn TBD upon submittal. Complete and submit the contractor-approved ETF purge water tank integrity assessment to ORP. The assessment will meet the requirements of 173-303 WAC and RCRA Permit WA7890008967 Operating Unit Group 3, Condition C.4.1.5 Integrity Assessments:
- Evaluate the DST dangerous waste Part B permit application by March 2016, and provide a draft revision to ORP for review by September 30, 2016. The Contractor shall earn TBD for completion of the draft revision.

## **SEA 7: Safety Program Implementation**

**Performance Fee value is established at \$760,000 of FY 2016 fee pool.**

**Desired Outcome:** Ensure focus is maintained on overall safety and efficiency of Tank Farm Project through improvements in radiological controls, industrial health and safety, and emergency preparedness.

**Areas of Focus** include radiological control, 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:

- Radiological Controls:
  - Reduction in the overall radiological areas (area and/or number of Contamination and High Contamination Areas, and High Radiation Areas).
  - Effectively control vegetation within TOC radiological posted areas, which have potential to spread contamination through root take-up and transport mechanisms.
  - Evaluate and implement appropriate configurations of radiological control points to allow for efficient control point operations.
- Industrial Health and Safety:
  - Develop and implement an annual year-end assessment to determine the effectiveness of the industrial hygiene program and use as a basis for program improvements. The self-assessment should consider areas such as noise, asbestos, chemical gases and vapors, fume, Be, field ergonomics and temperature extremes for FY 2015. The self-assessment should be used to develop a strategic plan for addressing annual priorities in the form of a revised H&S surveillance plan.
  - Demonstration of a highly effective Industrial Hygienist and industrial hygiene technicians integrated training and field work process. Success is defined by demonstrated overall knowledge and field competency resulting from technical training, supervised On-the-job training, and ability to function in a professional manner consistent with industry standards. Performance to be judged under normal and abnormal operating conditions per observations and drill performance.
  - Demonstrate two-way engagement with the workforce in communicating issues, evaluating options, developing improvements, implementing improvements, and evaluating the effectiveness of Tank Vapors Assessment Team Implementation Plan items.
  - Perform an evaluation of potential TF vapor hazards and interim control options pending IP Phase II, to determine the appropriate control set for work within the Tank Farms.

- Maintain the Beryllium performance metric (March 2015 baseline) for closure of assessments and sampling of buildings, structures, and Conex boxes.
- Complete a quarterly communication campaign centered on objectives identified in Safety and Health performance metrics and indicators.
- Strategically benchmark Hanford Prime Contractors and Industry leaders (e.g., “best practice” companies) to further develop and expand the Behavior Based Safety program.
- Develop and implement community outreach activities involving parent companies, Hanford prime contractors, and government agencies (e.g., Occupational Safety and Health Administration, DOE) that include public education/awareness regarding Safety and Health.
- Emergency Preparedness:
  - Develop and maintain emergency preparedness drill packages for all of the Facility Emergency Event Tables in the Emergency Action Levels listed in Richland Operations Office Emergency Preparedness (RLEP) 1.1 appendices 1-2.A, 1-2.F, and 1-2.M. Schedule, conduct, and evaluate, emergency preparedness drill packages for 50 percent of the Facility Emergency Event Tables in the Emergency Action Levels listed in RLEP 1.1 appendices 1-2.A, 1-2.F, and 1-2.M. Emphasis shall be placed on facility emergency events before natural emergency events and security contingencies.
  - Conduct a minimum of one evaluated field drill a quarter that minimizes simulations and control cell actors in order to maximize field responses by Facility Emergency Response Organization (FERO) and skilled support personnel (i.e., health physics technician, industrial hygiene technician, NCO). Two of these drills shall integrate Hanford Fire Department and/or Hanford Patrol such that FERO members interact directly with their counterparts (e.g., FOS and On-scene coordinator) in the field.
  - Conduct 2 no-notice ICP limited drills in FY 2016 that evaluate all Contractor specific RLEP 1.1 check-listed FERO positions. One of these drills shall be conducted on a weekend or off-shift.

## **SEA 8: Support for DFLAW and WTP Commissioning**

**Performance Fee value is established at \$1,520,000 of FY 2016 fee pool**

### **Desired Outcome:**

**Development of improved Management systems and technical support for WTP commissioning.**

**Areas of focus** include overall WRPS management of the Hanford Tank Farm facilities and systems including for WTP commissioning.

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

- Integration - Establish a prioritized set of activities and timing to fully integrate Tank Farms and WTP necessary to meet the contractual dates for startup and commissioning of WTP. Be responsible for coordinating, tracking, measuring and reporting on those activities.
- Interface Control Documents - Manage the WTP Interface Control Documents.
- Transition - Recommend to ORP, WRPS, and Bechtel National Inc. actions needed to more effectively and efficiently conduct the transition to startup, commissioning, and operation.
- Flowsheet Management - Establish a long-term Tank Waste Disposition Integrated Flow-Sheet (TWDIF) stewardship and technical management process that involves the national laboratories.
- System Planning - Provide for the integration of TOC and WTP system planning and modeling, with a focus on the WTP feed vector and waste feed qualification requirements.
- Contract Management - Identify those DOE directives and contract changes needed to align the WRPS and Bechtel National, Inc. contracts, and establish an optimum or necessary time to have each item aligned.
- Chief Technology Office - Establish an integrated national laboratory support program for WRPS including procurement, communication, reporting protocols, and a mission directed research and development program. Develop an integrated WRPS technology development roadmap including integration with WRPS mission planning documents (System Plan, Risk Management Plan, etc.) and DOE Headquarters technology development program.
- Project Management - Management of the Project Management Program is effective and supports the LAWPS Project.
- DFLAW Integration -
  - WRPS direct field execution of projects and activities supporting DFLAW startup.

- Proactive actions to identify and mitigate potential negative impacts from WRPS specific scope that could delay the DFLAW startup schedule.
- Integrated risk planning, risk assessment, and risk handling to achieve risk reduction such that the DFLAW December 2021 schedule confidence is increased.
- Actions taken to more effectively and efficiently conduct the startup, commissioning, and operations of DFLAW.

**ATTACHMENT 2**  
**PERFORMANCE MONITOR EVALUATION REPORT FORM**

**I. EVALUATION PERIOD:** \_\_\_\_\_

**II. DOE PERFORMANCE MONITOR:**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**III. PERFORMANCE BASED INCENTIVIES (PBI) EVALUATIONS:**

<b>PBI #</b> _____	<b>Recommended</b>	<b>Fee</b>	<b>Earned</b>
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**Discussion:**

**IV. EVALUATION OF AWARD FEE SPECIAL EMPHASIS AREAS:**

<b>SEA #</b> _____	<b>Adjective</b>	<b>Rating</b>
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**Discussion:**

Discussion summaries should describe the method used to evaluate timeliness, quality and completion of performance objectives/measures; clarifying remarks regarding the timeliness and sufficiency of the products/activities against defined performance objectives/measures; identification of significant deviations; rationale for recommended fee payment/rating (if necessary, provide computations); and mitigating factors, if any, that were considered in determining the amount of fee.

Areas to consider:

- Contractor monthly performance indicator results including positive or negative trends.
- Management reviews and reports including the new monthly reviews.
- Contractor's self-assessment report.
- DOE independent and program assessments.
- Issues and corrective action of issue

**ATTACHMENT 3**  
**FEE DETERMINATION OFFICIAL AND PERFORMANCE EVALUATION BOARD**  
**MEMBERS**

**FEE DETERMINATION OFFICIAL**

Manager, ORP

**PERFORMANCE EVALUATION BOARD MEMBERSHIP**

Assistant Manager, Tank Farms Project, ORP (Chair Person)

Deputy Assistant Manager, Tank Farms Project, ORP

Assistant Manager, Technical and Regulatory Support Services, ORP

Manager, WTP Start-up and Commissioning Integration, ORP

Contracting Officer, Contracts and Property Management, ORP

**ATTACHMENT 4  
 PERFORMANCE EVALUATION AND MEASUREMENT PLAN  
 CHANGE REQUEST**

1. Initiator of Change Request:		2. Office Symbol:	3. Phone No:
4. Current Version of PEMP:	a. Revision No:	b. Change No:	5. Date of Request:
6. Reason for Request:			
7. Authority for Change: a. Technical Direction Letter <input type="checkbox"/> b. Contracting Officer Letter <input type="checkbox"/> c. Baseline Change Proposal <input type="checkbox"/> d. Other <input type="checkbox"/>		e. Explain reason for change here, if necessary: (required for Other)	
8. Section No. in PEMP of Change:			
9. Exact Wording: (rewrite the section with changes identified)			
10. Request Disposition: a. Accepted, Change Implemented <input type="checkbox"/> b. Accepted with Changes <input type="checkbox"/> c. Rejected <input type="checkbox"/> d. Other <input type="checkbox"/>		11. Comments: (including changes made, rejection reason, or other)	
12. Approved By:	13. Effective Date:	14. New PEMP Rev No/Change No.:	
		a. Rev No:	b. Change No.:

**ATTACHMENT 5  
 INTERIM RATING CHART – OBJECTIVE AND SUBJECTIVE ITEMS**

ORP will use this separate color-coded table for informal monthly performance evaluations. The final evaluation will reflect the adjectival rating scale in Attachment 1.

		<b>OBJECTIVE ITEMS</b>	<b>SUBJECTIVE ITEMS</b>
Dark Blue “Excellent” Performance		<ul style="list-style-type: none"> <li>Objective measures are achieved on or ahead of time</li> <li>Very high probability of achieving the outcome</li> <li>Meeting all Cost, Scope, and Schedule objectives</li> <li>Very high degree of transparency</li> </ul>	<ul style="list-style-type: none"> <li>100% of key areas meeting requirements</li> <li>100% of key deliverables will be met on time</li> <li>90% of sub or supporting areas are performing very well</li> <li>No safety, security, or quality issues of note</li> <li>Very high degree of self-identification and reporting deficiencies</li> <li>Very high degree of transparency</li> <li>Strong ISMS practices, timely reporting, critiqued/EOC whenever needed</li> </ul>
Light Blue “Very Good” Performance		<ul style="list-style-type: none"> <li>Objective measures expected to be achieved on time</li> <li>Very good probability of achieving the outcome</li> <li>Expect to meet Cost, Scope, and Schedule objectives</li> <li>High degree of transparency</li> </ul>	<ul style="list-style-type: none"> <li>100% of key areas meeting or close to meeting requirements</li> <li>100% of key deliverables are meeting or expected to meet requirements</li> <li>Majority of sub or supporting areas are performing very well</li> <li>At most minor safety, security, or quality issues of note</li> <li>High degree of self-identification and reporting deficiencies</li> <li>High degree of transparency</li> <li>Strong ISMS practices, timely reporting, critiqued/EOC whenever needed</li> </ul>
Green “Good” Performance		<ul style="list-style-type: none"> <li>Objective measures reasonably expected to be achieved on time</li> <li>Reasonable probability of achieving the outcome</li> <li>Expect to meet or be very close to Cost, Scope, and Schedule</li> </ul>	<ul style="list-style-type: none"> <li>Almost all key areas meeting or close to meeting requirements</li> <li>Majority of key deliverables are satisfactory or better</li> <li>Majority of sub or supporting areas are performing satisfactorily</li> <li>Mostly minor safety, security, or quality issues of note</li> </ul>

		<b>OBJECTIVE ITEMS</b>	<b>SUBJECTIVE ITEMS</b>
		<ul style="list-style-type: none"> <li>• Good degree of transparency</li> </ul>	<ul style="list-style-type: none"> <li>• Good degree of self-identification and reporting deficiencies</li> <li>• Good degree of transparency</li> <li>• Infrequent deviation in ISMS practices, timely reporting, critiqued/EOC reviews</li> </ul>
Yellow “Underperforming” “Needs improvement” “Elevated risk”		<ul style="list-style-type: none"> <li>• Elevated risk of objectives not being achieved on time</li> <li>• Reasonable probability of not achieving the outcome</li> <li>• Expect to not meet Cost, Scope, or Schedule</li> <li>• Partial degree of transparency</li> </ul>	<ul style="list-style-type: none"> <li>• Majority key areas meeting or close to meeting requirements</li> <li>• Notable percentage of key deliverables are satisfactory or better</li> <li>• Notable percentage of sub or supporting areas are performing satisfactorily</li> <li>• Occasional mid-level safety, security, or quality issues of note</li> <li>• ~75% of issues are self-identified with most reporting in a timely manner</li> <li>• Partial degree of transparency</li> <li>• Clear deviations of ISMS practices, reporting, critiques, Extent of Condition reviews, safety basis/CONOPS/Engineering deviations that are generally infrequent or have minor consequences</li> <li>• Nominal NOV, PAAA, Fine, Injury, security infraction(s)</li> </ul>
Red “Does not meet rqmts” “Failing or will fail”		<ul style="list-style-type: none"> <li>• A clear (or high) risk of objectives not being achieved on time</li> <li>• High probability of not achieving the outcome</li> <li>• Expect to not meet or significantly miss Cost, Scope, or Schedule</li> <li>• Inadequate degree of transparency</li> </ul>	<ul style="list-style-type: none"> <li>• Overall most key areas meeting or close to meeting requirements</li> <li>• Inadequate percentage of key deliverables are satisfactory or better</li> <li>• Inadequate percentage of sub or supporting areas are performing satisfactorily</li> <li>• Too high a frequency of mid-level safety, security, or quality issues of note</li> <li>• Major safety, security, or quality issue</li> <li>• Less than ~75% of issues are self-identified and reported in a timely manner</li> <li>• Inadequate degree of transparency</li> </ul>

		<b>OBJECTIVE ITEMS</b>	<b>SUBJECTIVE ITEMS</b>
			<ul style="list-style-type: none"> <li>• Significant deviations of ISMS practices, reporting, critiques, Extent of Condition reviews, multiple safety basis/CONOPS/Engineering deviations or a significant deviation with nuclear safety or operational implications</li> <li>• Significant NOV, PAAA, Fine, Injury, security deviation(s)</li> </ul>
Grey "Insufficient data" "Not able to assess"		<ul style="list-style-type: none"> <li>• Insufficient data to assess at this time</li> </ul>	<ul style="list-style-type: none"> <li>• Insufficient data to assess at this time</li> <li>• Parties misaligned on the objective</li> </ul>

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