

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE	PAGE OF PAGES 1   2
2. AMENDMENT/MODIFICATION NO. 0498	3. EFFECTIVE DATE 10/01/2018	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 893040	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: Keven Mabe Washington River Protection Solutions LLC 2425 Stevens Center Pl Richland WA 99354-1874		(x) 9A. AMENDMENT OF SOLICITATION NO.	
CODE 806500521 FACILITY CODE		9B. DATED (SEE ITEM 11)	
		x 10A. MODIFICATION OF CONTRACT/ORDER NO. DE-AC27-08RV14800	
		10B. DATED (SEE ITEM 13) 05/29/2008	

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

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

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

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

CHECK ONE X	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. FAR 52.243-2 Changes-Cost Reimbursement (AUG 1987)
	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:
	D. OTHER (Specify type of modification and authority)

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

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

1. The purpose of this modification is to incorporate the Performance Evaluation and Measurement Plan (PEMP) for Fiscal Year (FY) 2019. As such, this modification replaces Section J, Attachment J.4 in its entirety.

2. Attached to this modification is Section J, Attachment J.4, FY 2019 PEMP, pages 1 through 69.

Continued ...

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) David R. Garcia	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA Signature on File (Signature of Contracting Officer)	16C. DATE SIGNED 09/28/2018

**CONTINUATION SHEET**REFERENCE NO. OF DOCUMENT BEING CONTINUED  
DE-AC27-08RV14800/0498PAGE OF  
2 2NAME OF OFFEROR OR CONTRACTOR  
WASHINGTON RIVER PROTECTION SOLUTIONS LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	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 09/30/2018				

**Attachment 1**

**DE-AC27-08RV14800, MODIFICATION 498**

**Fiscal Year 2019 Performance Evaluation Measurement Plan**

**Replacement Pages**

**(Total: Seventy (70) including this Cover Page)**

- **Section J, Attachment J.4, Performance Evaluation and Measurement Plan, Pages 1 thru 69**

**SECTION J, ATTACHMENT J.4**

**PERFORMANCE EVALUATION AND  
MEASUREMENT PLAN FISCAL YEAR  
2019**

**Fiscal Year 2019**

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

**Performance Period:**  
**October 1, 2018 through September 30, 2019**

**Issued by:**



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**Brian T. Vance**  
**Fee Determination Official**  
**DOE/ORP**

28 SEP 2018

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**Date**

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Attachment 1      Performance Based Incentives

## **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. The 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:

- 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.

This PEMP also defines the ORP approach in evaluating, documenting, and providing performance fee to WRPS, in the execution of requirements defined in Contract DE-AC27-08RV14800. This PEMP is for the Option Period 2 Extension of the contract with a period of performance from October 1, 2018 through September 30, 2019.

### **1. PEMP Objectives**

- a. Provide ORP with a mechanism to achieve its highest priority objectives.
- b. Provide incentive to WRPS to accomplish ORP's management and program objectives through the establishment of critical performance objectives and measures.
- c. Reward WRPS with fee commensurate with the achievement of the specific ORP performance requirements.
- d. Create an administratively efficient process to assess WRPS performance.
- e. Provide a fair and reasonable basis for determining the amount of fee earned.
- f. 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**

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

- d. Office of River Protection. ORP is a Department of Energy Environmental Management field office.
- e. 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.
- f. 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.
- g. Performance Evaluation Period. The period for which the PEB evaluates contractor's overall performance: October 1 through September 30.
- h. 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.
- i. Performance Based Incentive (PBI). A performance based 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.
- j. Performance Measure. The quantitative method for characterizing performance.
- k. Performance Monitor (PM). Designated by the PEB as responsible individuals monitoring and evaluating the contractor's performance.
- l. Performance Objective. A statement of desired results from an organization or activity.
- m. Provisional Payment of Fee. Any payments paid on a provisional basis may be reclaimed.
- n. Special Emphasis Area (SEA). 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.
- o. 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.
- p. 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.

#### **a. PBI**

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.

#### **b. 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.

### **REFERENCES**

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

### **ORGANIZATIONAL STRUCTURE FOR PERFORMANCE FEE ADMINISTRATION**

The PEMP is established unilaterally by ORP to provide for successful completion of ORP's significant management and program objectives. The effectiveness of this PEMP also requires the establishment of a close working relationship between ORP and WRPS because all entities are responsible for successful implementation of the plan and successful completion of ORP's significant management and program objectives. The roles and responsibilities of the key personnel are as follows:

**1. DOE-Headquarters (HQ)**

- Deputy Assistant Secretary for Acquisition and Project Management
  - Serves as Head of Contracting Activity for the Office of Environmental Management.
  - Reviews and comments on the PEMP and Recommended Fee Determination.
  - Coordinates with the Deputy Secretary of Energy (S-2) and the Office of Acquisition and Project Management as necessary.

**2. ORP**

- a. Manager, ORP
  - Approves annual PEMP.
  - Approves changes to the PEMP during the execution period.
  - Serves as FDO.
  - Formally charters the PEB to ensure senior management involvement and accountability.
  - Issues annual Award Fee Determination.
  - Approves PBI Completion Determination.
- b. Assistant Manager, Tank Farms Project
  - Serves as Chair of the PEB.
- c. Director, Contracts and Property Management
  - Forwards draft PEMP to the Environmental Management Head Contracting Authority for review and comment.
  - Forwards draft Award Fee Determination for review and comment.
  - Works with PEB to address any HQ comments concerning PEMP or Award Fee Determination, adjudicated by the FDO.
  - Ensures a unilateral or bilateral plan is issued prior to the start of the performance period.
  - Reviews draft evaluation report.
  - Coordinates with FDO during PEMP evaluation and fee recommendation.
- d. ORP PEB
  - Accountable for final selection and recommendation of contract-specific performance-based and award fee incentives.
  - Assigns responsibilities to PMs to monitor and evaluate completion of performance against objectives and measures for PBIs and SEAs.
  - Provides input, reviews, and concurs on the PEMP.

- Accountable for addressing any external stakeholder comments concerning PEMP or Award Fee Determination through the FDO.
  - Reviews WRPS performance at the end of the evaluation period and upon completion of key milestones.
  - Evaluates WRPS performance and recommends earned fee to the FDO.
- e. PEB Chair Person
- Issues call letters for input in the development of the PEMP.
  - Submits draft PEMP to PMs and WRPS for review and comment.
  - Consolidates, coordinates, and incorporates comments to the PEMP.
  - Obtains appropriate concurrence and approvals of the PEMP.
  - Issues call letter to PMs for input to WRPS performance evaluation report.
  - Coordinates evaluations of WRPS's performance with the PEB.
  - Consolidates input from ORP PMs.
  - Coordinates training for participants in the performance fee process.
  - Coordinates changes with PMs.
  - Provides fee recommendation to the FDO.
- f. PEB Members/PMs
- Attend all meetings unless formally excused by the Chair.
  - Actively participate in meetings.
  - Assure all program activities are represented.
  - Accountable for finalizing performance objectives/measures.
  - Monitor and evaluate completion of performance objectives.
  - Provide input, review, and concur on performance objectives.
  - Provide independent assessment of WRPS performance and recommend earned fee to the FDO.
  - Validate and document completion of PBI and SEA performance objectives and measures.
  - Elevate recommendations, issues or concerns to the Chair.
  - Review and consider WRPS self-assessments in recommending fee.
- g. Contracting Officer
- Transmits the PEMP to the contractor and incorporates the PEMP into the contract either bilaterally or unilaterally.

- Provides input, reviews, and concurs on the PEMP PBI and SEA objectives and measures to achieve ORP's management and program requirements.
- Determines the completion and achievement of the performance objectives and measures for the FDO.

### **3. WRPS**

#### **– Project Manager**

- Collaborates with ORP management to establish a working relationship that enables production of high value deliverables.
- Responsible for the achievement of performance objectives and measures.
- Provides critical self-assessments of performance against PBI and SEA performance objectives and measures to the ORP Contracting Officer.

## **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 ten (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**

<b>Performance Evaluation Process</b>		
<b>Activity</b>	<b>Duration</b>	<b>Evaluation Period</b>
Award fee evaluation period	365 days	October 1, 2018 to September 30, 2019
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

<b>Performance Evaluation Process</b>		
<b>Activity</b>	<b>Duration</b>	<b>Evaluation Period</b>
		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

- a. Within ten (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 ten (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.
- b. Within twenty (20) working days upon receipt of the monthly WRPS PBI completion letter, and twenty (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.
- c. 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.
- d. Within approximately thirty (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.
- e. Within approximately sixty (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.
- f. Within seventy (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, HQ, 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.”

### **PEB INVOLVEMENT IN FINAL EVALUATIONS**

The PEB is responsible for reviewing the PM Evaluation Reports and developing a Fee Recommendation Report to the FDO. The PEB Chair will provide updates and feedback to the FDO prior to receiving the PEB’s final signed fee recommendation report.

### **FDO RESPONSIBILITIES IN FINAL EVALUATIONS**

Based on the FDO’s personal knowledge, the information contained in WRPS’s self-assessment, the PEB Fee Recommendation Report, and/or other information relating to WRPS’s performance of the contract requirements, the FDO develops a determination on the evaluation and award fee.

### **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.

**Attachment 1**

**PERFORMANCE BASED INCENTIVES**

<b>PERFORMANCE BASED INCENTIVES</b>	<b>VALUE</b>	<b>PERFORMANCE MONITOR</b>
PBI-49.0, CLIN 1: Manage DST Space (includes DST Tank Integrity)	5.00%	Tank Farms
PBI-50.0, CLIN 1: Improve Tank Farm Infrastructure	10.15%	Tank Farms
PBI-51.0, CLIN 3: Integrate Tank Farms and WTP	3.20%	Tank Farms
PBI-52.0, CLIN 2: Tank Farm Closure Activities	6.40%	Tank Farms
PBI-53.0, CLIN 3: Chief Technology Office	7.60%	Tank Farms
PBI-55.0, CLIN 3 Test Bed Initiative	4.30%	Tank Farms
PBI-56.0, CLIN 2: A/AX Retrievals	15.70%	Tank Farms
Total Expense PBI Fee Available	52.35%	
PBI-54.0, CLIN 5 Tank Side Cesium Removal Award and Planning	8.05%	Tank Farms
Total Capital PBI Fee Available	8.05%	
Total FY 2019 PBI Fee Available	60.40%	

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. PBI and Award fee is approximately a 60.40% 39.60% split.

**AWARD FEE SPECIAL EMPHASIS AREAS**

<b>SPECIAL EMPHASIS AREAS</b>	<b>VALUE</b>	<b>PERFORMANCE MONITOR</b>
SEA 1: Management of Single-Shell Tank (SST) and Double-Shell Tank (DST) System	6.40%	Tank Farms
SEA 2: Performance of Tank Farm Project Operations – Conduct of Operations	5.70%	Tank Operations
SEA 3: Cost and Management Performance	5.75%	Tank Farms
SEA 4: Quality Assurance Program	3.00%	Quality Assurance
SEA 5: Nuclear Safety Program	3.00%	Nuclear Safety
SEA 6: Environmental Regulatory Management	3.00%	Environmental
SEA 7: Safety Program Implementation	6.75%	Safety and Health
SEA 8: Support for DFLAW and WTP Commissioning	3.00%	Tank Farms
SEA 9: Contractor Assurance System (CAS)	3.00%	Tank Farms
<b>Total SEA Fee Available</b>	<b>39.60%</b>	

The available fee for both the PBIs and the SEAs combined is \$41,000,000. Unearned fee is not available to be earned in any subsequent evaluation period.

**PBI-49.0, CLIN 1: Manage DST Space (including DST Tank Integrity)**

**Performance Fee value is established at 5.00% of FY 2019 fee pool.**

**Fee Structure:** Terminal Method

<b>Milestone</b>	<b>Method</b>	<b>Fee Value</b>	<b>Due Date</b>	<b>Fund Type</b>
1	Terminal	0.70%	September 30, 2019	Expense
2	Terminal	0.80%	September 30, 2019	Expense
3	Terminal	1.60%	September 30, 2019	Expense
4	Terminal	0.80%	March 31, 2019	Expense
5	Terminal	0.60%	September 30, 2019	Expense
6	Terminal	0.10%	September 30, 2019	Expense
7	Terminal	0.40%	September 30, 2019	Expense
<b>Total</b>		<b>5.00%</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, which supports the Amended Consent Decree Milestones B-2 and B-3 and TPA Milestones. The 242-A Evaporator is the primary tool to reduce waste volumes stored in the DST system, as well as DST to DST transfers, appropriate sampling, encasement pressure tests, SST and DST visual inspections, SST intrusion mitigation, Effluent Treatment Facility (ETF) Liquid Effluent Retention Facility (LERF) inventory reduction, etc. Overall facility operations support preparations for Direct Feed of Low Activity Waste (DFLAW),

**Fee Bearing Milestones:**

1. Complete seven (7) grab samples in support of the Tank Operations Contract (TOC) mission by September 30, 2019. The Contractor shall earn 0.10% of incremental fee upon completion of each grab sample (total of 0.70% of incremental fee is available to be earned).

Work scope/completion criteria:

Completion of 7 grab samples as described in the applicable TSAPs. The plan shall identify; the type of sample, the technical need for the sampling activity, the location of the samples, and the sampling requirements.

Completion document:

Letter transmitting performance expectation completion notice, copy of the chain of custody, and copy of the sampling datasheet. These items document completion of the grab sample and transfer of ownership to the laboratory. If two (2) are completed within a month the completion documentation will be combined into one performance expectation completion notice.

2. Complete one (1) core sample in support of the Tank Operations Contract (TOC) mission by September 30, 2019. The Contractor shall earn 0.40% of incremental fee upon completion. Complete one (1) core sample tear down and relocation, preventative maintenance, readiness activities, and training in support of the Tank Operations Contract (TOC) mission by September 30, 2019. The Contractor shall earn 0.40% of incremental fee upon completion. For a total available fee pool for completion of both activities of 0.80%.

Work scope/completion criteria:

Completion of one core sample as described in the applicable TSAPs. The plan shall identify; the type of sample, the technical need for the sampling activity, the location of the samples, and the sampling requirements. Completion of core sample tear down and relocation, preventative maintenance, and readiness activities.

Completion document:

Letter transmitting performance expectation completion notice, copy of the chain of custody, and copy of the sampling datasheet. These items document completion of the core sample and transfer of ownership to the laboratory. Letter transmitting performance expectation completion notice, copy of the signed readiness documentation, work order signature page approved through Operations Acceptance, and complete preventative maintenances.

3. Reduce LERF inventory by 4,000,000 gallons, including inventory from Basin 44 by September 30, 2019. The Contractor shall earn 0.40% of incremental fee upon completion of each 1,000,000 gallons of LERF inventory for total available fee pool of 1.60% for 4,000,000 cumulative gallons.

Work scope/completion criteria:

Operate the ETF as a key component of the Tank Farms. The ETF will process the LERF waste to the parameters determined by ETF Engineering. (Note: When the Basin 44 inventory is transferred, the new basin of receipt shall still be considered to contain "Basin 44 inventory.") The volume of waste processed shall be based on LERF inventory transferred to the Surge Tank as determined by the Process Control Plan.

Completion document:

Letter transmitting the performance expectation completion notice and letter report containing evidence of completion documenting that the LERF inventory reduction has been achieved and summarizing the processing results.

4. Complete the inter-basin transfer of LERF Basin 44 to a minimum heel level as allowed by the permanently installed transfer pump by March 31, 2019. The Contractor shall earn 0.80% of fee upon completion of the LERF Basin 44 transfer.

Work scope/completion criteria:

The Liquid Effluent Retention Facility (LERF) accepts and stores waste waters prior to treatment at the Effluent Treatment Facility (ETF). Contamination control has been ineffective at preventing spread of radiological contamination from LERF Basin 44 to areas not previously

controlled for contamination (see WRPS-PER-2015-0994.2). The contents of LERF Basin 44 shall be transferred into a newly upgraded LERF basin to place it into a safe configuration.

Completion document:

Letter transmitting the performance expectation completion notice and letter report containing evidence of completion documenting that the LERF inventory reduction has been achieved and summarizing the processing results.

5. Perform Ultrasonic Testing (UT) Examination of three (3) DSTs by September 30, 2019. The Contractor shall earn 0.20% of fee upon completion of examination each tank for a total available fee of 0.60%.

Work scope/completion criteria:

Perform UT Examination of the three (3) DSTs. The UT examination shall include at a minimum the primary walls and the floor of the annulus for each tank.

Completion document:

Letter transmitting the performance expectation completion notice and copy of the work order signature page approved through Operations Acceptance. If two (2) are completed within a month the completion documentation will be combined into one performance expectation completion notice.

6. Install a retractable corrosion monitoring probe in one (1) DST by September 30, 2019. The Contractor shall earn 0.10% fee upon completion.

Work scope/completion criteria:

Fabricate and install one retractable corrosion monitoring probe in one DST.

Completion documentation:

Letter transmitting the performance expectation completion notice and copy of the work order signature page through Operations acceptance.

7. Procure, design, fabricate, and deliver double-shell tank (DST) annulus floor cleaning system by September 30, 2019. The Contractor shall earn 0.40% of fee upon completion.

Work scope/completion criteria:

Receipt of DST annulus floor cleaning system by September 30, 2019.

Completion documentation:

Letter transmitting the performance expectation completion notice and copy of the letter report documenting results, with copy of payment invoice associated with the design, fabrication, and delivery of the DST annulus floor cleaning system.

**PBI-50.0, CLIN 1: Improve Tank Farm Infrastructure**

**Performance Fee value is established at 10.15% of FY 2019 fee pool.**

**Fee Structure: Terminal Method**

<b>Milestone</b>	<b>Method</b>	<b>Fee Value</b>	<b>Due Date</b>	<b>Fund Type</b>
1	Terminal	0.70%	September 30, 2019	Expense
2	Terminal	0.80%	September 30, 2019	Expense
3	Terminal	1.25%	September 30, 2019	Expense
4	Terminal	0.40%	September 30, 2019	Expense
5	Terminal	0.40%	September 30, 2019	Expense
6	Terminal	0.20%	September 30, 2019	Expense
7	Terminal	0.50%	September 30, 2019	Expense
8	Terminal	0.70%	September 30, 2019	Expense
9	Terminal	0.40%	September 30, 2019	Expense
10	Terminal	0.40%	September 30, 2019	Expense
11	Terminal	0.30%	September 30, 2019	Expense
12	Terminal	0.20%	June 30, 2019	Expense
13	Terminal	0.20%	January 31, 2019	Expense
14	Terminal	1.00%	September 30, 2019	Expense
15	Terminal	0.20%	September 30, 2019	Expense
16	Terminal	0.20%	September 30, 2019	Expense
17	Terminal	1.50%	September 30, 2019	Expense
18	Terminal	0.80%	February 28, 2019	Expense
<b>Total</b>		<b>10.15%</b>		

**Desired Endpoint/Outcome:**

Improvements to the tank farm infrastructure are not only essential for providing waste treatment capabilities to meet DFLAW and future needs, but also support the TPA Milestones and Consent Decree Milestones B-2 and B-3. Upgrading aging infrastructure provides safe, reliable systems which are necessary to support the mission. Replacing the aging tank farm infrastructure through upgrades in the 242-A Evaporator, 222-S Laboratory, AW Farm, AX Farm, and nonfarm specific areas will support projects retrieval of waste activities, direct-feed of low-activity waste to the Waste Treatment and Immobilization Plant, etc.

**Fee Bearing Milestones:**

1. Procure and install seven (7) 222-S Laboratory Analytical Instruments by September 30, 2019. The Contractor shall earn 0.10% of incremental fee upon completion of installation of an analytical instrument for a total available fee pool of 0.70%.

Work scope/completion criteria:

Procure and install seven (7) analytical instruments:

- (1) Ion Chromatograph (1 of 2)
- (2) Ion Chromatograph (2 of 2),
- (3) Volatile Organic Analysis Gas Chromatograph Mass Spectrometer
- (4) Purge and Trap Autosampler
- (5) Inductively Coupled Plasma—Atomic Emission Spectroscopy
- (6) Alpha Energy Analysis, and
- (7) X-Ray Diffractometer

Completion document:

Letter transmitting the performance expectation completion notice(s) and copy of work order signature pages approved through Operations acceptance. If two (2) or more analytical installations are completed within a month the completion documentation will be combined into one performance expectation completion notice.

2. Complete four (4) double-shell tank farm upgrades by September 30, 2019. The Contractor shall earn 0.20% of fee upon completion of each upgrade for a total available fee pool of 0.80%.

Work scope/completion criteria:

Complete upgrades in support of the AW, AY/AZ, AN, and SY Farm upgrades:

- Leak detector relay replacement (AY/AZ Farm).
- Leak detector relay replacement (AN Farm).
- Leak detector relay replacement (AW Farm).
- Leak detector relay replacement (SY Farm).

Completion document:

Letter transmitting performance expectation completion notice and copy of the installation work order signature page approved through Operations Acceptance. If two (2) or more DST upgrades are completed within a month the completion documentation will be combined into one performance expectation completion notice.

3. Complete one (1) basin cover replacement at LERF Basin 44 by September 30, 2019. The Contractor shall earn 1.25% of fee upon completion.

Work scope/completion criteria:

Complete one (1) facility upgrades in support of the LERF as follows:

- (1) One LERF Basin 44 cover replacement.

Completion document:

Letter transmitting performance expectation completion notice and copy of the work order signature page approved through Operations Acceptance.

4. Complete a Liquid Effluent Retention Facility (LERF) upgrade and a LERF design by

September 30, 2019. The Contractor shall earn 0.20% of incremental fee upon completion for a total available fee pool of 0.40%.

Work scope/completion criteria:

Complete a facility upgrade and a facility design in support of the LERF as follows:

- (1) 310/311 Transfer Line design and RCRA permit modification submittal
- (2) Leachate Pumping System upgrade.

Completion document:

Letter transmitting performance expectation completion notice and copy of the work order signature page approved through Operations Acceptance for the completed upgrade and a copy of the released design media and submitted RCRA permit modification submittal for the completed design. If both the upgrade and the design are completed within a month, the completion documentation will be combined into one performance expectation completion notice.

5. Complete two (2) 222-S Laboratory Facility upgrade designs by September 30, 2019. The Contractor shall earn 0.20% of incremental fee upon completion for a total available fee pool of 0.40%.

Work scope/completion criteria:

Complete two (2) facility upgrade designs in support of the 222-S Laboratory as follows:

- (1) Fire Alarm System
- (2) 222-SL Cold Laboratory

Completion document:

Letter transmitting the performance expectation completion notice and a matrix identifying the completed and released design media.

6. Replace the existing fire alarm panel at 2704-HV by September 30, 2019. The Contractor shall earn 0.20% of fee upon completion.

Work scope/completion criteria:

Procure a subcontractor to install the new fire alarm panel, all necessary conduit, wire, power supply, devices, sensors as required for a complete and fully operational fire alarm system as evidenced by successful completion of a WRPS Fire Protection approved acceptance test plan.

Completion document:

Letter transmitting the performance expectation completion notice and copy of the work order signature page through operations acceptance.

7. Complete installation of new waste transfer pump in AW-04A pump pit by September 30, 2019. The Contractor shall earn 0.50% of fee upon completion.

Work scope/completion criteria:

Complete installation of new waste transfer pump in the AW-04A pump pit.

Completion document:

Letter transmitting the performance expectation completion notice and copy of the work order signature page through operations acceptance.

8. Complete installation of equipment necessary to support waste transfers thru the AY-02A pit while isolated from tank AY-102 by September 30, 2019. The Contractor shall earn 0.70% of fee upon completion.

Work scope/completion criteria:

Complete installation of equipment necessary to support waste transfers thru the AY-02A pit while isolated from AY-102 tank.

Completion document:

Letter transmitting the performance expectation completion notice and copy of the work order signature page through operations acceptance.

9. Complete 60% installation design for Cross-Site Activation upgrades to SY-01A, SY-02A, SY-A, SY-B, and AN-01A pits by September 30, 2019. The Contractor shall earn 0.40% of fee upon completion.

Work scope/completion criteria:

Complete 60% installation design for Cross-Site Activation upgrades to SY-01A, SY-02A, SY-A, SY-B, and AN-01A pits. Smart Plant Foundation (SPF) documentation showing 60% design media completion.

Completion document:

Letter transmitting the performance expectation completion notice and a matrix identifying the completed and 60% design media deliverables.

10. Complete two (2) facility improvements/upgrades at 272-AW by September 30, 2019. The Contractor shall earn 0.20% for each improvement/upgrade for total available fee of 0.40%.

Work scope/completion criteria:

Complete two (2) facility improvements/upgrades at 272-AW as follows:

- (1) Complete the replacement of the roof for building 272-AW.
- (2) Complete the replacement of the HVAC for building 272-AW.

Completion document:

Letter transmitting the performance expectation completion notice and copy of the work order/documentation signature page(s) approved through Field Work Supervisor(s). If two (2) are completed within a month the completion documentation will be combined into one performance expectation completion notice.

11. Complete two (2) facility improvements/upgrades by September 30, 2019. The Contractor shall earn 0.15% for each improvement/upgrade for total available fee of 0.30%.

Work scope/completion criteria:

Complete two (2) facility improvements/upgrades as follows:

- (1) 2750E D-Wing 1st and 2nd floor restroom facilities upgrades.
- (2) MO-730 replacement (this is the doublewide restroom building for the craft village SW of 2704-HV).

Completion document:

Letter transmitting the performance expectation completion notice and copy of the work order/documentation signature page(s) approved through Field Work Supervisor(s). If two (2) or more are completed within a month the completion documentation will be combined into one performance expectation completion notice.

12. Complete stack extension field installation for AW farm primary exhauster and turnover to operations by June 30, 2019. The Contractor shall earn 0.20% upon submittal.

Work scope/completion criteria:

The exhaust stack extension at AW farm primary exhauster shall be constructed and turned over to Operations by June 30, 2019 assumes permit modification received by no later than March 15, 2019.

Completion document:

Letter transmitting the performance expectation completion notice and copy of work order signature pages for the completed installation and initial function testing of the exhaust stack extension work scope approved through Operations acceptance.

13. Contract award for the procurement and installation of AP Farm change trailer to support Tank Farm Upgrades by January 31, 2019. The Contractor shall earn 0.20% of fee upon completion.

Work scope/completion criteria:

The Contractor shall complete the issuance of a contract award to procure and install AP Farm change trailer to support the Tank Farm Upgrades project.

Completion document:

Letter transmitting the performance expectation completion notice and the contract award to procure and install the AP Farm change trailer.

14. Complete three (3) Effluent Treatment Facility (ETF) upgrades by September 30, 2019. The Contractor shall earn 0.33, 0.33 and 0.34% of incremental fee upon completion of each upgrade for a total available fee pool of 1.00%.

Work scope/completion criteria:

Complete three (3) facility upgrades in support of the ETF as follows:

- (1) Air Compressor installation
- (2) Peroxide Decomposer Vessel removal and installation
- (3) Verification Tank #1 repairs

Completion document:

Letter transmitting the performance expectation completion notice and copy of work order signature pages approved through Construction acceptance. If two (2) or more upgrades are completed within a month, the completion documentation will be combined into one performance expectation completion notice.

15. Complete one (1) 222-S Laboratory facility upgrade by September 30, 2019. The Contractor shall earn 0.20% incremental fee upon completion.

Work scope/completion criteria:

Complete one (1) facility upgrade in support of the 222-S Laboratory as follows:

- (1) Potable Water Air Gap installation

Completion document:

Letter transmitting the performance expectation completion notice and a copy of the work package signature page approved through Operations acceptance.

16. Complete the DST structural analysis of record (AOR) in support of the Tank Operations Contract (TOC) mission by September 30, 2019. The Contractor shall earn 0.20% of incremental fee upon completion.

Work scope/completion criteria:

Perform finite element analysis modeling for a representative DST to support future tank level increase initiatives—including thermal and operating loads analysis (TOLA), and seismic analysis to address the WTP baseline and Cascadia Subduction Zone (CSZ) seismic events. Actual DST soil spectra data is used in seismic modeling. Analysis will be subject to independent review by seismic/structural experts. This independent analysis will include sensitivities studies and the effect of tank pits and penetration. Additionally, a demand/capacity evaluation will be performed on the structure in accordance with American Concrete Institute (ACI) code. The structural AOR will be performed by a national laboratory with expert review provided by a specialist subcontractor and a direct labor structural engineer.

Completion document:

Letter transmitting performance expectation completion notice and final report including the results of the structural AOR, and the report will have been reviewed by structural engineer specialist.

17. Operational utilization of Vapor Monitoring and Detection System (VMDS) stack monitors in AN, AW, AX, and AY/AZ Farms for chemical monitoring by September 30, 2019. The Contractor shall earn 0.20% upon utilization of each VMDS monitor for total incremental fee

of 1.00% upon completion. If all stack monitors are utilized in the above five stacks by September 30, 2019, the Contractor shall earn an additional 0.50% for a total possible fee of 1.50%.

Work scope/completion criteria: Operational utilization of VMDS stack monitors for monitoring of chemical concentrations for change in operational conditions from the central control room for AN, AW, AX, and AY/AZ stack monitors.

Completion document: Letter transmitting performance expectation completion notice(s), copy(ies) of the signed Operational Acceptance Testing approval cover-page document(s), and JTWG meeting minutes authorizing use of the VMDS stack monitors.

18. Removal of AP-102 pump to support Tank Farm Upgrades by February 28, 2019. The Contractor shall earn 0.80% of fee upon completion.

Work scope/completion criteria: The Contractor shall complete the removal of AP-102 transfer pump to support the Tank Farm Upgrades project.

Completion document: Letter transmitting the performance expectation completion notice and the AP-102 pump removal work completed ECN(s).

**PBI-51.0, CLIN 3: Integrated Tank Farms and WTP**

**Performance Fee value is established at 3.20% of FY 2019 fee pool.**

**Fee Structure: Terminal Method**

<b>Milestone</b>	<b>Method</b>	<b>Fee Value</b>	<b>Due Date</b>	<b>Fund Type</b>
1	Terminal	0.50%	September 30, 2019	Expense
2	Terminal	0.60%	June 30, 2019	Expense
3	Terminal	0.30%	September 30, 2019	Expense
4	Terminal	0.60%	September 30, 2019	Expense
5	Terminal	0.40%	September 30, 2019	Expense
6	Terminal	0.20%	September 30, 2019	Expense
7	Terminal	0.20%	September 30, 2019	Expense
8	Terminal	0.40%	September 30, 2019	Expense
<b>Total</b>		<b>3.20%</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 in addition to supporting TPA Milestones. This includes providing critical support to major elements of the program such as the Integrated Disposal Facility (IDF) Performance Assessment and the Flowsheet Maturation Plan.

**Fee Bearing Milestones:**

1. Submit the River Protection Project (RPP) System Plan Selected Scenarios document by September 30, 2019. This aligns with TPA Milestone M-062-40, “*allowing one year prior to the issuance of the System Plan, DOE and Ecology will each select the scenarios that will be analyzed in the System Plan, with DOE and Ecology each having the right to select a minimum of three scenarios each*”. The Contractor shall earn 0.50% upon completion.

Work scope/completion criteria:

Select, at a minimum, six scenarios for inclusion in the RPP System Plan, Revision 9. Release a document describing the selected RPP System Plan System Plan, Revision 9 scenarios and the key assumptions for each scenario.

Completion document:

Letter transmitting performance expectation completion notice and a copy of the Contractor approved System Plan Selected Scenarios document.

2. Complete ILAW Transporter System Final Design. Prepare a final ILAW Transporter System design package by June 30, 2019. The Contractor shall earn 0.60% of fee upon completion.

Work scope/completion criteria:

Issued ILAW Transporter System final design package, including drawings, specifications, and prototype test report, suitable for final system procurement.

Completion document:

Letter transmitting performance expectation completion notice and a copy of the final design package and prototype test report. The transmittal shall include documentation of the dispositions of all formal ORP comments received by ORP up to 30 days prior to scheduled design package and test report completion.

3. Issue DFLAW Secondary Waste Technical Assessment Report by September 30, 2019. The Contractor shall earn 0.30% of fee upon completion.

Work scope/completion criteria:

Issued document describing all secondary waste streams, including those from the Effluent Treatment Facility, associated with WTP and Tank Farm DFLAW hot commissioning and operation, and their disposition path and/or technical approaches for management.

Completion document:

Letter transmitting performance expectation completion notice and a copy of the issued report. The transmittal shall include documentation of the dispositions of all formal ORP comments received by ORP up to 30 days prior to scheduled report completion.

4. Submit the 3 volumes of the Integrated Waste Feed Delivery Plan incorporating Tank Side Cesium Removal and waste feed delivery to WTP from AP Farm. The Contractor shall earn 0.60% of fee upon completion by September 30, 2019.

Work scope/completion criteria:

Issue the Contractor approved Integrated Waste Feed Delivery Plan.

Completion document:

Letter transmitting performance expectation completion notice and a copy of the Contractor approved report.

5. Submit the Direct Feed Low Activity Waste: First Feed Flowsheet incorporating LAW pretreatment in the Tank Side Cesium Removal system. The Contractor shall earn 0.40% of fee upon completion by September 30, 2019.

Work scope/completion criteria:

Issue the Contractor approved Direct Feed Low Activity Waste: First Feed Flowsheet.

Completion document:

Letter transmitting performance expectation completion notice and a copy of the Contractor approved report.

6. Submit the River Protection Project Integrated Flowsheet incorporating Tank Side Cesium Removal and waste feed delivery to WTP from AP Farm. The Contractor shall earn 0.20% of fee upon completion by September 30, 2019.

Work scope/completion criteria:

Issue the Contractor approved River Protection Project Integrated Flowsheet.

Completion document:

Letter transmitting performance expectation completion notice and a copy of the Contractor approved report.

7. Submit the Integrated DFLAW Feed Qualification Program Description incorporating Tank Side Cesium Removal and waste feed delivery to WTP from AP Farm. The Contractor shall earn 0.20% of fee upon completion by September 30, 2019.

Work scope/completion criteria:

Issue the Contractor approved Integrated DFLAW Feed Qualification Program Description.

Completion document:

Letter transmitting performance expectation completion notice and a copy of the Contractor approved report.

8. Complete final versions of the Process Control Plan and Waste Compatibility Analysis required for repurposing AP-106 to receive treated Low Activity Waste. The Contractor shall earn 0.40% of fee upon completion by September 30, 2019.

Work scope/completion criteria:

Issue the Contractor approved Plan and Analysis.

Completion document:

Letter transmitting performance expectation completion notice and copies of the Contractor approved plan and analysis.

**PBI-52.0, CLIN 2: Tank Farm Closure Activities**

**Performance Fee value is established at 6.40% the FY 2019 fee pool**

**Fee Structure:** Terminal

<b>Milestone</b>	<b>Method</b>	<b>Fee Value</b>	<b>Due Date</b>	<b>Fund Type</b>
1	Terminal	1.50%	September 30, 2019	Expense
2	Terminal	0.50%	September 30, 2019	Expense
3	Terminal	0.40%	September 30, 2019	Expense
4	Terminal	0.40%	September 30, 2019	Expense
5	Terminal	2.10%	September 30, 2019	Expense
6	Terminal	0.25%	September 30, 2019	Expense
7	Terminal	0.50%	September 30, 2019	Expense
8	Terminal	0.50%	July 30, 2019	Expense
9	Terminal	0.25%	September 30, 2019	Expense
<b>Total</b>		<b>6.40%</b>		

**Desired Endpoint/Outcome:**

Perform tank farm closure activities that meet TPA Milestones and regulatory requirements.

**Fee Bearing Milestones:**

1. Complete SX barrier expansion at SX Farm by September 30, 2019. The Contractor shall earn 1.50% upon completion.

Work scope/completion criteria:

Complete SX barrier expansion construction at SX farm, including installation of asphalt.

Completion document:

Letter transmitting the performance expectation completion notice and construction complete with minor punchlist item.

2. Complete the Focus Area 2 WMA A-AX Data Quality Objectives (DQO) and Focus Area 2 WMA A-AX Sampling and Analysis Plan (SAP) for ORP review by September 30, 2019. The Contractor shall earn 0.25% for the DQO and 0.25% for the SAP for total available fee of 0.50%.

Work scope/completion criteria:

Develop of the Focus Area 2 WMA A-AX DQO and Focus Area 2 WMA A-AX SAP. The Focus Area 2 WMA A-AX DQO and SAP will guide the collection of field and laboratory information needed to support the WMA A-AX RFI and CMS for WMA A-AX and the WMA A-AX Performance Assessment.

Completion document:

Letter transmitting the performance expectation completion notice with the Focus Area 2 WMA A-AX DQO and SAP.

3. Complete data quality objectives (DQO) for the CR Vault by September 30, 2019. The Contractor shall earn 0.40% upon completion of the DQO for the CR Vault report.

Work scope/completion criteria:

Develop DQOs for the CR Vault which will describe the type, quantity, and quality of the data required to make component closure evaluations for the CR Vault. This report will address whether or not the currently planned closure activities are appropriate, and if not, provide information which can be used to re-plan closure activities for the CR Vault.

Completion document:

Letter transmitting the performance expectation completion notice with the DQOs for the CR Vault.

4. Complete data quality objectives (DQO) for the 241-C-301 Catch Tank by September 30, 2019. The Contractor shall earn 0.40% upon completion of the DQO for the 241-C-301 Catch Tank report.

Work scope/completion criteria:

Develop DQOs for the 241-C-301 Catch Tank which will describe the type, quantity, and quality of the data required to make component closure evaluations for 241-C-301 Catch Tank. This report will address whether or not the currently planned closure activities are appropriate, and if not, provide information which can be used to replan closure activities for the 241-C-301 catch tank.

Completion document:

Letter transmitting the performance expectation completion notice with the DQO for the 241-C-301.

5. Perform vadose zone direct push characterization for Focus Area 1 for WMA A-AX. The characterization shall include collection of approximately 10 soil samples each from at least 5 locations in A and AX farm, and initial analysis of the samples by September 30, 2019. The Contractor shall earn 2.10% upon completion of providing letter report to ORP.

Work scope/completion criteria:

Use the hydraulic hammer/direct push technology to perform direct push sampling for at least 5 locations included in the Focus Area 1 SAP for WMA A-AX. Field work shall include: obtaining approximately 10 soil samples per location for analysis, and decommissioning of the sampling boreholes. Samples will be delivered to the laboratory for analysis as described in the SAP. Initial analysis reporting to be included in the PBI deliverable will be for soil moisture, technetium and nitrate concentrations.

Completion document:

Provide to the ORP a letter report documenting sample locations and depths; providing chain of custody forms; and summarizing analytical results for soil moisture, technetium and nitrate concentrations.

6. In support of TPA milestone M-045-56, develop a SAP for the T-102/T-105 areas for ORP review by September 30, 2019. The Contractor shall earn 0.25% upon completion of providing the SAP performance expectation completion notice for ORP review.

Work scope/completion criteria:

Develop of the T-102/T-105 SAP, which will guide the collection of field and laboratory information to support M-045-56 actions.

Completion document:

Letter transmitting the performance expectation completion notice with the T-102/T-105 SAP.

7. Complete preparation of the draft Preliminary WMA A-AX Performance Assessment (PA). The Contractor shall earn 0.50% upon completion of this submittal to ORP by September 30, 2019.

Work scope/completion criteria:

The draft preliminary WMA A-AX Performance Assessment (PA) will document a preliminary analysis of radiological impacts from tank waste residuals left in WMA A-AX at closure. This preliminary PA will be prepared following general guidance provided in DOE-STD-5002-2017 (2017). The draft preliminary WMA A-AX Performance Assessment (PA) will be completed and submitted to ORP for their review and approval by September 30, 2019.

Completion document:

Letter transmitting the performance expectation completion notice with copy of draft Preliminary WMA A-AX Performance Assessment (PA).

8. Complete update of DOE Order 435.1 Performance Assessment for Waste Management Area C by July 30, 2019. The Contractor shall earn 0.50% in incremental fee for this updated documentation.

Work scope/completion criteria:

An update to RPP-ENV-58782, Rev.0 entitled "Performance Assessment of Waste Management Area C, Hanford Site, Washington" will be prepared to address comments provided by NRC and the public as a part the review of the Draft Waste Incidental to Reprocessing Evaluation (DOE-ORP-2018-01, Draft D). The updated version of the RPP-ENV-58782 (Revision 1) will be completed and submitted to ORP for their review and approval by September 30, 2019.

Completion document:

Letter transmitting the performance expectation completion notice and a copy of the RPP-ENV-58782, Rev. 1.

9. Complete update of Draft Waste Incidental to Reprocessing Evaluation for Waste Management Area C by September 30, 2019. The Contractor shall earn 0.25% in incremental fee for this updated documentation.

Work scope/completion criteria:

An update to DOE-ORP-2018-01, Draft D, entitled “Draft Waste Incidental to Reprocessing Evaluation for Closure of Waste Management Area C at the Hanford Site” will be prepared to address comments provided by NRC and the public as a part the NRC’s and public review of this document. The updated version of the DOE-ORP-2018-01, Draft D will be completed and submitted to ORP for their review and approval by July 30, 2019.

Completion document:

Letter transmitting the performance expectation completion notice and a copy of the updated version of DOE-ORP-2018-01, Draft D.

**PBI-53.0, CLIN 3: Chief Technology Office**

**Performance Fee value is established at 7.60% the FY 2019 fee pool**

**Fee Structure: Terminal Method**

<b>Milestone</b>	<b>Method</b>	<b>Fee Value</b>	<b>Due Date</b>	<b>Fund Type</b>
1	Terminal	2.00%	September 30, 2019	Expense
2	Terminal	0.50%	September 30, 2019	Expense
3	Terminal	0.60%	September 30, 2019	Expense
4	Terminal	0.60%	September 30, 2019	Expense
5	Terminal	0.60%	September 30, 2019	Expense
6	Terminal	0.60%	September 30, 2019	Expense
7	Terminal	0.60%	September 30, 2019	Expense
8	Terminal	0.50%	September 30, 2019	Expense
9	Terminal	0.60%	September 30, 2019	Expense
10	Terminal	0.50%	September 30, 2019	Expense
11	Terminal	0.50%	September 30, 2019	Expense
<b>Total</b>		<b>7.60%</b>		

**Desired Endpoint/Outcome:**

Complete testing and laboratory studies to support disposal related waste form performance necessary for advanced glasses, secondary liquid waste streams, and secondary solid waste forms in support of DFLAW and the TPA Milestones. Complete necessary development of technologies in support of retrieval and tank integrity field solutions.

**Fee Bearing Milestones:**

1. Complete testing and laboratory studies to support disposal related waste form performance necessary for advanced glasses, secondary liquid waste streams, and secondary solid waste forms by September 30, 2019. The Contractor shall earn 2.00% upon submittal.

Work scope/completion criteria:

Complete testing and laboratory studies to support disposal related waste form performance necessary for advanced glasses, secondary liquid waste streams, and secondary solid waste forms by September 30, 2019:

- LAW glass performance testing to expand the range of glass compositions tested
- Evaluate secondary alteration phases and potential for Stage III dissolution rate
- Determine method for measuring alkali ion-exchange rate in LAW glass
- Complete scale-up testing of ammonia-tolerant grouts
- Development and testing of high performance encapsulation grout for HEPA filters
- Leach testing of Ag mordenite and GAC absorber beds.

Completion document:

Letter submitting the performance expectation completion notice and the comprehensive report(s) described above. The transmittal shall include documentation of the dispositions of all formal ORP comments received by ORP up to 30 days prior to scheduled report completion.

2. Complete waste form development and performance testing for EMF bottoms utilizing real waste by September 30, 2019. The Contractor shall earn 0.50% of fee upon completion.

Work scope/completion criteria:

Complete technical report(s) evaluating EMF waste forms using real waste compared to simulant waste forms and submit final report.

Completion document:

Letter submitting the performance expectation completion notice and the technical report with waste form evaluation. The transmittal shall include documentation of the dispositions of all formal ORP comments received by WRPS up to 30 days prior to scheduled report completion.

3. Complete sample preparation and test configuration for three (3) lysimeter cells with a focus on cementitious only and glass only waste forms by September 30, 2019. The Contractor shall earn 0.20% of fee for each lysimeter cell configured for a total available fee of 0.60%.

Work scope/completion criteria:

Prepare and load samples for lysimeter tests and issue status report.

Completion document:

Letter transmitting the performance expectation completion notice and the status report. The transmittal shall include documentation of the dispositions of all formal ORP comments received by WRPS up to 30 days prior to scheduled report completion.

4. Fabricate and design a non-destructive examination (NDE) technology based on FY 2017 Effectiveness Testing and lessons learned from prototype design and sensor testing in FY 2018. Complete integration testing of the delivery system and sensor for under double-shell tank developed by the Tank and Pipeline Integrity (TAPI) group by September 30, 2019. The Contractor shall earn 0.60% upon completion.

Work scope/completion criteria:

The under DST NDE sensor delivery system will consist of a sensor carriage and sensor that will be integrated into the delivery system for under the DST, which gains access to the bottom of the tank through the air channels. The primary completion elements for this work shall include:

- Sensor modified to deploy under the DST using the sensor carriage based on FY 2018 testing and evaluation
- Delivery system for deployment of the sensor under the DST
- Integrated testing of sensor carriage design and delivery system

Completion document:

Letter transmitting the performance expectation completion notice and the integrated testing report. The transmittal shall include documentation of the dispositions of all formal ORP comments received by WRPS up to 30 days prior to scheduled report completion.

5. Complete fabrication of new shielded sampler for the Tank Farms and complete functional testing by September 30, 2019. The Contractor shall earn 0.60% of fee for completion of the fabrication and functional testing and submittal of the final test report by September 30, 2019.

Work scope/completion criteria:

Fabricate the shielded sampler based off of the design completed in FY 2018, and complete functional testing of the shielded sampler unit.

Completion document:

Letter transmitting the performance expectation completion notice and the final test report. The transmittal shall include documentation of the dispositions of all formal ORP comments received by WRPS up to 30 days prior to scheduled report completion.

6. Complete demonstration of the integrated mechanical waste gathering system technology following component testing and submit an effectiveness test report by September 30, 2019. The Contractor shall earn a total of 0.60% of fee for completion of the integrated system demonstration.

Work scope/completion criteria:

Completed integrated system demonstration, and submit the final effectiveness test results report.

Completion document:

Letter transmitting the performance expectation completion notice and the final effectiveness test report. The transmittal shall include documentation of the dispositions of all formal ORP comments received by WRPS up to 30 days prior to scheduled report completion.

7. Complete 90% design of the NUCON vapor abatement unit by September 30, 2019. The Contractor shall earn 0.60% of fee upon completion.

Work scope/completion criteria:

Completed 90% design and design review of the NUCON vapor abatement unit which will be used as input to the permitting process in preparation for the field demonstration of the vapor abatement unit.

Completion document:

Letter transmitting performance expectation completion notice and the completed 90% design. The transmittal shall include documentation of the dispositions of all formal ORP comments received by WRPS up to 30 days prior to scheduled report completion.

8. Perform characterization of the spent CST used for the AP-107 real waste testing by September 30, 2019. The Contractor shall earn 0.50% of fee upon completion.

Work scope/completion criteria:

Using spent CST from AP-107, perform analysis to understand what constituents remain on the spent CST. This Characterization will allow input into future secondary waste disposal options to support both TSCR and LAWPS operations.

Completion document:

Letter transmitting performance expectation completion notice and final results of characterization into a report AP-107 spent CST Characterization Report.

9. Perform crucible melt with spent CST from AP-107 real waste testing by September 30, 2019. The Contractor shall earn 0.60% of fee upon completion.

Work scope/completion criteria:

This will be performed after the characterization. The spent CST will be vitrified in a crucible to demonstration initial of vitrification of CST.

Completion document:

Letter transmitting performance expectation completion notice and letter report documenting crucible melt.

10. Complete TSCR Filter testing real waste for AP-107 to support TSCR filter type by September 30, 2019. The Contractor shall earn 0.50% of fee upon completion.

Work scope/completion criteria:

Procure/Fabrication bench scale filter replicating the TSCR application. Install in the hot cell and perform filtration.

Completion document:

Letter transmitting performance expectation completion notice and letter report documenting testing results.

11. Complete AP-107 IX testing with CST by September 30, 2019. The Contractor shall earn 0.50% of fee upon completion.

Work scope/completion criteria:

Perform bench scale column tests in support of TSCR and LAWPS. Collect performance data to input to the operations/projects.

Completion document:

Letter transmitting performance expectation completion notice and letter report documenting testing results.

**PBI-54.0 CLIN 5 Tank Side Cesium Removal Award and Planning**

**Performance Fee value is established at 8.05% of FY 2019 fee pool.**

**Fee Structure:** Terminal Method

<b>Milestone</b>	<b>Method</b>	<b>Fee Value</b>	<b>Due Date</b>	<b>Fund Type</b>
1	Terminal	1.25 %	April 30, 2019	Capital
2	Terminal	0.80%	July 31, 2019	Capital
3	Terminal	0.60%	July 31, 2019	Capital
4	Terminal	0.60%	September 30, 2019	Capital
5	Terminal	0.60%	September 30, 2019	Capital
6	Terminal	0.80%	September 30, 2019	Capital
7	Terminal	0.80%	September 30, 2019	Capital
8	Terminal	0.80%	September 30, 2019	Capital
9	Terminal	0.80%	September 30, 2019	Capital
10	Terminal	1.00%	September 30, 2019	Capital
<b>Total</b>		<b>8.05%</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 in addition to supporting TPA milestones.

**Fee Bearing Milestones:**

1. Submit the Tank Side Cesium Removal Project (TSCR) 60% Design Review Documents/Package to ORP for review by April 30, 2019. The Contractor shall earn 1.25% in fee upon completion.

Work scope/completion criteria: The 60% Design Review Documents/Package for TSCR will consist primarily of alpha revisions of the design media and will include the following:

- General Arrangement Drawings
- Equipment Location Drawings
- Calculations
- P&ID, V&ID
- Control Logic Drawings
- Electrical One-line diagrams
- Master Equipment List

The Design Package will have been through the WRPS design review with comments collected, dispositioned, and a comment incorporation path forward planned.

Completion document: Letter transmitting the performance expectation completion notice and 60% Design Review Documents/Package to ORP for review.

2. Complete 90% design review package for W-211 to ICD-30/31 transfer lines for Tank Farm Upgrades by July 31, 2019. The Contractor shall earn 0.80% upon completion.

Work scope/completion criteria: The Contractor shall submit the 90% design review package for W-211 to ICD-30/31 transfer lines. The Design Package will have been through the WRPS design review with comments collected, dispositioned, and a comment incorporation path forward planned.

Completion document: Letter transmitting the performance expectation completion notice and the 90% design review package for W-211 to ICD-30/31.

3. Submit 90% design review package for AP Farm Waste Feed transfer lines for Tank Farm Upgrades by July 31, 2019. The Contractor shall earn 0.60% upon completion.

Work scope/completion criteria: The Contractor shall submit the 90% design review package for the AP Farm Waste Feed transfer lines. The Design Package will have been through the WRPS design review with comments collected, dispositioned, and a comment incorporation path forward planned.

Completion document: Letter transmitting the performance expectation completion notice and the AP Farm Waste Feed transfer lines 90% design review package.

4. Complete submittal of 90% design review package for TSCR transfer lines for Tank Farm Upgrades by September 30, 2019. The Contractor shall earn 0.60% upon completion.

Work scope/completion criteria: The Contractor shall submit the 90% design review package for TSCR transfer lines. The Design Package will have been through the WRPS design review with comments collected, dispositioned, and a comment incorporation path forward planned.

Completion document: Letter transmitting the performance expectation completion notice and the TSCR transfer lines 90% design review package.

5. Complete submittal of 90% design review package for the TSCR Ion Exchange Column storage pad for Tank Farm Upgrades by September 30, 2019. The Contractor shall earn 0.60% upon completion.

Work scope/completion criteria: The Contractor shall submit the 90% design review package of the TSCR Ion Exchange Column storage pad. The Design Package will have been through the WRPS design review with comments collected, dispositioned, and a comment incorporation path forward planned.

Completion document: Letter transmitting the performance expectation completion notice and

the TSCR Ion Exchange Column pad 90% design review package.

6. Submit the Tank Side Cesium Removal Project (TSCR) 90% Design Review Documents/Package to ORP for review by September 30, 2019. The Contractor shall earn 0.80% in fee upon completion.

Work scope/completion criteria: The 90% Design Review Documents/Package for TSCR will consist primarily of alpha revisions of the design media and will include the following:

- General Arrangement Drawings
- Equipment Location Drawings
- Calculations
- P&ID, V&ID
- Control Logic Drawings
- Electrical One-line diagrams
- Master Equipment List

The Design Package will have been through the WRPS design review with comments collected, dispositioned, and a comment incorporation path forward planned.

Completion document: Letter transmitting the performance expectation completion notice and 90% Design Review Documents/Package to ORP for review.

7. Submit the initial Low Activity Waste Pretreatment Systems RCRA permit application to ORP by September 30, 2019. The Contractor shall earn 0.80% in fee upon completion.

Work scope/completion criteria: Permit application preparation and Class 3 modification request. The initial application package will consist of narrative portions, including addenda and early design media. The application will be certified by Contractor senior management.

Completion document: Letter transmitting the performance expectation completion notice and copy of the Contractor issued and certified initial Direct Feed Low Activity Waste Pretreatment Systems RCRA permit application package.

8. Submit the TSCR Preliminary Documented Safety Analysis (PDSA) amendment to ORP by September 30, 2019. The Contractor shall earn 0.80% in fee upon completion.

Work scope/completion criteria: The Contractor shall submit the TSCR PDSA amendment to ORP with WRPS and ORP review comments dispositioned and incorporated. The PDSA amendment shall be formatted and documented consistent with an amendment to the Tank Farms Documented Safety Analysis.

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

9. Submit test reports for the TSCR support testing by September 30, 2019. The Contractor shall earn 0.80% upon completion.

Work scope/completion criteria: The support testing comprises a series of tests to confirm/validate design and analysis activities. The testing shall include completing the base test scope that commenced in FY2018 for the following four support test activities:

- Tall column testing
- Batch contact testing
- Gas generation testing with ion exchange media
- Ion exchange media drying tests.

Completion document: Letter transmitting the performance expectation completion notice and the completed test reports to ORP.

10. Complete the Geotechnical Exploration work for the TSCR Concrete Pad and the Spent Ion Exchange Colum Interim Storage Pad by September 30, 2019. The Contractor shall earn 1.00% of fee upon completion.

Work scope/completion criteria:

Perform planning, field investigation/testing, laboratory and engineering analyses, and develop a geotechnical report to support the design and construction of the TSCR Concrete Pad and the Spent Ion Exchange Colum Interim Storage Pad, culminating in the formal issuance and acceptance of the Final Geotechnical Investigation Report.

Completion document:

Letter transmitting performance expectation completion notice and formal issuance and acceptance of the Final Geotechnical Investigation Report.

**PBI-55.0 CLIN 3 Test Bed Initiative**

**Performance Fee value is established at 4.3% of FY 2019 fee pool.**

**Fee Structure:** Declining and Terminal Method

<b>Milestone</b>	<b>Method</b>	<b>Fee Value</b>	<b>Due Date</b>	<b>Fund Type</b>
1	Declining	3.50%	March 26, 2019	Expense
2	Terminal	0.80%	September 30, 2019	Expense
<b>Total</b>		<b>4.30%</b>		

**Desired Endpoint/Outcome:**

Processing 2,000 gallons of waste through the test bed, shipment pretreated waste to the offsite vendor, and submit the final Test Bed Initiative (TBI) Demonstration Project report.

**Fee Bearing Milestones:**

1. Complete shipment of the processed waste (maximum 2,000 gallons) totes to the off-site vendor. The Contractor shall earn 3.50% of fee if all shipments are completed before March 26, 2019. The Contractor shall earn 2.50% of fee if the last shipment is completed between March 26, 2019 and May 25, 2019. The Contractor shall earn 0.50% of fee if the last shipment is completed between May 26, 2019 and June 25, 2019. No fee shall be earned if the scope is completed after June 25, 2019. Completion dates are dependent on predecessor third party/GFE completion dates in project baseline schedule; therefore, this PBI may require renegotiation.

Work scope/completion criteria: Ship 2,000 gallons of pretreated waste to Permafix for grouting.

Completion document: Letter transmitting the performance expectation completion notice and copy of the shipping documentation and transfer of ownership from WRPS to off-site treatment vendor Permafix.

2. Complete removal of TBI equipment from the 242-A facility and return facility to pre TBI configuration/Issue final TBI test report by September 30, 2019. The Contractor shall earn 0.80% of fee upon completion.

Work scope/completion criteria: Testing complete, TBI equipment has been removed from the 242-A evaporator and facility returned to pre TBI configuration, issuance of final TBI test report.

Completion document: Letter transmitting the performance expectation completion notice and the completed Construction Completion Document (CCD) with no Type A Exceptions open, issuance of final TBI test report.

**PBI-56.0, CLIN 2: A/AX Retrieval**

**Performance Fee value is established at 15.70% of Fiscal Year 2019 fee pool.**

**Fee Structure: Terminal Method**

<b>Milestone</b>	<b>Method</b>	<b>Fee Value</b>	<b>Due Date</b>	<b>Fund Type</b>
1	Terminal	1.00%	September 30, 2019	Expense
2	Terminal	1.00%	June 30, 2019	Expense
		1.10%	September 30, 2019	Expense
3	Terminal	0.50%	September 30, 2019	Expense
4	Terminal	0.50%	September 30, 2019	Expense
5	Terminal	0.50%	September, 2019	Expense
6	Terminal	0.50%	September 30, 2019	Expense
7	Terminal	0.50%	June 30, 2019	Expense
8	Terminal	5.00%	September 30, 2019	Expense
		1.00%	June 30, 2019	Expense
9	Terminal	1.50%	September 30, 2019	Expense
		2.60%	September 30, 2019	Expense
10	Terminal	2.60%	September 30, 2019	Expense
<b>Total</b>		<b>15.70%</b>		

**Desired Endpoint/Outcome:**

The work outlined in this performance based incentive is required to prepare and retrieve tanks in A/AX farms for waste retrieval and initiate and perform waste retrieval activities and supports the Amended Consent Decree Milestones B-2 and B-3.

**Fee Bearing Milestones:**

1. Complete two (2) Long Length Equipment (LLE) removal actions from A Farm tanks by September 30, 2019. The Contractor shall earn 0.50% in incremental fee for each LLE removal for a total available fee of 1.00%.

Work scope/completion criteria:

The Contractor shall remove two (2) LLE from A Farm tanks to prepare for installation of ventilation ducting.

Completion document:

Letter transmitting the performance expectation completion notice and a copy of the work package(s) signed off as LLE removal complete by the Field Work Supervisor. If two (2) or more LLE removals are completed within a month the completion documentation will be combined into one performance expectation completion notice.

2. Complete installation of nine (9) A Farm Exhauster System infrastructure components. The Contractor shall earn: 1.00% upon completion of two (2) Exhauster components by June 30, 2019, and 0.50% upon completion of one (1) Exhauster Valve Manifold component by September 30, 2019; and 0.60% upon completion of all six (6) Ventilation Ducting Cold “Tie-In” components by September 30, 2019, for a total available fee of 2.10%. The Contractor shall be paid for each unit completion, on a prorated basis, if less than the maximum quantities are complete by the defined terminal date(s).

Work scope/completion criteria:

The Contractor shall install A Farm infrastructure to support tank ventilation. Complete A Farm infrastructure components as follows:

- (1) Exhauster POR518 and POR519 (including platforms and support structures) install;
- (2) Exhauster Valve Manifold install; and
- (3) All A Farm tank ventilation ducting “cold” tie-in component installation. Final hot tie-ins and Construction Acceptance Testing and Operations Acceptance Testing are excluded from this work scope.

Completion document:

Letter transmitting the performance expectation completion notice and copy of the work package(s) signed off as cold tie-in installation complete by the Field Work Supervisor. If two (2) or more equipment upgrades are completed within a month the completion documentation will be combined into one performance expectation completion notice.

3. Complete the (WRS) design for A Farm by September 30, 2019. The Contractor shall earn 0.50% in fee upon completion.

Work scope/completion criteria:

Complete 90% design of major components installation for WRS. The Design Package will have been through the WRPS design review with comments collected, dispositioned, and a comment incorporation path forward planned.

Completion document:

Letter transmitting the performance expectation completion notice and a matrix that identifies 90% design media issued to support major component installation for the A Farm WRS.

4. Complete installation of control trailer POR471 internal equipment and electrical tie-in to retrieval systems by September 30, 2019. The Contractor shall earn 0.50% upon completion.

Work scope/completion criteria:

Complete installation of control trailer POR471 internal equipment and electrical tie-in to retrieval systems.

Completion document:

Letter transmitting the performance expectation completion notice and copy of the work package(s) signed off as installation complete by the Field Work Supervisor.

5. Complete installation of AX Farm infrastructure High Resolution Resistivity Leak Detection Monitor (HRR/LDM) installation by September 30, 2019. The Contractor shall earn 0.50% upon completion of installation.

Work scope/completion criteria:

Complete installation of HRR/LDM System to support AX-102 retrieval operations.

Completion document:

Letter transmitting the performance expectation completion notice and copy of the work package signed off as installation complete by the Field Work Supervisor.

6. Complete installation of new in-tank video recording system for AX-102 by September 30, 2019. The Contractor shall earn 0.50% upon completion.

Work scope/completion criteria:

Complete installation of the new in-tank video recording system for AX-102 that will be required to support retrieval operations.

Completion document:

Letter transmitting the performance expectation completion notice and copy of the work package(s) signed off as installation complete by the Field Work Supervisor.

7. Complete installation of AX Farm Lighting Infrastructure upgrade by June 30, 2019. The Contractor shall earn 0.50% upon completion.

Work scope/completion criteria:

Complete installation AX Farm Lighting Upgrade.

Completion document:

Letter transmitting the performance expectation completion notice and copy of the work package(s) signed off as installation complete by the Field Work Supervisor.

8. Complete waste retrieval system construction for Tank 241-AX-102 and turnover to Operations by September 30, 2019. The Contractor shall earn 3.00% of incremental fee upon completion of construction of Tank 241-AX-102 and turnover to operations. Complete the operational readiness checklist (ORC) in support of initial waste retrieval operations at Tank 241-AX-102 by September 30, 2019. The Contractor shall earn 2.00% of fee upon completion. For a total available fee, for completion of both construction and ORC, of 5.00%

Work scope/completion criteria:

Complete waste retrieval system construction. The Construction Completion Document (CCD), Section 1a, will be completed. The Contractor will ensure that waste retrieval systems, procedures, and training and qualification of staff are ready to support operations. Signed ORC

for Waste Retrieval operations at Tank 241-AX-102 demonstrating that the facility, staff, and processes are ready for operations.

Completion document:

Letter transmitting the performance expectation completion notice and copy of the Contractor approved CCD through section 1a with exceptions listing. Letter transmitting the performance expectation completion notice and copy of the signed ORC to ORP.

9. Complete five (5) Long Length Equipment (LLE) removals in AX-101 and/or AX-103. The Contractor shall earn: 1.00% upon completion of two (2) of (5) LLE removals in by June 30, 2019, and 1.5% for the remaining three (3) of (5) by September 30, 2019. The Contractor shall earn 0.50% in incremental fee for each LLE removal for a total available fee of 2.50%.

Work scope/completion criteria:

The Contractor shall remove five (5) LLE from AX-101 and/or AX-103 tanks to prepare for the installation of retrieval equipment.

Completion document:

Letter transmitting the performance expectation completion notice(s) and a copy of the work package(s) signed off as LLE removal complete by the Field Work Supervisor. If two (2) or more LLE removals are completed within a month the completion documentation will be combined into one performance expectation completion notice.

10. Commence waste retrieval activities in 241-AX-102 and retrieve 25% of the waste by volume by September 30, 2019. The Contractor shall earn 2.60% of incremental fee upon completing retrieval of 10,000 gallons of the Waste by Volume in Tank 241-AX-102.

Work scope/completion criteria:

Perform waste retrieval activities to achieve a 25% reduction in the initial SST waste volume. The retrieval of 25% of initial SST waste by volume shall be based upon initial volume determined from the latest BBI information or a preretrieval volume determination, if completed. The retrieved volume will be an estimate based on material balance calculations.

Completion document:

Letter transmitting the performance expectation completion notice and submittal of material balance data and engineering calculations summary information demonstrating retrieval of 25% of the initial waste volume.

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

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

Award Fee: The period of performance is October 1, 2018, through September 30, 2019. 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.**

Factors for consideration in the Contractor's performance will include, effective WRPS management at all levels, overall or specific risk reductions and Contractor efficiencies (faster, reduced costs, etc.) created or generated in the conduct of work.

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 QA requirements.

Evidence of performance to be considered in determining an adjectival rating will include:

- Overall quality of contractor developed products
- Performance against agreed upon schedule dates
- Degree of compliance with designated completion criteria
- Periodic reviews of performance against completion criteria using lower tier measures and metrics agreed upon between Federal and Contractor program owners.

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

**Performance Fee value is established at 6.40% of FY 2019 fee pool.**

### **Desired Outcome:**

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

1. Demonstrating safety leadership and risk-informed, conservative decision-making
2. Anticipating project challenges and providing timely resolution
3. Open communication with the workforce – fostering a questioning attitude and an environment free from retribution
4. Management focus on maintenance, compliance, surveillance and integrity of the Tank Farms facility.

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

**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:

1. Demonstrating safety leadership and risk-informed, and effective decision-making.
2. Anticipating project challenges and providing timely resolution.
3. Effective and open communication with the workforce – to include tools such as the comprehensive vapors website, reader board, public announcements and other communication methods.
4. Effectively manage the mission activities (such as work-planning and control, critical spares, and procurements) to avoid mission delays.
5. Communications, tracking and effectiveness measurements of vapors activities in response to external assessments performed as part of Comprehensive Vapors Actions.

### **SST and DST Infrastructure**

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

1. 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:

1. Maintain tank chemistry per Operations Specifications Documents to ensure long term integrity of tanks
2. Obtain better understanding of the susceptibility of the primary and secondary liners to corrosion.

### **Single-Shell Tank Integrity**

Maintain the SST Integrity program.

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

### **Vapors Oversight and Communication**

1. Execute the comprehensive vapor management communication plan, engagement processes, and effectiveness measurements (Comprehensive Vapor Action Plan Key Performance Parameter 1). Create a quarterly report of the effectiveness of the communication plan (e.g., effectiveness of metrics, focus groups, surveys, Chemical Protection Program Office (CPPO) notebooks, Comprehensive Vapors Solution Team (CVST), etc. and associated feedback.)

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

**Performance Fee value is established at 5.70% of FY 2019 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 improvement.

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

1. 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;
2. 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;
3. The Conduct of Operations Council Focus demonstrate continuous improvement as evidenced by Contractor performance indicators, effective improvement initiatives, and/or Contractor/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 Labs, response to abnormal events or lessons learned, training program status and initiatives, or drill program improvement;
4. 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.
5. Contractor 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.
6. Effectively control vegetation and biological vectors within TOC radiological posted areas, which have potential to spread contamination through root take-up and transport mechanisms and animal intrusion and subsequent transport;
7. Maintain safe nuclear operations compliant with 10 CFR 830.

8. Adequate flow-down and effective application of TOC Nuclear Safety requirements.

**Conduct of Engineering** – Sustaining and improving the effectiveness and consistent delivery of Engineering solutions, systems and programs.

1. Deliver effective and timely solutions to emerging Tank Farms technical issues as and when the need arises.
2. Provide innovative engineering solutions that result in improved efficiency, industrial safety and/or ALARA performance.
3. Provide innovative automation-related solutions that result in improved efficiency, industrial safety and/or cyber security.
4. Provide efficient and effective Process Engineering support to TOC projects and programs.
5. Maintain the backlog of Engineering Change Notices (ECNs) > 3 years old below 25.
6. Monitor and continue to maintain design errors that result in engineering or field rework at acceptable levels.
7. Continue to monitor and sustain ventilation system performance, maintaining > 90 percent availability for active systems.
8. Implement additional enhancements to the SmartPlant® Foundation document control and configuration management system in support of the effective implementation of TOC processes.
9. Continue to monitor and report Engineering Technical Rigor performance.
10. Implement a Reliability Centered Maintenance pilot program.

**Conduct of Maintenance** –

1. 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;
2. 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;

3. Identification and implementation of at least two improved stewardship opportunities (i.e., Tool Crib equipment tracking), including metrics to demonstrate improvement;
4. Ensure the Spares Program is maintained and inventory is between the minimum and maximum levels to ensure adequate turnover of program at contract transition.

**Work Processes –**

1. Measure performance of work scheduling versus work execution effectiveness, evaluate the causes for cancelation of planned work, evaluate trends and respond to improve performance.
2. Evaluate work packages for appropriate level of planning, including use of “skill of the craft” and effective integration of controls into work instructions.
3. 900 (75/month) management oversight observations of work execution.

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

**Performance Fee value is established at 5.75% of FY 2019 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 as a key element of managing both capital projects and operational activities.

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

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

1. **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 Management – Evaluate and utilize project performance data and cost and schedule metrics to support sound project management decisions, such as implementation of cost and schedule recovery initiatives as appropriate.

Assessing Schedule Health – Perform schedule health checks applied to project performance and as beneficial to assessing or continually improving EVMS – Complete Acumen Fuse 14 point schedule check evaluation on TOC Baseline and current schedule and track/trend schedule health improvement. Perform additional schedule health checks as beneficial to assessing or improving EVMS health.

#### **Effective Change Control Process and Baseline Management –**

Baseline Change Requests will be incorporated in a timely manner defined as implementation of the BCR within the same reporting month as it was approved into the baseline in accordance with the procedure that governs the increase or decrease in plan changes as a result of realization of risk, client-initiated changes, changes to laws and other governing documents, or in accord with other changes as defined in the TOC

Program Log Reconciliation will be maintained with monthly logs for Contract Budget Base and Total Allocated Budget, to include all transactions affecting Management Reserve, Undistributed Budget, and Authorized Unpriced Work tracking and aging. In addition, WRPS will maintain a separate Log for Capital Line Item projects in accordance with DOE Order 413.3B, to support

unique monthly reporting, aging of undistributed budget, contingency and staging for contract disposition, as well as authorized unpriced work aging and tracking for definitization.

**Portfolio Management** – Maintain disciplined monthly Portfolio Management Reporting (PMR) process in support of contractual requirements and ORP expectations including development of a fiscal year work plan, which maintains alignment of budget and funds and ensures EACs are reconciled with funding targets associated with Project Direction Notices/Indirect Cost Target Reports. Supports reinvestment of identified cost savings to perform additional work scope or addresses emergent directed work scope as applicable. Provide the Monthly Funds Analysis Report to communicate contract funding needs for duration of the contract. Segregate funding reporting for capital and operating dollars to ensure project funds traceability.

**Out Year Planning Estimate Range (OPER) Update**– Develop, update and delivery of the OPER which will include a summary scope of work, cost and schedule range which will be unconstrained by fiscal year unless a revised funding profile has been provided by EM-5 for the OPER Period. The OPER detail will be dependent upon the complexity of the work, ability to define remaining scope, regulatory drivers, waste disposition paths, existing or new technology requirements, et cetera.

2. **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. 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:

Perform EVMS compliance and self-governance oversight in the following areas:

- Administration of a self-governance surveillance approach that considers DOE PM-30 requirements
- Enhance EVMS surveillance to include protocol for continued compliance and improvement of “Qualified” CAMs through comprehensive CAM interview protocol, tracking and trending.
- Support the development and implementation of DOE policies and EVMS related initiatives.

TOC Monthly Report – 1) Prepare and submit, in accordance with the contract requirements, a TOC Monthly Report on time and with high quality. Pursue continuous improvement in monthly performance reviews conducted in parallel with submission of the TOC Monthly Report.

Corrective Action Tracking/Closeout – Demonstrate proactive identification of program level corrective actions and effective management of corrective actions to closure. The contractor is proactive in assisting ORP with issue identification and proposed resolution.

Reporting Tools/Systems/Processes – Demonstrate effective implementation of the Contractor Integrated EVM System. Develop and enhance project management tools and reports in support of performance monitoring, predictive analysis, and identification of cost and schedule recovery plan actions.

3. **Estimating System** – Maintain an estimating system in compliance with contractual and DOE requirements, including consideration of the GAO 12-Step estimating process and best practices. DOE will assess the Contractor’s performance in:
  - Incorporating enhancements or improvements to the estimating system based on the results of external reviews including estimating system audits and capital project peer reviews or independent cost estimates
  - Use of established estimate benchmarks as an input in project estimating activities as applicable (for instance, in the development of proposal estimates, fiscal year work plans, or other related products).
4. **Risk/Opportunity Management** – DOE will evaluate the Contractor’s Risk and Opportunity Management performance within the award fee period based upon the Contractor’s ability to identify the risks associated with the execution of their work and assess their potential impact. ORP will rely on objective and/or subjective risk/opportunity performance elements to evaluate the Contractor’s performance, which includes but is not limited to the following:

Development and maintenance of active risk registers for all line item projects, and category 1 and 2 projectized operational activities as defined in TFC-PLN-84.

Application of disciplined processes to:

- Forecast the expected impacts of future risks and opportunities consistent with project schedules and to-go work.
- Assess the sum of the budget utilized to respond to or handle risks/opportunities.
- Ensure contractor risk register updates occur, on average, at least once every 60 days, and all active risk registers are updated quarterly with risks/opportunities that are realized.

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

**Performance Fee value is established at 3.00% of FY 2019 fee pool.**

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

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

Overall performance and improvement of the QA program will be judged based on the quality and timeliness of products and services produced during the reporting period and the overall effectiveness of the Contractor's assurance system to completely identify, track, correct, and communicate issues. The analysis of quality performance will also give consideration to the Contractor's ability to self-identify issues (e.g., nonconforming conditions, legacy issues, emerging negative performance trends) and correct negative performance trends before significant issues occur.

**Evaluation Criteria:** ORP will perform both objective and subjective evaluations of the Contractor's efforts to:

1. Continue to develop objective metrics and targets to assess the effectiveness of the QA program (not just the QA organization), including benchmarking of key functional areas. Measures reflecting significant rework should be included where available, or otherwise developed;
2. Improve management of QA program requirements including the ability to demonstrate compliance with contractually imposed standards throughout all supporting program plans and specific implementing procedure elements or steps;
3. Contractor plan, schedule, and perform effective QA Surveillances consistent with the Contractor's graded approach, including bias-based coverage for higher consequence processes and activities;
4. Demonstrate effective and consistent performance of the procurement quality engineering function, including requirements development, procurement document review, bid evaluation, control of changes, subcontractor/supplier selection and oversight, review/acceptance of deliverables, all consistent with the Contractor's graded-approach;
5. Streamline/standardize supplier audit processes to reduce overall costs of supplier audits and improve reliability of the DOE nuclear supply chain.

## **SEA 5: Nuclear Safety Program**

**Performance Fee value is established at 3.00% of FY 2019 fee pool.**

**Desired Outcome:** Effectively manage the Tank Farms safety basis in compliance with 10 CFR 830.

**Areas of Focus** include Contract requirements, responsiveness to emerging issues and high visibility items, and identifying improvements in the Nuclear Safety Program, safety basis, and required amendments.

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

1. Completion of Planned Improvements identified in the 242-A Evaporator and Tank Farms DSA;
2. Timely declaration and management of potential inadequacies in the Safety Basis;
3. Unreviewed Safety Question process compliance with 10 CFR 830.203 and DOE Guide 424.1-1, Implementation Guide for Use in Addressing Unreviewed Safety Question Requirements;
4. Responsiveness to and management of performance and assessment areas needing attention as identified by Contractor self-assessments, ORP assessments, and external reviews; and
5. 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 3.00% of FY 2019 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;

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:

1. Establish and implement environmental performance metrics.
2. Prepare data and regulatory approaches on time and integrate them with associated Hanford Site regulatory compliance actions.
3. Provide on schedule and accurate input to Hanford Site environmental reports and Site-wide compliance initiatives.
4. Integrate permit and licensing document preparation activities with project schedules allowing adequate timeframes for DOE and regulatory review.
5. Minimize the number and seriousness of any non-compliances, infractions, or violations. Ensure responses to inspections are coordinated with facility operations and DOE, of high quality and on schedule.
6. Integrate DOE Sustainable Program Goals into WRPS planning and operations.
7. Coordinate environmental activities across the Tank Farms Contract (e.g., One System and Retrieval/Closure).

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

**Performance Fee value is established at 6.75% of FY 2019 fee pool.**

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

**Areas of Focus for radiological control, industrial health, safety, emergency preparedness.**

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

### Sustain Safety Performance.

- 1) Have an effective safety conscious work environment and culture through implementation of programs and dissemination of expectations in order to establish a work environment in which employees feel free to raise safety concerns to management and/or a regulator without fear of retaliation.

Fostering a culture that rewards proactive self-identification and reporting of issues, and proactively identifying and taking action on systemic weaknesses leading to sustained continuous self-improvement.

- 2) Actively participate in Hanford Site-Wide Committees and contribute in the support and effective implementation of the programs, development of revisions, and interpretations.
- 3) Continue safety related outreach and benchmarking activities (industrial safety, industrial hygiene, radcon), at least one per quarter, to include sharing lessons learned and best management practices with other companies and the public, as appropriate.
- 4) Continue to develop, distribute, and improve safety and health communications to the workforce.

### Radiological Controls:

- 1) Improve radiological conduct of operations. Demonstrate procedure compliance by documented oversight. Emphasize release surveys and boundary control.
- 2) Emphasize the as low as reasonably achievable (ALARA) concept to drive occupational dose to the lowest reasonably achievable level.
  - Increase awareness of the ALARA program through educational ALARA awareness activities;
  - Continue to develop innovative tools and processes to reduce dose with an emphasis on engineering controls; and

- Investigate and implement innovations and process improvements to continue the reduction of extremity dose.
  - a) Conduct six ALARA education events or communication initiatives to increase awareness of the ALARA program.
  - b) Document implementation of six innovative tools and processes used to reduce worker dose.
  - c) Evaluate one new technology or process dedicated to the monitoring and reduction of extremity dose.
- 3) Reduce radiological risk through appropriate management/reduction of radiological areas with high dose rates and levels of contamination. Emphasis should be on source reduction (removal or mitigation of the source term), and claims should point to what was removed to lower the dose rate and/or probability of re-contamination of the area. In-process work evolutions and active waste management activities are exempted.
- a) Achieve a reduction of five high-risk areas and eight low-risk areas. Of the 13 areas, 4 areas must be focused on dose reduction and/or hazard reduction.

#### Beryllium

- 1) Conduct sampling of facilities, conex boxes and structures as required by the Hanford CBDPP (DOE-0342) and referenced sub-tier procedures (target of 45 to be sampled);
- 2) Transition one beryllium controlled facility to a beryllium cleared status;
- 3) Develop a performance indicator for reduction of WRPS beryllium legacy items;
- 4) Maintain technical documents up to date and field implementation consistent with the Hanford CBDPP; and
- 5) Evaluate and implement, where feasible, efficiencies to the program (i.e., monthly surface sampling routines).

#### Emergency Preparedness:

- 1) Conduct a minimum of one evaluated field drill a quarter that minimizes simulations and control cell actors in order to maximize field responses by the 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., Facility Operations Specialist (FOS) and On-scene Coordinator) in the field.

- 2) Conduct a minimum of two Event Scene Set-Up Operational Field drills per a quarter with Production Operations shift personnel. TFC-OPS-OPER-C-51, Operational Drill Program, will be used as documentation and Emergency Preparedness Event Scene Setup & Response procedure will be used as the drill scenario driver.
- 3) Develop, and conduct a tabletop (TT) drill that focuses on Recovery planning actions from a WRPS HMOE. The TT will use lessons learned and after action reports from DOE complex events in the past 36 months. The TT include elements of response in accordance with guidelines within DOE O RLEP 3.4, Event Termination, Reentry, and Recovery.
  - a) Emergency Operations Center;
  - b) Site Emergency Director;
  - c) DOE Advisor;
  - d) WRPS Senior Management;
  - e) WRPS Recovery Team; and
  - f) Hanford Fire

#### Industrial Hygiene

- 1) Improve and execute an integrated sampling and monitoring program which includes source, area, and personal sampling results.
- 2) Provide IH and Industrial Hygiene Technicians (IHT) professional development training in FY 2019.
- 3) IH program oversight shall include one effectiveness review of IH work permit process. Work planning cases will be reviewed with varying levels of complexity (i.e., Level 1, 2, 3, and 4 work packages), a review on the application of the mixture rule, as well as interviews of key process participants. Report is to be issued and released to ORP.
- 4) Complete baseline exposure assessments, using the exposure assessment process developed in FY 2018 for the following tank farms and facilities:  
AX, AY, AZ and AN Tank Farms and the 242-A Evaporator.
- 5) Demonstrate effective implementation of personal ammonia monitoring into the IH program through the following measures:
  - a) Schedule adherence;
  - b) Communications and training of affected personnel;
  - c) Timely problem resolution; and
  - d) Documented lessons learned within six months following implementation.
- 6) Complete internal review process for PNNL-27089, Chemical Mixtures and Modeling.
- 7) Complete the Charter-71 process for the following reports:

- a) PNNL-26775, Proposed Occupational Exposure Limits for Furans, recommendation;
  - b) PNNL-26819, Proposed HTFOELs for Chronic Exposures – Nitrile Class COPCs and 2,4 – Dimethylpyridine.
- 8) Complete closeout of CVAP PERs, associated with the IH program.

Safety & Health Contractor Assurance Systems

- 1) Improve contractor assurance systems in the Industrial Safety, Industrial Hygiene, Radiological Controls, and Emergency Preparedness program areas. CAS includes, but is not limited to, the following:
- a) Assessments have been performed for all safety program areas within the last three years. Develop a risk-based assessment plan, and ensure each safety program area is assessed within an interval not to exceed 3 years. The risk-based strategy should include consideration of future operational work, regulatory-driven assessments, topical areas where improvement in performance is desired. Assessments contain adequate breadth and depth of review, identify good practices, accomplishments, and are self-critical.
  - b) Develop, maintain, and update S&H department-level performance indicators to monitor the health and performance of safety program areas.
  - c) Develop department-level performance indicators to monitor S&H PER performance to support timely resolution of PER's. Identify and evaluate potential trends. Monitor S&H trend performance and effectiveness of corrective actions. Declining performance is evaluated, and timely and appropriate actions are taken.
  - d) Safety and health issues and events are evaluated (e.g., investigation, cause analysis, trend, and action implementation) resulting in effective organizational learning with the goal of eliminating recurring events and implementing quality corrective actions within contractual, procedural, and/or DOE Orders-specified timing.
  - e) Regular (e.g., monthly) discussion with ORP Safety and Health Division (SHD) regarding the performance of program area.

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

**Performance Fee value is established at 3.00% of FY 2019 fee pool.**

**Desired Outcome:** Development of improved Management systems and technical support for WTP commissioning and supporting Tank Farm upgrades.

**Areas of focus for overall Contractor 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:

1. DFLAW Integration – Coordinate, trace, measure and report on a prioritized set of activities and timing in a DFLAW Integrated Schedule to fully integrate Tank Farms, WTP and other Hanford Site Contractors to meet the contractual dates for startup and commissioning of DFLAW. Utilize the one system governance process to identify elements of high risk and/or inadequate schedule performance needed for successful completion of the DFLAW program.
2. Transition - Recommend to ORP actions needed to more effectively and efficiently conduct the transition to DFLAW startup, commissioning, and operation.
3. Flowsheet Management - Continuously improve a long-term RPP integrated flow sheet stewardship and technical management process that involves the national laboratories. Flowsheet management also includes waste feed qualification and delivery.
4. System Planning - Provide for the integration of TOC and WTP system planning and modeling, with a focus on long-term RPP mission planning, TPA milestone support, software modeling and development and near-term opportunity evaluation.
5. Contract Management - Identify those DOE directives and contract changes needed to align and/or maintain aligned the TOC Contractor and Bechtel National, Inc. contracts, and establish an optimum or necessary time to have each item aligned.
6. Chief Technology Office - Establish an integrated national laboratory support program for ORP including procurement, communication, and reporting protocols that ensures technology maturation in support of the project schedules. Conduct an annual national laboratory coordination meeting and monthly conference calls to integrate the national laboratory efforts in support of the RPP mission. Utilize the prioritized technology development roadmap (accounting for ORP mission needs and priorities) to integrate with TOC Contractor mission planning documents (System Plan, Risk Management Plan, Comprehensive Vapor Action Plan, etc.) ORP's other prime Contractors, ORP's Grand Challenge Competition, DOE-HQ technology development program, capture and record results of completed research on OSTI and document in the technology roadmap, and define and prioritize future TOC technology development initiatives.

7. Project Management - Through the Project Management Office provide the processes, PM qualification, and direct project assistance to support effective delivery of TOC projects.
8. DFLAW Execution Process - TOC Contractor supports Tank Farm upgrades and field execution of TOC projects and activities supporting DFLAW startup.

**SEA 9: Contractor Assurance System (CAS)**

**Performance Fee value is established at 3.00% of FY 2019 fee pool.**

**Desired Outcome:** CAS is effectively used, throughout the WRPS management hierarchy, in accordance with DOE Order 226.1B, to enable DOE's mission. Effective implementation of the approved CAS will provide assurance that mission and operations objectives are achieved and workers, the public, and the environment are adequately protected. Requirements delineated in the contract and/or DOE approved plans are effectively implemented in a manner that ensures mission and operations deliverables meet the applicable requirements for all work described in the contract's Statement of Work.

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

Methods of monitoring and measuring performance, including metrics, assessments, surveillances, and other operational activities, are effectively used to provide an accurate representation of current performance of mission objectives and goals.

1. An issues management process that supports categorization, tracking, trending, and analysis of performance data. Corrective actions are clear, appropriate, and effective.
2. Additional trending data such as Occurrence Reporting and Processing System Reports, Problem Evaluation Requests, and Performance Indicators are established that monitor the health and status of the programs to both normalize and evaluate the safety significance of trending data and Contractor management takes actions to mitigate performance deficiencies.
3. External independent evaluation of the CAS by entities such as corporate parent companies or other external entities.
4. Open and continuous communication on issues identified with the CAS and/or programs that make up parts of the CAS.
5. Flow down of CAS implementation requirements to work performed by sub-contractors.
6. Metrics are effectively used to provide an accurate picture of current performance against goals.
7. Lessons learned experiences and good practices are incorporated into the overall work process and used to inform the organizations of adverse work practices or experiences.

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

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

**II. DOE PERFORMANCE MONITOR:**

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

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

**PBI #** \_\_\_\_\_ **Recommended Fee Earned** \_\_\_\_\_

**Discussion:**

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

**SEA #** \_\_\_\_\_ **Adjective Rating** \_\_\_\_\_

**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:

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

**ATTACHMENT 3 - FDO 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

Assistant 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>
<b>Dark Blue</b> “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>
<b>Light Blue</b> “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>
<b>Green</b> “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> <li>- Good degree of transparency</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> <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>

<p><b>Yellow</b>                  “Underperforming”                  “Needs improvement”                  “Elevated risk”</p>		<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>
<p><b>Red</b>                  “Does not meet reqmts”                  “Failing or will fail”</p>		<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> <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>
<p><b>Grey</b>                  “Insufficient data”                  “Not able to assess”</p>		<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>