

|   |                                    |  |                                |
|---|------------------------------------|--|--------------------------------|
| <b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>   |                                    | 1. CONTRACT ID CODE  | PAGE OF PAGES<br>1 8           |
| 2. AMENDMENT/MODIFICATION NO.<br>113  | 3. EFFECTIVE DATE<br>See Block 16C | 4. REQUISITION/PURCHASE REQ. NO.<br>11EM002912   | 5. PROJECT NO. (If applicable) |
| 6. ISSUED BY<br>Office of River Protection<br>U.S. Department of Energy<br>Office of River Protection<br>P.O. Box 450<br>Richland WA 99352  | CODE<br>00603                      | 7. ADMINISTERED BY (If other than Item 6)<br>Office of River Protection<br>U.S. Department of Energy<br>Office of River Protection<br>P.O. Box 450<br>MS: H6-60<br>Richland WA 99352 | CODE<br>00603                  |
| 8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and ZIP Code)<br>WASHINGTON RIVER PROTECTION SOLUTIONS LLC<br>Attn: DUANE SCHMOKER<br>PO BOX 73<br>720 PARK BLVD<br>BOISE ID 837290001 |                                    | (x) 9A. AMENDMENT OF SOLICITATION NO.  |                                |
| CODE 806500521 FACILITY CODE  |                                    | 9B. DATED (SEE ITEM 11)  |                                |
|   |                                    | x 10A. MODIFICATION OF CONTRACT/ORDER NO.<br>DE-AC27-08RV14800   |                                |
|   |                                    | 10B. DATED (SEE ITEM 13)<br>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 Net Decrease: -\$1,155,708.00

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

|           |   |
|-----------|---|
| CHECK ONE | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.  |
|           | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). |
| X         | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:<br>FAR 52.243-2, Changes-Cost Reimbursement (AUG 1987) & FAR 52.232-22, Limitation of Funds (APRIL 1984)                                     |
|           | D. OTHER (Specify type of modification and authority)   |

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

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

See Continuation Pages.

FOB: Destination

Period of Performance: 06/20/2008 to 09/30/2013

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

|   |                                    |  |                                    |
|---|------------------------------------|--|------------------------------------|
| 15A. NAME AND TITLE OF SIGNER (Type or print)<br><i>Abel B. Dennison / Contract Mgr</i> |                                    | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)<br>Susan E. Bechtoi |                                    |
| 15B. CO<br><i>[Signature]</i><br>ORIGINAL SIGNED BY                                     | 15C. DATE SIGNED<br><i>6/20/11</i> | 16B. UNITED STATES OF AMERICA<br><i>[Signature]</i><br>ORIGINAL SIGNED BY      | 16C. DATE SIGNED<br><i>6/20/11</i> |

**Purpose of Modification:**

The following changes are hereby incorporated into the contract:

1. De-obligate incremental funding in the amount of \$-1,155,708.00. The funding shall be de-obligated as follows:

| Accounting Code  | Fund | Appr Year | Allottee | Reporting Entity | Object Class | Program | Project | WFO | Funded Amount          |
|--|------|-----------|----------|------------------|--------------|---------|---------|-----|------------------------|
| De-obligating WRPS<br>TDD funds from WP-2:<br>Alternative Waste<br>Pretreatment  | 1250 | 2011      | 34       | 421301           | 25200        | 1111412 | 4263    | 0   | -\$855,708.00          |
| De-obligating WRPS<br>TDD funds from WP-4:<br>Improved Vitrification<br>Capacity | 1250 | 2011      | 34       | 421301           | 25200        | 1111412 | 4265    | 0   | -\$300,000.00          |
| <b>Total</b>   |      |           |          |                  |              |         |         |     | <b>-\$1,155,708.00</b> |

2. As a result of this de-obligation, the Total Obligated Amount for this award is changed from \$1,480,492,844.77 to \$1,479,337,136.77.
3. Update Section B, Clause B.3, Obligation and Availability of Funds, to update the total Obligation of Funds. Then change is as follows:

**FROM:**

- (a) Obligation of Funds. Pursuant to the Section I Clause entitled, FAR 52.232-22 Limitation of Funds, total funds in the amount of \$1,480,492,844.77 have been allotted for obligation and are available for payment of services provided from the effective date of the Notice to Proceed through September 30, 2013.

Of the total identified above, \$323,855,000.00 in Recovery Act funds have been allotted for obligation and are available for payment of services provided from the effective date of this modification through September 30, 2011. (Subject to Section I clause 52.216-24 Limitation of Government Liability) and \$1,156,637,844.77 in non-Recovery Act funds are available for payment of services through September 30, 2013.

**TO:**

- (a) Obligation of Funds. Pursuant to the Section I Clause entitled, FAR 52.232-22 Limitation of Funds, total funds in the amount of \$1,479,337,136.77 have been allotted for obligation and are available for payment of services provided from the effective date of the Notice to Proceed through September 30, 2013.

Of the total identified above, \$323,855,000.00 in Recovery Act funds have been allotted for obligation and are available for payment of services provided from the effective date of this modification through September 30, 2011. (Subject to Section I clause 52.216-24 Limitation of Government Liability) and \$1,155,482,136.77 in non-Recovery Act funds are available for payment of services through September 30, 2013.

4. Update Section J, Attachment J.15, American Recovery and Reinvestment Act (ARRA) Scope and End-State Milestones to update completion date for Analytical Building Block RA-1 Tank Farm Infrastructure Upgrades, Other Tank/Farm Upgrades (multiple subprojects). The change is as follows:

**FROM:**

|   |                     |   |          |   |
|---|---------------------|---|----------|---|
| <b>RA-1 Tank Farm Infrastructure Upgrades</b> | <b>Sub-CLIN 7.1</b> | Other Tank/Farm Upgrades (multiple subprojects) |          |   |
|   |                     | 1. ENRAF® upgrades.                             | Aug – 11 | Upgrades complete.                      |
|   |                     | 2. Ventilation system reliability study.        | Sep – 09 | Vent system reliability study complete. |
|   |                     | 3. Obsolete tank farm equipment removal.        | Sep – 11 | Equipment removed.                      |
|   |                     | 4. Decon trailer procurement.                   | Sep – 10 | System received.                        |

**TO:**

|   |                     |   |          |   |
|---|---------------------|---|----------|---|
| <b>RA-1 Tank Farm Infrastructure Upgrades</b> | <b>Sub-CLIN 7.1</b> | Other Tank/Farm Upgrades (multiple subprojects) |          |   |
|   |                     | 1. ENRAF® upgrades.                             | Sep – 11 | Upgrades complete.                      |
|   |                     | 2. Ventilation system reliability study.        | Sep – 09 | Vent system reliability study complete. |
|   |                     | 3. Obsolete tank farm equipment removal.        | Sep – 11 | Equipment removed.                      |
|   |                     | 4. Decon trailer procurement.                   | Sep – 10 | System received.                        |

5. Update Section J, Attachment J.15, American Recovery and Reinvestment Act (ARRA) Scope and End-State Milestones to update the completion date for Analytical Building Block RA-1 Tank Farm Infrastructure Upgrades, SST Life Extension. The change is as follows:

**FROM:**

| RA-1 Tank Farm Infrastructure Upgrades | Sub-CLIN<br>7.1 | SST Life Extension                          |          |                          |
|--|-----------------|---|----------|--------------------------|
|  |                 | 1. Replace radial filters.                  | Aug – 11 | Radial filters replaced. |
|  |                 | 2. Remove obsolete SST equipment.           | Aug – 11 | Equipment removed.       |
|  |                 | 3. Complete SST electrical system upgrades. | Aug – 11 | Upgrades complete.       |

**TO:**

| RA-1 Tank Farm Infrastructure Upgrades | Sub-CLIN<br>7.1 | SST Life Extension                          |          |                          |
|--|-----------------|---|----------|--------------------------|
|  |                 | 1. Replace radial filters.                  | Aug – 11 | Radial filters replaced. |
|  |                 | 2. Remove obsolete SST equipment.           | Aug – 11 | Equipment removed.       |
|  |                 | 3. Complete SST electrical system upgrades. | Sep – 11 | Upgrades complete.       |

6. Update Section J, Attachment J.15, American Recovery and Reinvestment Act (ARRA) Scope and End-State Milestones to update completion date for Analytical Building Block RA-3 Facilities Upgrades. The change is as follows:

**FROM:**

| RA-3 Facilities Upgrades | Sub-CLIN<br>7.2 | 222-S Life Extensions<br>(multiple subprojects) |          |   |
|--------------------------|-----------------|---|----------|---|
|                          |                 | 1. Roof replacement.                            | Nov – 10 | 222-S roof replaced.                      |
|                          |                 | 2. Conditioned storage addition.                | Oct – 10 | Conditioned storage facility constructed. |
|                          |                 | 3. Replace HPT support facilities.              | Sep – 10 | Facility constructed.                     |

|  |  |                                 |          |  |
|--|--|---------------------------------|----------|--|
|  |  | 4. Replace mobile office.       | Aug - 11 | Office constructed.                          |
|  |  | 5. Replace HVAC control system. | Sep - 11 | Control system installed.                    |
|  |  | 6. Renovate rooms.              | Sep - 11 | 222-S rooms upgraded.                        |
|  |  | 7. Upgrade stairway access.     | Sep - 09 | Stairway access meets current building code. |

**TO:**

|                                 |                         |   |          |  |
|---------------------------------|-------------------------|---|----------|--|
| <b>RA-3 Facilities Upgrades</b> | <b>Sub-CLIN<br/>7.2</b> | <b>222-S Life Extensions<br/>(multiple subprojects)</b> |          |  |
|                                 |                         | 1. Roof replacement.                                    | Nov - 10 | 222-S roof replaced.                         |
|                                 |                         | 2. Conditioned storage addition.                        | Oct - 10 | Conditioned storage facility constructed.    |
|                                 |                         | 3. Replace HPT support facilities.                      | Sep - 10 | Facility constructed.                        |
|                                 |                         | 4. Replace mobile office.                               | Sep - 11 | Office constructed.                          |
|                                 |                         | 5. Replace HVAC control system.                         | Sep - 11 | Control system installed.                    |
|                                 |                         | 6. Renovate rooms.                                      | Sep - 11 | 222-S rooms upgraded.                        |
|                                 |                         | 7. Upgrade stairway access.                             | Sep - 09 | Stairway access meets current building code. |

7. Update Section J, Attachment J.15, American Recovery and Reinvestment Act (ARRA) Scope and End-State Milestones to update completion date for Analytical Building Block RA-4 Waste Feed Infrastructure Upgrades. The change is as follows:

**FROM:**

|  |                     |                                  |                 |                     |
|--|---------------------|----------------------------------|-----------------|---------------------|
| <b>RA-4 Waste Feed Infrastructure Upgrades</b> | <b>Sub-CLIN 7.1</b> | <b>Exhauster D&amp;D (AW/AN)</b> | <b>Aug – 11</b> | Exhausters removed. |
|--|---------------------|----------------------------------|-----------------|---------------------|

**TO:**

|  |                     |                                  |                 |                     |
|--|---------------------|----------------------------------|-----------------|---------------------|
| <b>RA-4 Waste Feed Infrastructure Upgrades</b> | <b>Sub-CLIN 7.1</b> | <b>Exhauster D&amp;D (AW/AN)</b> | <b>Sep – 11</b> | Exhausters removed. |
|--|---------------------|----------------------------------|-----------------|---------------------|

8. Update Section J, Attachment J.15, American Recovery and Reinvestment Act (ARRA) Scope and End-State Milestones to update completion date for Analytical Building Block RA-5 Waste Feed Transfer Line Upgrades. The change is as follows:

**FROM:**

|   |                     |   |                 |                        |
|---|---------------------|---|-----------------|------------------------|
| <b>RA-5 Waste Feed Transfer Line Upgrades</b> | <b>Sub-CLIN 7.3</b> | <b>Transfer Line Upgrades – SL-177/SN-277 and SL-180/SN-280</b> | <b>Aug – 11</b> | Construction complete. |
|---|---------------------|---|-----------------|------------------------|

**TO:**

|   |                     |   |                 |                        |
|---|---------------------|---|-----------------|------------------------|
| <b>RA-5 Waste Feed Transfer Line Upgrades</b> | <b>Sub-CLIN 7.3</b> | <b>Transfer Line Upgrades – SL-177/SN-277 and SL-180/SN-280</b> | <b>Sep – 11</b> | Construction complete. |
|---|---------------------|---|-----------------|------------------------|

9. Update Section J, Table of Contents, to correct Revision Numbers for Attachments J.2, J.3, J.4, J.9, J.13, J.14, and J.15 and to update the Number of Pages in J.15. The change is as follows:

**FROM:**

| Attachment Number | Title of Attachment   | Revision Number | Number of Pages |
|-------------------|---|-----------------|-----------------|
| J.1               | ABBREVIATIONS AND ACRONYM LIST  | 0               | 7               |
| J.2               | REQUIREMENTS SOURCES AND IMPLEMENTING DOCUMENTS                                   | 0               | 8               |
| J.3               | HANFORD SITE SERVICES AND INTERFACE REQUIREMENTS MATRIX                           | 0               | 68              |
| J.4               | PERFORMANCE EVALUATION AND MEASUREMENT PLAN (PEMP)                                | 6               | 99              |
| J.5               | PERFORMANCE GUARANTEE AGREEMENT   | 0               | 5               |
| J.6               | SMALL BUSINESS SUBCONTRACTING PLAN  | 0               | 14              |
| J.7               | SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM TARGETS                        | 0               | 3               |
| J.8               | ADVANCE UNDERSTANDING OF COSTS  | 0               | 5               |
| J.9               | SPECIAL FINANCIAL INSTITUTION ACCOUNT AGREEMENT                                   | N/A             | 5               |
| J.10              | WAGE DETERMINATIONS – SERVICE CONTRACT ACT (SCA) AND DAVIS-BACON ACT              | 1               | 48              |
| J.11              | SUPPLEMENTAL WORK DESCRIPTION TABLES  | 0               | 22              |
| J.12              | GOVERNMENT-FURNISHED SERVICES AND INFORMATION (GFS/I)                             | 0               | 1               |
| J.13              | HANFORD SITE STRUCTURES LIST  | 0               | 66              |
| J.14              | HANFORD WASTE SITE ASSIGNMENT LIST  | 0               | 132             |
| J.15              | AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) MILESTONES AND PERFORMANCE MEASURES | 0               | 12              |

**TO:**

| <b>Attachment Number</b> | <b>Title of Attachment</b>  | <b>Revision Number</b> | <b>Number of Pages</b> |
|--------------------------|---|------------------------|------------------------|
| J.1                      | ABBREVIATIONS AND ACRONYM LIST  | 0                      | 7                      |
| J.2                      | REQUIREMENTS SOURCES AND IMPLEMENTING DOCUMENTS                                   | 11                     | 8                      |
| J.3                      | HANFORD SITE SERVICES AND INTERFACE REQUIREMENTS MATRIX                           | 3                      | 68                     |
| J.4                      | PERFORMANCE EVALUATION AND MEASUREMENT PLAN (PEMP)                                | 9                      | 99                     |
| J.5                      | PERFORMANCE GUARANTEE AGREEMENT   | 0                      | 5                      |
| J.6                      | SMALL BUSINESS SUBCONTRACTING PLAN  | 0                      | 14                     |
| J.7                      | SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM TARGETS                        | 0                      | 3                      |
| J.8                      | ADVANCE UNDERSTANDING OF COSTS  | 0                      | 5                      |
| J.9                      | SPECIAL FINANCIAL INSTITUTION ACCOUNT AGREEMENT                                   | 1                      | 5                      |
| J.10                     | WAGE DETERMINATIONS – SERVICE CONTRACT ACT (SCA) AND DAVIS-BACON ACT              | 1                      | 48                     |
| J.11                     | SUPPLEMENTAL WORK DESCRIPTION TABLES  | 0                      | 22                     |
| J.12                     | GOVERNMENT-FURNISHED SERVICES AND INFORMATION (GFS/I)                             | 0                      | 1                      |
| J.13                     | HANFORD SITE STRUCTURES LIST  | 1                      | 66                     |
| J.14                     | HANFORD WASTE SITE ASSIGNMENT LIST  | 1                      | 132                    |
| J.15                     | AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) MILESTONES AND PERFORMANCE MEASURES | 3                      | 5                      |

**10. Attached to this modification are replacement pages for the following sections:**

- Section B, Page B-3
- Section J, Table of Contents, Page 1
- Section J, Attachment J.15, Pages J.15-1, and J.15-3-5

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



## **Replacement Pages**

**(Total: Seven (7) including this Cover Page)**

- **Section B, Page B-3**
- **Section J, Table of Contents, Page 1**
- **Section J, Attachment J.15, Pages J.15-1, and J.15-3-5**

- b. Sub-CLIN 4.2: Extended Demonstration Bulk Vitrification System Operations;
  - c. Sub-CLIN 4.3: Supplemental Treatment Design
  - d. Sub-CLIN 4.4: Supplemental Treatment Construction and Operations
  - e. Sub-CLIN 4.5: Transuranic Tank Waste Treatment and Packaging.
- (5) *CLIN 5 – Early Feed and Operation of the WTP Low Activity Waste (LAW) Facility:*
- a. Sub-CLIN 5.1: Tank Selection, Retrieval, Pretreatment and Feed Delivery Design;
  - b. Sub-CLIN 5.2: Retrieval, Pretreatment and Feed Delivery Construction and Operations;
  - c. Sub-CLIN 5.3: (moved to Sub-CLIN 3.4)
  - d. Sub-CLIN 5.4: LAW/BOF/LAB Operations.
- (6) *CLIN 6 – Pension and Welfare Plans:*
- a. Sub-CLIN 6.1: Hanford Employee Retirement and Benefit Plan Management; and
  - b. Sub-CLIN 6.2: Legacy Pension and Benefit Plan Management.
- (7) *CLIN 7 – American Recovery and Reinvestment Act (ARRA) Workslope:*
- a. Sub-CLIN 7.1: ARRA workslope under Sub-CLIN 1.2 – Safe, Compliant Operations;
  - b. Sub-CLIN 7.2: ARRA workslope under Sub-CLIN 1.3 – Analytical Laboratory Support;
  - c. Sub-CLIN 7.3: ARRA workslope under Sub-CLIN 3.1 – Treatment Planning, Waste Feed Delivery, and WTP Transition; and
  - d. Sub-CLIN 7.4: ARRA workslope under Sub-CLIN 3.3 – Immobilized High-Level Waste (IHLW) Storage and Shipping Facility Construction
  - e. Sub-CLIN 7.5: ARRA workslope under Sub-CLIN 3.4 - Upgrade and Operate the Effluent Treatment Facility (ETF).
  - f. Sub-CLIN 7.6: ARRA workslope under Sub-CLIN 2.1 Single Shell Tank (SST) Retrieval and Closure

### **B.3 OBLIGATION AND AVAILABILITY OF FUNDS**

- (a) Obligation of Funds. Pursuant to the Section I Clause entitled, FAR 52.232-22 Limitation of Funds, total funds in the amount of \$1,479,337,136.77 have been allotted for obligation and are available for payment of services provided from the effective date of the Notice to Proceed through September 30, 2013.

Of the total identified above, \$323,855,000.00 in Recovery Act funds have been allotted for obligation and are available for payment of services provided from the effective date of this modification through September 30, 2011. (Subject to Section I clause 52.216-24 Limitation of Government Liability) and \$1,155,482,136.77 in non-Recovery Act funds

**PART III – LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS**

**SECTION J -- LIST OF ATTACHMENTS**

**TABLE OF CONTENTS**

| <b>Attachment Number</b> | <b>Title of Attachment</b>  | <b>Revision Number</b> | <b>Number of Pages</b> |
|--------------------------|---|------------------------|------------------------|
| J.1                      | ABBREVIATIONS AND ACRONYM LIST  | 0                      | 7                      |
| J.2                      | REQUIREMENTS SOURCES AND IMPLEMENTING DOCUMENTS                                   | 11                     | 8                      |
| J.3                      | HANFORD SITE SERVICES AND INTERFACE REQUIREMENTS MATRIX                           | 3                      | 68                     |
| J.4                      | PERFORMANCE EVALUATION AND MEASUREMENT PLAN (PEMP)                                | 9                      | 99                     |
| J.5                      | PERFORMANCE GUARANTEE AGREEMENT   | 0                      | 5                      |
| J.6                      | SMALL BUSINESS SUBCONTRACTING PLAN  | 0                      | 14                     |
| J.7                      | SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM TARGETS                        | 0                      | 3                      |
| J.8                      | ADVANCE UNDERSTANDING OF COSTS  | 0                      | 5                      |
| J.9                      | SPECIAL FINANCIAL INSTITUTION ACCOUNT AGREEMENT                                   | 1                      | 5                      |
| J.10                     | WAGE DETERMINATIONS – SERVICE CONTRACT ACT (SCA) AND DAVIS-BACON ACT              | 1                      | 48                     |
| J.11                     | SUPPLEMENTAL WORK DESCRIPTION TABLES  | 0                      | 22                     |
| J.12                     | GOVERNMENT-FURNISHED SERVICES AND INFORMATION (GFS/I)                             | 0                      | 1                      |
| J.13                     | HANFORD SITE STRUCTURES LIST  | 1                      | 66                     |
| J.14                     | HANFORD WASTE SITE ASSIGNMENT LIST  | 1                      | 132                    |
| J.15                     | AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) MILESTONES AND PERFORMANCE MEASURES | 3                      | 5                      |

**ATTACHMENT J.15  
 AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) SCOPE AND END-STATE  
 MILESTONES**

| Analytical Building Block              | Contract Line Item Number | Scope   | Date*  | Completion End Point(s)   |
|--|---------------------------|---|--|---|
| RA-1 Tank Farm Infrastructure Upgrades | Sub-CLIN 7.1              | AP/SY Ventilation Design and Fabrication  | Sep – 11                                     | Fabrication complete.   |
| RA-1 Tank Farm Infrastructure Upgrades | Sub-CLIN 7.1              | SY Electrical Upgrades  | Sep – 11                                     | Upgrades complete.  |
| RA-1 Tank Farm Infrastructure Upgrades | Sub-CLIN 7.1              | Valve Funnel Replacement  | Sep – 11                                     | Installation complete.  |
| RA-1 Tank Farm Infrastructure Upgrades | Sub-CLIN 7.1              | AP Valve Pit Jumpers  | Sep – 11                                     | Installation complete.  |
| RA-1 Tank Farm Infrastructure Upgrades | Sub-CLIN 7.1              | AP Level Rise Construction Modifications  | Oct – 10                                     | Construction Modifications complete.  |
| RA-1 Tank Farm Infrastructure Upgrades | Sub-CLIN 7.1              | AZ Farm Control System Upgrade  | July – 11                                    | Installation complete.  |
| RA-1 Tank Farm Infrastructure Upgrades | Sub-CLIN 7.1              | Other Tank/Farm Upgrades (multiple subprojects)<br>1. ENRAF <sup>®</sup> upgrades.<br>2. Ventilation system reliability study.<br>3. Obsolete tank farm equipment removal.<br>4. Decon trailer procurement. | Sep – 11<br>Sep – 09<br>Sep – 11<br>Sep – 10 | Upgrades complete.<br>Vent system reliability study complete.<br>Equipment removed.<br>System received. |
| RA-1 Tank Farm Infrastructure Upgrades | Sub-CLIN 7.1              | DST Upgrades/Life Extension (multiple subprojects)<br>1. Issue DSTIP lab report.<br>2. Fabricate and install AN-107 corrosion probe.<br>3. Cathodic protection modifications/adjustments.                   | Dec – 10<br>Oct – 10<br>Sep – 11             | Issue report.<br>Installation complete.<br>Adjustments complete.  |
| RA-1 Tank Farm Infrastructure Upgrades | Sub-CLIN 7.1              | SST Life Extension<br>1. Replace radial filters.<br>2. Remove obsolete SST equipment.<br>3. Complete SST electrical system upgrades.  | Aug – 11<br>Aug – 11<br>Sep – 11             | Radial filters replaced.<br>Equipment removed.<br>Upgrades complete.                                    |

| Analytical Building Block | Contract Line Item Number | Scope  | Date*  | Completion End Point(s)   |
|---------------------------|---------------------------|--|--|---|
|                           |                           | 3. Process condensate leak detection upgrades.   | Sep - 10   | Condensate leak detection system upgraded / Construction Complete   |
|                           |                           | 4. Asbestos abatement.   | Jan - 11   | Abatement complete.   |
| RA-3 Facilities Upgrades  | Sub-CLIN 7.2              | <b>222-S Instrument Upgrades</b><br>1. Statements of Work for Priority Instruments (alpha energy analyzer, gamma energy analyzer, liquid chromatograph/mass spectrometer, ion chromatograph).  | Sep - 11<br>Sep - 09   | Instruments upgraded.<br>Statements of work complete.   |
| RA-3 Facilities Upgrades  | Sub-CLIN 7.2              | <b>222-S Life Extensions (multiple subprojects)</b><br>1. Roof replacement.<br>2. Conditioned storage addition.<br>3. Replace HPT support facilities.<br>4. Replace mobile office.<br>5. Replace HVAC control system.<br>6. Renovate rooms.<br>7. Upgrade stairway access. | Nov - 10<br>Oct - 10<br>Sep - 10<br>Sep - 11<br>Sep - 11<br>Sep - 11<br>Sep - 09 | 222-S roof replaced.<br>Conditioned storage facility constructed.<br>Facility constructed.<br>Office constructed.<br>Control system installed.<br>222-S rooms upgraded.<br>Stairway access meets current building code. |
| RA-3 Facilities Upgrades  | Sub-CLIN 7.2              | <b>222-S Upgrades (multiple subprojects)</b><br>1. Upgrade HVAC system to electric.<br>2. Increase HLAN speed.<br>3. Room HVAC upgrades.<br>4. Back-up compressed air system.<br>5. As-built electrical drawings.<br>6. Update PAX system.                                 | Sep - 11<br>Sep - 09<br>Sep - 11<br>Jul - 10<br>Jul - 11<br>Jun - 11             | Conversion to electric heat complete.<br>HLAN upgraded.<br>HVAC for rooms upgraded.<br>Air system installed.<br>Drawings updated.<br>PAX system upgraded.   |
|                           |                           | 7. Lighting upgrades.  | Sep - 11   | Light systems replaced.   |
|                           |                           | 8. Access to fan deck upgrade.   | Sep - 09   | New access provided.  |
|                           |                           | 9. Demolish MO-924.  | Sep - 09   | MO-924 demolished.  |
| RA-3 Facilities Upgrades  | Sub-CLIN 7.5              | <b>Effluent Treatment Facility (Grout and Waste Form Testing)</b>  |  |   |

| Analytical Building Block               | Contract Line Item Number | Scope  | Date*      | Completion End Point(s)                          |
|---|---------------------------|--|------------|--|
|   |                           | 1. Test glass formulations for technetium retention.                                 | Sep – 11   | Issue final report.                              |
|   |                           | 2. Short-term leaching tests of grout formulations to solidify ETF waste streams.    | Sep – 11   | Issue final report.                              |
| RA-4 Waste Feed Infrastructure Upgrades | Sub-CLIN 7.1              | DST Control Systems Update   | Sep – 11   | Control systems installed.                       |
| RA-4 Waste Feed Infrastructure Upgrades | Sub-CLIN 7.1              | Exhauster D&D (AW/AN)  | Sep – 11   | Exhausters removed.                              |
| RA-4 Waste Feed Infrastructure Upgrades | Sub-CLIN 7.3              | AZ Condensate Line Upgrade   | April – 11 | Upgrades complete.                               |
| RA-4 Waste Feed Infrastructure Upgrades | Sub-CLIN 7.3              | AW COB Isolation and Removal   | May – 11   | Construction complete.                           |
| RA-4 Waste Feed Infrastructure Upgrades | Sub-CLIN 7.3              | Mixer Pump Design  | May – 11   | Mixer pump design complete.                      |
| RA-4 Waste Feed Infrastructure Upgrades | Sub-CLIN 7.3              | Tank Waste Mixing Demonstrations   |            |  |
|   |                           | 1. Complete small-scale mixing demonstration and submit draft report to DOE-ORP.     | Sep – 10   | Draft small-scale mixing demo report.            |
|   |                           | 2. Complete test loop demonstration and submit draft report to DOE-ORP.              | Jan – 11   | Draft test loop demonstration report.            |
|   |                           | 3. Complete small-scale sampling demonstration and submit draft report to DOE-ORP.   | Jun – 11   | Draft small-scale sampling demonstration report. |
| RA-4 Waste Feed Infrastructure Upgrades | Sub-CLIN 7.3              | AW D&D (SHMS-GCS Removal)  | May – 11   | Equipment Removal complete.                      |
| RA-4 Waste Feed Infrastructure Upgrades | Sub-CLIN 7.3              | SY-102 D&D (SHMS-GCS Removal)  | Dec – 10   | Equipment Removal complete.                      |
| RA-4 Waste Feed Infrastructure Upgrades | Sub-CLIN 7.3              | Strategic Planning – Process Control Flow Sheets Complete for First 3 WTP Feed Tanks | Sep – 11   | Flow sheet complete.                             |
| RA-4 Waste Feed Infrastructure Upgrades | Sub-CLIN 7.3              | Waste Feed Delivery – Pre-Design/Design Activities for Waste Feed Delivery           | Sep – 11   | Design review complete.                          |
| RA-4 Waste Feed Infrastructure Upgrades | Sub-CLIN 7.3              | Statements of Work and Procurement Specifications                                    |            |  |
|   |                           | 1. Prepare SOW for Exhauster D&D.  | Dec – 09   | Statement of work prepared.                      |

| Analytical Building Block              | Contract Line Item Number | Scope   | Date*    | Completion End Point(s)             |
|--|---------------------------|---|----------|-------------------------------------|
|  |                           | 2. Complete Mixer Pump Procurement Specification.                                     | Dec - 09 | Procurement Specification prepared. |
| RA-5 Waste Feed Transfer Line Upgrades | Sub-CLIN 7.3              | Transfer Line Upgrades – SL-177/SN-277 and SL-180/SN-280                              | Sep - 11 | Construction complete.              |
| RA-5 Waste Feed Transfer Line Upgrades | Sub-CLIN 7.3              | Transfer Line Upgrades – SN-278/SN-279 and SN-285/SN-286                              | Sep - 11 | Construction complete.              |
| RA-5 Waste Feed Transfer Line Upgrades | Sub-CLIN 7.3              | Design  |          |                                     |
|  |                           | 1. Complete 90 % design for Transfer Line Upgrades – SL-177/SN-277 and SL-180/SN-280. | Dec - 09 | 90% Design complete.                |
|  |                           | 2. Complete 90% design for Transfer Line Upgrades – SN-278/SN-279 and SN-285/SN-286.  | Mar - 10 | 90% Design complete.                |

\* Dates represent completion by the end of the month indicated.

® ENRAF is a registered trademark of Enraf B.V. Corporation, Delft, Netherlands.

COB = cleanout box

D&D = deactivation and decommissioning

DST = double-shell tank

DSTIP = double-shell tank integrity program

FY = fiscal year

GCS = Gas Characterization System

HLAN = Hanford Local Area Network

HPT = health physics technician

HVAC = heating, ventilation, and air conditioning

MO = mobile office

SHMS = Standard Hydrogen Monitoring System

SST = single-shell tank

WTP = Waste Treatment and Immobilization Plant