AMENDMENT OF SOLICITATION/MODIFIC	ATION OF CON	TRACT	1. CONTRACT ID CODE		OF PAGES
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DA	TE 4. R	EQUISITION/PURCHASE REQ. NO.	5. PROJECT	NO. (If applicable)
132	See Block	111	EM000570		. ,,,
6. ISSUED BY CODE	00601		ADMINISTERED BY (If other than Item 6)	CODE 00	601
Richland Operations Office U.S. Department of Energy Richland Operations Office P.O. Box 550, MSIN A7-80 Richland WA 99352		U. Ri P.	Richland Operations Office U.S. Department of Energy Richland Operations Office P.O. Box 550, MSIN A7-80 Richland WA 99352		
8. NAME AND ADDRESS OF CONTRACTOR (No., street	t, county, State and ZIP	Code) (x)	9A. AMENDMENT OF SOLICITATION NO.		
CH2M HILL PLATEAU REMEDIATION COMPANY Attn: Reese Bang 2420 Stevens Center Place Richland wa 99354-1659		x	9B. DATED (SEE ITEM 11) 10A. MODIFICATION OF CONTRACT/ORDER N DE - AC 0 6 - 0 8 R L 1 4 7 8 8 10B. DATED (SEE ITEM 13)	NO.	
CODE 805603128	FACILITY CODE		06/19/2008		
	11. THIS ITEM C	NLY APPLIES TO AMEN	DMENTS OF SOLICITATIONS		
separate letter or telegram which includes a reference THE PLACE DESIGNATED FOR THE RECEIPT OF virtue of this amendment you desire to change an offe to the solicitation and this amendment, and is received 12. ACCOUNTING AND APPROPRIATION DATA (If received See Schedule	OFFERS PRIOR TO er already submitted, d prior to the opening quired)	THE HOUR AND DATE such change may be mad hour and date specified.	SPECIFIED MAY RESULT IN REJECTION OF Y de by telegram or letter, provided each telegram or	OUR OFFER. or letter makes r	If by reference
	ODIFICATION OF C	ONTRACTS/ORDERS. IT	MODIFIES THE CONTRACT/ORDER NO. AS DE	ESCRIBED IN IT	TEM 14.
X ORDER NO. IN ITEM 10A. I.102-FAR 52.243-2-0	Changes-Cos CT/ORDER IS MODI H IN ITEM 14, PURS	t Reimburseme FIED TO REFLECT THE UANT TO THE AUTHOR	NGES SET FORTH IN ITEM 14 ARE MADE IN 1 ent (8/87) - Alt II (4/84) ADMINISTRATIVE CHANGES (such as changes ITY OF FAR 43.103(b). DRITY OF:		
D. OTHER (Specify type of modification	and authority)				
E. IMPORTANT: Contractor X is not,	☐ is required to sign	gn this document and retu	rn 0 copies to the issuin	ng office.	
14. DESCRIPTION OF AMENDMENT/MODIFICATION This modification makes the			ng solicitation/contract subject matter where feasi	ible.)	
1. Change Order # 009 Revisi Reimbursement, Change Order Attachment 1 to this modific Change Order 009 specified i	# 009, as pation. The	provided in M e funds limit	Modification M017, is reveation and definitization	rised as	
2. Change Order # 108: In a select portions of Section C	, Subsecti	on C.2.7.3, K	Basins Sludge Treatment	System,	, and
C.2.7.4, K Basins Sludge Tre to prospective Change Order					
Continued					
Except as provided herein, all terms and conditions of the	ne document reference	ced in Item 9A or 10A, as	heretofore changed, remains unchanged and in f	ull force and eff	ect.
15A. NAME AND TITLE OF SIGNER (Type or print)			A. NAME AND TITLE OF CONTRACTING OFFI	CER (Type or p	print)
			enise C. Connerly		
15B. CONTRACTOR/OFFEROR	150		B. UNITED STATES OF AMERICA		16C. DATE SIGNED
			Signature on File		12/09/2010
(Signature of person authorized to sign)	I	l	(Signature of Contracting Officer)		

CONTINUATION SHEET REFERENCE NO. OF DOCUMENT BEING CONTINUED DE-AC06-08RL14788/132 PAGE OF 2

NAME OF OFFEROR OR CONTRACTOR

CH2M HILL PLATEAU REMEDIATION COMPANY

(A) (B) (C) (D) (E) (F) contractor is not authorized to expend funds for work on Change Order 108 prior to RL approval through contract modification. Following RL approval of the Contractor's recommendation for sludge treatment and packaging, CHPRC shall prepare and submit a proposal for Change Order 108 within 120 days. 3. Change Order # 107: In accordance with FAR 52.243-2, Changes - Cost Reimbursement, Section	SUPPLIES/SERVICES QUANTITY UNIT UNIT PRICE AMO	OUNT
work on Change Order 108 prior to RL approval through contract modification. Following RL approval of the Contractor's recommendation for sludge treatment and packaging, CHPRC shall prepare and submit a proposal for Change Order 108 within 120 days. 3. Change Order # 107: In accordance with FAR 52.243-2, Changes - Cost Reimbursement, Section		(F)
and Deep Vadose Zone, CHPRC shall proceed with work as shown in Attachment 3 to this modification not to exceed \$4,000,000.00 in accordance with Clause B.3 Obligation and Avaliability of Funds, prior to the definitization of this change in accordance with the referenced clause. The definitization schedule for Change Order 107 is provided in Attachment 5 to this modification. 4. Change Order #069 Revisions: In accordance with FAR 52.243-2, Changes - Cost Reimbursement, Change Order #069, as provided in Modification 118, is revised as shown on Attachment 4 to this modification. The funds limitation schedule for Change Order 069, specified in Modification 118, remains unchanged. The definitization schedule for Change Order 069, specified in Modification 118, is replaced with the schedule provided in Attachment 5 to this modification. All other terms and conditions remain the same. End of modification. FOB: Destination Period of Performance: 06/19/2008 to 09/30/2013	contractor is not authorized to expend funds for work on Change Order 108 prior to RL approval through contract modification. Following RL approval of the Contractor's recommendation for sludge treatment and packaging, CHPRC shall prepare and submit a proposal for Change Order 108 within 120 days. 3. Change Order # 107: In accordance with FAR 52.243-2, Changes - Cost Reimbursement, Section C, Subsection C.2.4.7, Remediation - Groundwater and Deep Vadose Zone, CHPRC shall proceed with work as shown in Attachment 3 to this modification not to exceed \$4,000,000.00 in accordance with Clause B.3 Obligation and Availability of Funds, prior to the definitization of this change in accordance with the referenced clause. The definitization schedule for Change Order 107 is provided in Attachment 5 to this modification. 4. Change Order #069 Revisions: In accordance with FAR 52.243-2, Changes - Cost Reimbursement, Change Order #069, as provided in Modification 118, is revised as shown on Attachment 4 to this modification. The funds limitation schedule for Change Order 069, specified in Modification 118, remains unchanged. The definitization schedule for Change Order 069, specified in Modification 118, is replaced with the schedule provided in Attachment 5 to this modification. All other terms and conditions remain the same. End of modification. FOB: Destination	(F)

Change Order #009, as provided in Modification M017, is hereby revised as shown below. This revision deletes or removes selected portions of Subsection C.2.7.3 and all of Subsection C.2.7.4 and places some of these requirements into Change Order #108 (as indicated by redline/strikeout text). The final version of Change Order #108 is provided in Attachment 2 to this modification. Additionally, this revision adds additional requirements into Subsection C.2.7.3 which is indicated by the new text.

CHANGE ORDER #: 009 (As Revised

in Modification 130)

CONTRACT NUMBER: DE-AC06-08RL14788

TITLE OF CHANGE: K EAST DEMOLITION AND PREPARATION FOR THE K BASINS SLUDGE TREATMENT SYSTEM, (BASE FUNDED)

DESCRIPTION OF CHANGE:

SOW Section: Section C, Subsection C.2.7.2, KE Basin Demolition, Subsection C.2.7.3, K Basins Sludge Treatment System, and C.2.7.4, K Basins Sludge Treatment

C.2.7.2 KE Basin Demolition

General Scope:

The Contractor shall complete demolition and disposal activities of the K East basin.

Detailed Scope and Requirements:

The Contractor shall:

- Demolish the K East basin and transport to ERDF for disposal; and
- Stabilize soil beneath the basin for subsequent remediation.

C.2.7.3 K Basins Sludge Treatment System

General Scope:

The Contractor shall design, procure, construct, and perform acceptance testing of the K Basins Sludge Treatment System.

Detailed Scope and Requirements:

The Contractor shall:

- Conduct alternatives analysis for the sludge disposition;
- Complete a sludge treatment and packaging Alternatives Analysis and provide a recommendation for a sludge treatment and packaging path forward to DOE-RL;
- Complete removal of Knock Out Pot (KOP) material from the K West Basin and place in

Interim safe storage on the Central Plateau;

- Treat and package the knock-out pot sludge waste stream separately from the remaining sludge waste streams.
- Complete removal of sludge from the Engineered Containers (EC) in the K West Basin and place in interim safe storage on the Central Plateau;
- Complete sludge treatment and approved storage design;
- Complete sludge treatment system and post-packaging components procurements;
- Complete construction of the Sludge Treatment System and associated facilities; and
- Obtain Critical Decisions as defined in DOE O 413.3A.

C.2.7.4 K Basins Sludge Treatment

General Scope:

The Contractor shall operate the Sludge Treatment System to treat and package the sludge material (approximately 29 m3) into a waste form that is suitable for approved disposal. Treated sludge shall be transported to an approved on-site storage location.

Detailed Scope and Requirements:

The Contractor shall treat K Basins sludge in accordance with the documented safety analysis, Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2000-1 Implementation Plan, An Implementation Plan for Stabilization and Storage of Nuclear Material, Washington State-approved permits, the TPA, and related-CERCLA documents.

The Contractor shall

The Contractor shall transport the treated sludge to an approved storage location.

CHANGE ORDER #: 108 CONTRACT NUMBER: DE-AC06-08RL14788

TITLE OF CHANGE: K BASINS SLUDGE TREATMENT, (BASE FUNDED)

DESCRIPTION OF CHANGE:

SOW Section: Section C, Subsection C.2.7.3, K Basins Sludge Treatment System, and C.2.7.4, K Basins Sludge Treatment,

Select portions of Section C, Subsection C.2.7.3, K Basins Sludge Treatment System, and C.2.7.4, K Basins Sludge Treatment, are hereby removed from Change Order 009 and assigned to Change Order # 108 as shown below:

C.2.7.3 K Basins Sludge Treatment System

General Scope:

The Contractor shall design, procure, construct, and perform acceptance testing of the K Basins Sludge Treatment System.

Detailed Scope and Requirements:

The Contractor shall:

- Complete sludge treatment and approved storage design;
- Complete sludge treatment system and post-packaging components procurements;
- Complete construction of the Sludge Treatment System and associated facilities; and
- Obtain Critical Decisions as defined in DOE O 413.3A.

C.2.7.4 K Basins Sludge Treatment

General Scope:

The Contractor shall operate the Sludge Treatment System to treat and package the sludge material (approximately 29 m3) into a waste form that is suitable for approved disposal. Treated sludge shall be transported to an approved on-site storage location.

Detailed Scope and Requirements:

The Contractor shall treat K Basins sludge in accordance with the documented safety analysis, Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2000-1 Implementation Plan, *An Implementation Plan for Stabilization and Storage of Nuclear Material*, Washington State-approved permits, the TPA, and related-CERCLA documents. The Contractor shall transport the treated sludge to an approved storage location.

Plateau Remediation Contract Contract No: DE-AC06-08RL14788 Page 2 of 1 Attachment 2, Modification 132 CHANGE ORDER #: 107 CONTRACT NUMBER: DE-AC06-09RL14788

DESCRIPTION OF CHANGE: 200-UP-1 Operable Unit

SOW Section: C.2.4.7

WBS: 30.22

S-SX interim extraction system design

S-SX interim extraction system construction

S-SX interim extraction system transfer piping and road crossings

The Contractor shall:

Implement interim actions as required for the 200-UP-1 operable unit, including but not limited to the S-SX interim extraction system, install transfer piping and road crossings, and construction activities of the transfer building and well drilling.

Also, revise the 200-UP-1 interim RDRAWP (DOE/RL-97-36) to Rev 3 to incorporate the ESD, and define the need for an interim P&T for the Tc-99 plumes at S-SX (per M-16-120) ESD support.

Within the proposal, please identify the funding source for the above described work scope. Additionally, identify other work scope that will need to be pushed out past end of contract date due to the above described work scope.

Change Order #069, as provided in Modification 118, is hereby revised as shown below (indicated by redline/strikeout text).

CHANGE ORDER #: 0069 | CONTRACT NUMBER: DE-AC06-09RL14788

TITLE OF CHANGE: WESF Ventilation Upgrades

DESCRIPTION OF CHANGE:

SOW Section: C.2.3.14, Facility Management

WBS: 13.02.02

The contractor shall perform K-1/K-3 ventilation upgrades to address DNFSB 2004-2 Recommendation.

Revision to 13.02.02 WBS dictionary:

This activity provides for the upgrade of WESF as necessary to maintain safe, compliant, and cost-effective operations until the capsules can be transferred to interim dry storage (scheduled for FY 2018).

WESF upgrades will include the following as a minimum:

- K-1/K-3 Confinement Ventilation System upgrades
- Replacement of Pool Cell Level Detectors
- Installation of Control System Remote Monitoring
- Installation of Lightweight Pool Cell Covers
- Replacement of Panel Boards
- Compressed Air Cost Reduction
- Installation of Larger Compressed Air Receiver
- Replacement of Motor Controllers
- Replacement of Beta/Gamma Monitoring System
- Refurbishing Shielded Door Actuators
- Replacement of Tank 100 Level Detector
- Modification of Capsule Cart
- Installation of Rain Intrusion protection at TK-50
- Removal of F Cell Water Source
- Refurbishing of F Cell Lighting
- Refurbishing of Roof
- Capsule Reloading
- Replacement of F Cell Window Seals
- Replacement of G Cell West Window Seals
- Replacement of Nitrogen Purge Lines

Assumptions

Life-extension evaluations will be performed and the identification of required upgrades and replacements defined for the contract period.

An additional \$500,000 per year for the contract period has been estimated to cover unexpected facility repairs.

WESF will be deactivated within 2 years following the removal of all capsules.

Upgrade of K-1/K-3 Confinement Ventilation System (CVS) to address DNFSB 2004-2 Recommendation into a single compliant CVS to mitigate potential release of source term. Upgrades shall be complete for operations by November 2012.

The following definitization schedule is established for Change Order 069 and Change Order 107:

Action Contractor submits technical, cost and fee proposal	<u>Date*</u> 45 days
Commence negotiations	130 days
Mutual agreement on definitization	140 days
Contractor submits certificate of current cost or pricing data	140 days
Execute definitization contract modification	150 days

^{*}Date is specified as the number of calendar days after contractor receipt of this modification.