

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1 2
2. AMENDMENT/MODIFICATION NO. 0178	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY Idaho Operations Office Idaho Operations U.S. Department of Energy Idaho Operations Idaho Falls ID 89415	CODE 892432	7. ADMINISTERED BY (If other than Item 6) Idaho Operations U.S. Department of Energy Idaho Operations 1955 Fremont Avenue MS 1221 Idaho Falls ID 83415	CODE 00701
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) FLUOR IDAHO, LLC Attn: AMANDA JORDAN 1070 RIVERWALK DRIVE, SUITE 201 IDAHO FALLS ID 83402		(x) 9A. AMENDMENT OF SOLICITATION NO.	
CODE 968795604		9B. DATED (SEE ITEM 11)	
FACILITY CODE		(x) 10A. MODIFICATION OF CONTRACT/ORDER NO. DE-EM0004083	
		10B. DATED (SEE ITEM 13) 02/04/2016	

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 electronic communication 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 letter or electronic communication, provided each letter or electronic communication 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)

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 data, 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: Section I.100, FAR 52.243-2 Changes - Cost Reimbursement (AUG 1987) Alternate II and III (APR 1984)
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not ☒ is required to sign this document and return 1 copies to the issuing office.

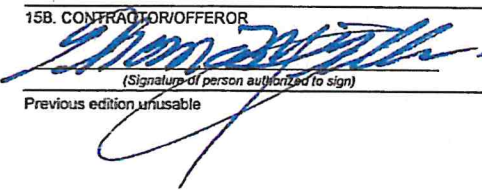
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: 968795604

The purpose of this modification is to definitize the equitable adjustment under CLIN-1 for Subsurface Disposal Area (SDA) Vadose Zone Vapor Rebound Study and for the SDA Well Decommissioning scope, both added to Section C.4.2 of the contract. Please refer to the continuation pages incorporated as part of this modification. The Contractor is directed to continue operations in accordance with contract Section B.2.

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 CONTRACTING OFFICER Thomas M. Williams Director, Prime Contracts		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Jennifer K. Cate	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED 3/12/20	16B. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	16C. DATE SIGNED 3/16/2020

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CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED DE-EM0004083/0178	PAGE	OF
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NAME OF OFFEROR OR CONTRACTOR

FLUOR IDAHO, LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
00001	Payment: OR for Idaho U.S. Department of Energy Oak Ridge Financial Service Center P.O. Box 6017 Oak Ridge TN 37831 FOB: Destination Period of Performance: 06/01/2016 to 05/31/2021 Change Item 00001 to read as follows (amount shown is the total amount): Target ICP-Core DOE Mission Work 1,925,730,696.00 Line item value is: \$1,925,730,696.00 Incrementally Funded Amount: \$1,616,523,755.91 This modification increases the Total Contract Value (including Options) by \$1,175,937 from \$2,024,145,248 to \$2,025,321,185.				

This modification is being made under the authority of contract clause Section I.100, *Changes – Cost Reimbursement (AUG 1987) - Alternate II and III (APR 1984)*. This bilateral contract modification definitizes the equitable adjustments under CLIN-1 for the Subsurface Disposal Area (SDA) Vadose Zone Vapor Rebound Study and for the SDA Well Decommissioning scope, both added to Section C.4.2 of the contract. The indirect cost under CLIN-1 is adjusted to reflect this change per Section B.15(g).

The following changes are hereby made to the contract:

1. SECTION B.2 CONTRACT COST AND FEE SCHEDULE is revised as follows:

CLIN-1: Target ICP Core DOE Mission Work Scope (Base) is revised to incorporate the change stated above.

The Direct Target Cost is increased by \$882,299 from \$909,905,499 to \$910,787,798.

The Indirect Target Cost (POH) is increased by \$158,813 from \$324,193,826 to \$324,352,639.

The Total Target Cost is increased by \$1,041,112 from \$1,234,099,325 to \$1,235,140,437.

The Cost Incentive (Target) is increased by \$51,535 from \$28,520,230 to \$28,571,764.

The Cost Incentive (Maximum) is increased by \$134,825 from \$72,144,798 to \$72,279,623.

The overall CLIN-1 Max Fee, including milestones and performance fee, is increased by \$134,825 from \$146,733,660 to \$146,868,485.

Summary:

The Total Contract Value, including options, is increased by \$1,175,937 from \$2,024,145,248 to \$2,025,321,185.

The attached B.2(c) Fee Model has been updated to reflect the adjustment to CLIN-1.

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B.2(c) Table				
CLIN 00001 - TARGET ICP-CORE DOE MISSION WORK (BASE)				
	Target Cost	Max Fee	Target Fee	Total Price
Direct Target Cost w/ ID Spt (No Options Included)	910,787,798	146,868,485		1,382,008,922
Indirect Target Cost w/o ID Spt (Total Pool, PWS C.8)	324,352,639			
	1,235,140,437			
Target Fee			61,139,452	
Subtotal Milestone-Schedule & Performance Fee (B.3(d))		74,588,862		
Subtotal Incremental Cost Incentive Fee		72,279,623		
Cost Incentive Breakout				
Cost Incentive (Max)		72,279,623		12.95%
Cost Incentive (Target)			28,571,764	4.95%
CLIN 00002 - TARGET ICP CORE NNPP PPF WORK SCOPE				
	Target Cost	Max Fee	Target Fee	Total Price
Navy (Pieces, Parts and Fines - 102 Cans)	42,367,181	5,382,479	2,503,195	47,749,660
Milestone-Schedule & Performance		3,970,091	1,963,325	
Cost Incentive (Max)		1,412,388	539,870	
CLIN 00003 - NON-TARGET ICP CORE WORK SCOPE				
	Estimated Cost	Fee		Total Price
Total Non-Target Work Scope (See Contracting Officer for Breakout)	56,784,084	2,937,333		59,721,417
CLIN 00004 - CONTRACT TRANSITION PERIOD				
Transition	6,811,889	0		6,811,889
CLIN 00005 - DEFINED BENEFIT PENSION PLAN COSTS				
Pension	125,000,000	0		125,000,000
CLIN 00006 INTEGRATED WASTE TREATMENT UNIT (IWTU) OPERATIONS AND TURNOVER				
	Estimated Cost	Max Fee	Fee Gal	Total Price
IWTU Ops (C.6.1) (Definitized by Modification 152)	0	-	\$ 6.53	\$ -
	Estimated Cost	Fee		
IWTU Phase 1 - Process Assessment (C.6.1.1) (Fixed Fee)	19,331,848.00	956,926.00		20,288,774.00
IWTU Phase 2 - Technical Issue Resolution (C.6.1.2) (Milestone Fee)	90,364,264.00	5,523,919.00		95,888,183.00
IWTU Phase 3/4 - Startup of Radiological Operations (C.6.1.10) (Fixed/Milestone Fee)	167,391,405.00	20,870,446.35		188,261,851.35
Total (Excluding C.6.1 IWTU Ops)	277,087,517.00	27,351,291.35		304,438,808.35
Total Contract Cost (Excluding Options)				
	Contract Cost	Max Fee	Target Fee	Total Price
	1,743,191,108	182,539,588	63,642,647	1,925,730,696
Total Contract Cost (Includes Options)				
	Target Cost	Max Fee	Target Fee	Total Price
Priced Options				
00001a - GrndWtr Monitoring Wells / CFA Landfill	773,962	100,228	38,311	874,190
00001b - GrdWtr Monitoring Wells/TAN Rem	676,966	87,667	33,510	764,633
00001c - Legacy Excess Radioactive/Haz Materials	24,747,535	3,204,806	1,225,003	27,952,341
00001d - RCRA Closure of AMWTP Facilities	30,476,158	3,946,662	1,508,570	34,422,820
00001e - Additional Temporary Storage	6,548,465	848,026	324,149	7,396,491
00001f - RH TRU Lot 11 Option Work (Definitized by Modification 050)	-	-	-	-
00001g - RH TRU Lot 12 Option Work	12,341,796	1,598,263	610,919	13,940,059
00001h - RH TRU Lot 11 GFY 2020 Option Work (Definitized by Modification 142)	-	-	-	-
00001i - RH TRU Lot 11 GFY 2021 Option Work	12,607,309	1,632,647	624,062	14,239,956
Total Options	88,172,191	11,418,299	4,364,524	99,590,490
Total Contract Cost (Includes Options) and Max Fee	1,831,363,299	193,957,887	68,007,170	2,025,321,185
Contract Performance Ceiling (B.6)				
Contract Performance Ceiling	1,493,354,554			
NOTE: Fixed Fee values from CLIN-3 and CLIN-6 are included in the max fee value for the total contract cost and total contract cost including options.				

No other changes to Section B.2(c).

2. SECTION B.6(a)(2) CONTRACT PERFORMANCE CEILING is revised as follows:

The current Contract Performance Ceiling (CPC) is increased by \$1,175,937 from \$1,492,178,617 to \$1,493,354,554.

No other changes to Section B.

3. SECTION C.4.2.01 SDA Well Decommissioning is added as follows:

The Contractor shall decommission 52 wells in the SDA area by May 31, 2021. The scope includes the following:

- A. Perform project preparation activities including preparation of a well decommissioning plan in accordance with Idaho Department of Water Resources (IDWR) regulations, procurement of materials and equipment, revising an existing well maintenance work order to address removal of internal well piping, training of personnel (if required), etc.
- B. Prepare and submit a notification letter to IDWR.
- C. Decommission 52 scientific instrumentation, vapor port, neutron access, and observation wells within the footprint of the future SDA cap that are currently available for decommissioning in accordance with the approved decommissioning plan. This will consist of removing concrete pads and pipe bollards at the well heads, cutting off well casings/pipes to 6 to 12 inches below ground level, placing a bentonite mixture inside the casings/pipes, and capping the casings/pipes. Internal piping must be removed from well 79-2 only and will necessitate use of a crane. A licensed professional engineer is required to witness the work and sign off on the well closure forms.
- D. Waste Disposal/Waste Generator Services (WGS) will review the decommissioning plan, develop the Waste Determination and Disposition form and waste profiles, support disposal of the cut off well casings/pipes, bollards, and concrete pads. They will also provide inventory and barcoding for waste tracking.
- E. Prepare and submit a well abandonment form to the Idaho Cleanup Project Hydrologic Data Repository and update the applicable well files for inclusion in the Annual Water Use Report and comprehensive well inventory update.
- F. Provide project and construction management and support.

The CLIN-1 direct costs are increased by \$200,475. Indirect target costs are increased by \$36,085. The corresponding CLIN-1 target fee is increased by \$11,710 and the CLIN-1 max fee is increased by \$30,635.

4. SECTION C.4.2.02 SDA Vadose Zone Vapor Rebound Study is added as follows:

The Contractor shall complete a Vadose Zone Vapor Rebound Study in the SDA area by February 28, 2021. The scope includes the following:

- A. Complete the first (only) rebound test described in the test plan. Samples from 83 Region A vapor ports and 74 Region B vapor ports (for a total of 157) will be collected each week for a minimum of 16 weeks or up to 20 weeks and analyzed on-site using a Bruel and Kjaer (B&K) or similar photoacoustic residual gas analyzer. Collection Method Validation Sampling (CMVS) validation samples will be collected throughout the

duration of the project from up to 12 Region A and B vapor ports and will be analyzed by an off-site independent laboratory using U.S. Environmental Protection Agency (EPA) Method TO-15.

- B. Based on the first rebound test, estimate how long it will take for concentrations of Carbon Tetrachloride (CC14) in Zones A1 and A2 to reach equilibrium and determine if vadose zone vapor average concentrations of CC14 in Zones A1 and A2 are greater than remediation goals in static (i.e., equilibrium) conditions.
- C. Summarize results, compare equilibrated average concentrations of CC14 to remediation goals, and provide information to the EPA and the Department of Environmental Quality (DEQ) to facilitate Agency deliberations.
- D. If the Agencies determine that remediation of volatile organic compounds (VOCs) in the vadose zone is complete in accordance with CERCLA, document that conclusion in a rebound study report in accordance with the test plan and await a decision from the Agencies and DOE-ID as to what the path forward will be regarding shutdown of the VVET system
- E. If the Agencies conclude that remediation goals have not been achieved, document the decision to restart and operate the VVET system in the interim until it is time for the second rebound test in accordance with the test plan.

The CLIN-1 direct costs are increased by \$681,824. Indirect target costs are increased by \$122,728. The corresponding CLIN-1 target fee is increased by \$39,825 and the CLIN-1 max fee is increased by \$104,190.

No other changes to Section C.4.2.

5. **CONTRACTOR'S STATEMENT OF RELEASE:** In consideration of the modification agreed to herein as a complete equitable adjustment for the directed changed identified in this modification, and in accordance with contract Section I.100 52.243-2 Changes—Cost Reimbursement Alt II and III, the Contractor hereby releases the Government from any and all liability under this contract for further equitable adjustments attributable to such facts or circumstances giving rise to the proposal for adjustment.

The total price of the equitable adjustment for CLIN-1 is \$1,175,937.

No other changes to the contract terms and conditions.