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| AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT | | 1. CONTRACT ID CODE | PAGE 1 OF PAGES 3 |
| 2. AMENDMENT/MODIFICATION NO. M083 | 3. EFFECTIVE DATE (M/D/Y) See Block 16C | 4. REQUISITION/PURCHASE REQ. NO. | 5. PROJECT NO. (If applicable) |
| 6. ISSUED BY U.S. Department of Energy Office of River Protection P. O. Box 450, MS H6-60 Richland, WA 99352 | | 7. ADMINISTERED BY (If other than Item 6) | |
| 8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP code) Bechtel National, Inc. 2435 Stevens Center Place Richland, WA 99352 | | <input type="checkbox"/> | 9A. AMENDMENT OF SOLICITATION NO. |
| | | <input type="checkbox"/> | 9B. DATED (SEE ITEM 11) |
| | | <input checked="" type="checkbox"/> | 10A. MODIFICATION OF CONTRACT/ ORDER NO. DE-AC27-01RV14136 |
| | | <input checked="" type="checkbox"/> | 10B. DATED (SEE ITEM 13) December 11, 2000 |
| CODE | FACILITY CODE | | |

11. THIS ITEM 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 DATE AND HOUR 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 amendment and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
Various (see page 2)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS SET FORTH IN ITEM 14.

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| 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. <input checked="" type="checkbox"/> Clause I.82 FAR 52.243-2 CHANGES – COST-REIMBURSEMENT (AUG 1987) – ALTERNATE III (APR 1984) <input type="checkbox"/> Clause I.83 FAR 52.243-6 CHANGE ORDER ACCOUNTING (APR 1984) |
| <input type="checkbox"/> | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO AUTHORITY OF FAR 43.103(b). |
| <input type="checkbox"/> | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO THE AUTHORITY OF: |
| <input type="checkbox"/> | 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.)

See following page(s)

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.

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| 15A. NAME AND TITLE OF SIGNER (Type or print) | | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Michael K. Barrett Contracting Officer | |
| 15B. CONTRACTOR/OFFEROR <hr/> <i>(Signature of person authorized to sign)</i> | 15C. DATE SIGNED | 16B. UNITED STATES OF AMERICA ORIGINAL SIGNED BY <hr/> <i>(Signature of Contracting Officer)</i> | 16C. DATE SIGNED March 10, 2007 |

Purpose of Modification:

The purpose of this contract modification is to issue a Change Order to direct Pretreatment and HLW Vitrification Facility Capacity Enhancement Modifications. Related correspondence is as follows:

1. BNI Letter from C. Albert, BNI, to J. Eschenberg, ORP, "Implementation of Pretreatment Capacity Modifications" CCN 137122, dated December 22, 2006.
2. BNI Letter from W. Elkins, BNI, to J. Eschenberg, ORP, "Implementation of Pretreatment Capacity Modifications" CCN 1146875, dated February 14, 2006.
3. BNI Letter from W. S. Elkins to J. R. Eschenberg, ORP, "Additional WTP Capacity Improvements," CCN: 137126, dated February 28, 2007.
4. ORP Letter from M. K. Barrett to C. E. Rogers, BNI, "Contract Modification No. M080 – Response to Bechtel National, Inc. (BNI) Recommendation for Implementation of Pretreatment (PT) Capacity Modifications," 07-WTP-057, dated March 2, 2007.

Description of Modification:

The following change is hereby incorporated into the Contract:

Section C, *Statement of Work, C.7 Facility Specification*, paragraph (b)(8), now reads:

- "(8) The Pretreatment Facility shall have the established capability to conduct sludge washing, caustic leaching, and oxidative leaching on HLW sludge and entrained solids. The Pretreatment Facility shall include the following capabilities to assure sludge washing, caustic leaching, and oxidative leaching flowsheet and treatment capacity:
- (i) Provide two ultrafiltration trains to support solid-liquid separation, sludge washing, caustic leaching, and oxidative leaching. The ultrafilter surface area for each train shall be approximately 1,500 square feet.
 - (ii) Provide the capability to mix chemical reagents used in the leaching processes, in line with ultrafiltration vessel recirculation pumps, to shorten mixing times.
 - (iii) Perform caustic leaching at 100°C to enhance leaching kinetics.
 - (iv) Include the capability to remove heels from the ultrafiltration vessels to move treated solids forward in the process and minimize recycle.
 - (v) Operate filtration at 45°C or higher to increase filter flux rates and potentially reduce caustic required in leaching.
 - (vi) Add caustic to ultrafilter permeate vessels to prevent post filtration precipitation and reduce the volume of permeate that must pass through the ultrafilters.
 - (vii) Increase the capacity of the cesium ion exchange system to a nominal 30 gallon/minute flowrate. This shall accommodate the increased waste volume

Continuation of Block 14

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resulting from caustic increases required to effectively conduct sludge washing, caustic leaching, and oxidative leaching on HLW sludge and entrained solids.”

Insert new sub-bullet (viii):

- “(viii) Provide the capability to perform caustic leaching in the ultrafiltration feed preparation vessel in addition to the ultrafiltration feed vessel.”

Under Section C, *Statement of Work, C.7 Facility Specification, Section (c), Waste Treatment and Immobilization Plant Expandability Requirements*, add the following three new subparagraphs:

- “(6) Provide the capability to install future alternative solids filtering technologies in Pretreatment facility hot cell areas used for the ultrafiltration system (Pretreatment Areas 34 and 35). This capability shall include the addition of spare wall penetrations.
- (7) Provide four piping stub-outs from the Pretreatment facility South Tunnel to route HLW slurry feed to and from a potential future HLW slurry feed concentration facility.
- (8) Provide HLW facility systems to support the future operation of the HLW facility at a design capacity of 7.5 MTG/d including melter power supplies, pour cave cooling, and support for melter bubblers. The expanded HLW vitrification capacity will be achieved by a second generation HLW melter. ”

Limitations:

The Contractor shall submit a Certified cost proposal (a Certificate of Current Cost or Pricing Data will be required at time of negotiation completion) for this Change Order by May 7, 2007. Pending definitization of this Change Order, the Contractor is authorized to incur costs not-to-exceed \$10,000,000 in performing the combination of this Statement of Work change and the Modification M080 Statement of Work change. The Contractor shall comply with Clause I.83 FAR 52.243-6 Change Order Accounting (APR 1984).