

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE 1	OF	PAGES 3
2. AMENDMENT/MODIFICATION NO. 199		3. EFFECTIVE DATE (M/D/Y) See Block 16C	4. REQUISITION/PURCHASE REQ. NO. N/A		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)		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP code) Bechtel National, Inc. 2435 Stevens Center Place Richland, WA 99354		9A. AMENDMENT OF SOLICITATION NO.		9B. DATED (SEE ITEM 11)	
CODE		FACILITY CODE		10A. MODIFICATION OF CONTRACT/ ORDER NO. DE-AC27-01RV14136	
				10B. DATED (SEE ITEM 13) December 11, 2000	
11. THIS ITEM APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> 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)					
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS SET FORTH 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. <input checked="" type="checkbox"/> Clause I.82 FAR 52.243-2 CHANGES -- COST-REIMBURSEMENT (AUG 1987) - ALTERNATE III (APR 1984) 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 <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return <u>0</u> 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)					
15A. NAME AND TITLE OF SIGNER (Type or print)			16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
			Ashley T. Morris Contracting Officer		
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED	16B. UNITED STATES OF AMERICA		16C. DATE SIGNED
_____ (Signature of person authorized to sign)			BY ORIGINAL SIGNED BY		<i>22 Dec 2000</i>
				_____ (Signature of Contracting Officer)	

Modification Purpose:

- A. The purpose of this modification is to direct BNI to proceed with the performance of large scale testing (LST). BNI is authorized a not-to-exceed (NTE) amount of \$4,900,000.
- B. BNI shall submit a detailed technical and price proposal no later than 45 days after date of modification.
- C. A bi-lateral modification definitizing this change order shall be executed no later than 180 days after receipt date of an acceptable proposal for this action.
- D. Based on the results of the authorized tasks (as outlined below in the Section C changes) and preparation of a definitized schedule and proposal to complete the large scale testing, the Contractor shall submit a request for DOE approval to proceed with scope to procure the large scale test capability and conduct testing. Initial testing to support confirmation of vessel scaling is estimated to be completed by April 2012.
- E. This modification does not add additional funds to the contract. Accordingly, work under the contract, such as that described herein, must be performed within the amount of funds which have been incrementally allotted to the contract in accordance with clause B.2 "Obligation and Availability of Funds and Contract Value", and clause I.66, "FAR 52.232-22 Limitation of Funds (Apr 1984)."

Modification Description:

- A. BNI is directed to proceed with the performance of large scale testing (LST) to reduce risk and support design confirmation of pulse jet mixed vessels. The initial scope authorized includes planning and preparation for testing that supports: 1) Engineering, procurement, and construction risk reduction; 2) Design confirmation; and 3) Waste Treatment and Immobilization Plant (WTP) commissioning risk reduction and operational optimization.
- B. The following are hereby incorporated into Section C, Statement of Work, Standard 2 Research, Technology, and Modeling, (a) Research and Technology Testing Program (3) Required Research and Technology Testing as follows:
 - (ix) The Contractor shall plan and perform large scale testing of pulse jet mixed vessels for both non-Newtonian and Newtonian vessel designs. Scope to be addressed includes planning and preparation for testing that supports: 1) Engineering, procurement, and construction risk reduction; 2) Design confirmation; and 3) Waste Treatment and Immobilization Plant (WTP) commissioning risk reduction and operation optimization. Key equipment such as test vessels used in this work shall be designed such that reuse in potential future post commissioning testing to support continuing WTP operations is not precluded.

Detailed objectives for testing shall include confirmation of: 1) Scaling for both non-Newtonian and Newtonian vessels; 2) Prototypic level and density instrument function; 3) Mixing performance with complex simulants (may be addressed through smaller scale testing if appropriate); and 4) Integrated operation of mixing, sampling, control, and transfer systems. Large scale test objectives may be accomplished incrementally based upon the timing of risk reduction driving activities. Specific objectives for each test increment shall be documented and substantiated in a formal Request for Technology Development (RTD). The RTD shall be provided to DOE for review and comment.

Specific authorized activities include: 1) Development of the RTD; 2) Completion of an options study to determine how the large scale test work will be accomplished; 3) Definition of test platform functional requirements; 4) Preparation of test specifications; 5) Preparation of a project execution plan; 6) Development of the basis for test simulants; and 7) Preparation of statements of

work and obtaining bids to perform the initial increments of large scale testing. The schedule for completion of work up to the point of contract award to obtain required equipment and perform testing is estimated to be April 2011.

C. All other terms and conditions remain unchanged.

(End of Modification)