

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE PAGE OF PAGES
 1 7

2. AMENDMENT/MODIFICATION NO. **230** 3. EFFECTIVE DATE (M/D/Y) **See Block 16C** 4. REQUISITION/PURCHASE REQ. NO. **11EM003149** 5. PROJECT NO. (If applicable)

6. ISSUED BY CODE 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) 10A. MODIFICATION OF CONTRACT/ ORDER NO. **DE-AC27-01RV14136** 10B. DATED (SEE ITEM 13) **December 11, 2000**
 CODE 396A5 FACILITY CODE 153392068

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)

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. 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). C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO THE AUTHORITY OF: Clause 1.82, "FAR 52.243-2 Changes - Cost Reimbursement (AUG 1987) - Alternate III (APR 1984)" Contract Clause 1.66, "FAR 52.232-22 Limitation of Funds (Apr 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 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.

15A. NAME AND TITLE OF SIGNER (Type or print) **Frank M. Russo
 Project Director** 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) ~~Ronnie L. Dawson~~ **Ashley T. Moellis
 Contracting Officer** 15B. CONTRACTOR/OFFEROR **ORIGINAL SIGNED BY** 15C. DATE SIGNED **8/12/11** 16B. UNITED STATES OF AMERICA BY: **ORIGINAL SIGNED BY** 16C. DATE SIGNED **9.1.2011**
 (Signature of person authorized to sign) (Signature of Contracting Officer)

Purpose of Modification:

The purpose of this modification is to update Contract Section B, *Supplies or Services and Prices/Costs*, Section C, *Statement of Work*, and Contract Section J, *List of Attachments*. These contractual actions are performed under the authority of Contract Clause I.66, *FAR 52.232-22 Limitation of Funds (Apr 1984)*, and Contract Clause I. 82, *FAR 52.243-2 Changes – Cost Reimbursement (AUG 1987) – Alternate III (APR 1984)*, at no additional cost.

Description of Modification:

- Under the authority of Contract Clause I.66, *FAR 52.232-22 Limitation of Funds (Apr 1984)*, the total amount of funds obligated to Inter-Entity Work Order (IEWO) No. MSRV00028 is increased by \$347,083.00, from \$886,201.00 to \$1,233,284.00. As a result of this contractual action, the total IEWO funds obligated is increased from \$75,087,518.82 to \$75,434,601.82 and the total contract value is increased from \$7,011,766,149.41 to \$7,012,113,232.41. The following table shows the increase in obligated funds by IEWO Amendment:

Amendment No.	Obligated Funding Amount
15	\$344,083.00
16	\$3,000.00
Total	\$347,083.00

- The table in Section B, *Supplies or Services and Prices/Costs*, Contract Clause B.2, *Obligation and Availability of Funds and Contract Value*, paragraph (a) is deleted in its entirety and replaced with the following table, which reflects the changes described herein.

BUDGETARY CONTROL POINTS FOR WTP PROJECT			
Description	Appropriation Symbol	B&R No. (Control Point)	Budget Authority
	1250	1110401	\$3,006,205,907.70
LAW	1250	1111183	\$637,566,389.64
LAB	1250	1111184	\$207,788,178.39
BOF	1250	1111185	\$261,722,260.48
HLW	1250	1111186	\$559,559,983.95
PT	1250	1111187	\$840,654,550.43
LAW	1250	1111241	\$206,280,590.00
LAB	1250	1111242	\$87,500,000.00
BOF	1250	1111243	\$58,000,000.00
HLW	1250	1111244	\$391,849,971.00
PT	1250	1111245	\$678,470,799.00

Subtotal - Budgetary Controls Points for WTP Project thru Contract Modification 231			\$6,935,598,630.59
BUDGETARY CONTROL POINTS FOR PROGRAM DIRECTION			
Description	Appropriation Symbol	B&R No. (Control Point)	Budget Authority
PD	1250	1110462	\$1,080,000.00
Subtotal - Budgetary Controls Points for Program Direction thru Contract Modification 231			\$6,936,678,630.59
INTER-ENTITY WORK ORDER FUNDING			
IEWO Identification Numbers		IEWO Amendment No.	Funding
M0SRLE60 Funding (SRNS/SRNL)		40	\$73,957,217.82
M0SRV00028 Funding (SRNS)		16	\$1,233,284.00
M0SRV00036 Funding (WSRC)		2	\$186,500.00
M0SRV00042 Funding (ORNL)		0	\$27,600.00
M0IDV00061 Funding (BEA)		0	\$30,000.00
Total - IEWO Funding			\$75,434,601.82
Total Budgetary Control Points for WTP Project (230)			\$7,012,113,232.41

3. Under the authority of Contract Clause I. 82, *FAR 52.243-2 Changes – Cost Reimbursement (AUG 1987) – Alternate III (APR 1984)*, Contract Section B, *Supplies or Services and Prices/Costs*, Contract Clause B.4, *Incentive Fee Structure*, paragraph (c), sub-paragraph (1) is corrected to show a change in reference from PEMP as the governing document, to Section J, Attachment P of the contract. Contract Section B, Contract Clause B.4, paragraph (c), sub-paragraph (1) is revised as follows:

FROM:

- (1) Activity Milestone Completion incentives are earned and payable upon the Contracting Officer's determination of the Contractor's completion of each milestone (listed in Attachment B-2-C) in accordance with the criteria set forth in the PEMP. The dates are considered as targets.

TO:

- (1) Activity Milestone Completion incentives are earned and payable upon the Contracting Officer's determination of the Contractor's completion of each milestone (listed in Attachment B-2-C) in accordance with the criteria set forth in Section J, Attachment P of the contract. The dates are considered as targets.
4. Under the authority of Contract Clause I. 82, *FAR 52.243-2 Changes – Cost Reimbursement (AUG 1987) – Alternate III (APR 1984)*, Contract Section C, *Statement of Work*, Clause C.6, *Standards*, Standard 2, *Research, Technology, and Modeling*, paragraph (b), sub-paragraph (2) is revised as follows:

FROM:

- (2) Waste Treatment and Immobilization Plant Tank Utilization Assessments: The Contractor shall perform Tank Utilization Assessments under specific feed vector assumptions provided by DOE. The Contractor shall perform Tank Utilization Assessments to support assessments of design changes that would affect model outcomes. The models shall reflect the latest design and information from research and technology. DOE shall review and approve the specific assumptions when the Tank Utilization Assessment model is used to evaluate Contract Section C.7 (b) design capacity requirements. The primary software used to run the dynamic flowsheet shall be Gensym G2 or other software as agreed to by DOE. The Contractor shall assess utilization of process tank capacity and supporting equipment capability and operational characteristics, to ensure that the tanks are appropriately sized to support process operations, sampling and analysis turnaround times, process control requirements, and waste form qualification requirements. The model assessments shall include material balance summaries of major chemical and radiochemical components to support demonstration of model assessment integrity. Results shall be provided to DOE for review and comment (Table C.5-1.1, Deliverable 2.6).

TO:

- (2) Waste Treatment and Immobilization Plant Tank Utilization Assessments: The Contractor shall perform Tank Utilization Assessments under specific feed vector assumptions provided by DOE and will be based upon the compositional limits defined in Specification 7, *Low-Activity Waste Envelopes Definition* and Specification 8, *High-Level Waste Envelope Definition*, tank waste inventory estimates, and the results of testing with actual tank waste samples. The Contractor shall perform Tank Utilization Assessments to support assessments of design changes that would affect model outcomes. The models shall reflect the latest design and information from research and technology. DOE shall review and approve the specific assumptions when the Tank Utilization Assessment model is used to evaluate Contract Section C.7 (b) design capacity requirements. The primary software used to run the dynamic flowsheet shall be Gensym G2 or other software as agreed to by

DOE. The Contractor shall assess utilization of process tank capacity and supporting equipment capability and operational characteristics, to ensure that the tanks are appropriately sized to support process operations, sampling and analysis turnaround times, process control requirements, and waste form qualification requirements. The model assessments shall include material balance summaries of major chemical and radiochemical components to support demonstration of model assessment integrity. Results shall be provided to DOE for review and comment (Table C.5-1.1, Deliverable 2.6).

The flowsheet and material balances shall estimate the quantity of ILAW, IHLW, and relevant secondary streams on an annual basis.

The material balances will be based on three standards for chemical composition estimation. The Standards are:

- (i) Best available information that is based upon the analysis of tank waste samples planned to be treated in the WTP;
- (ii) Agreed upon waste input inventory; and
- (iii) Specification 7, *Low-Activity Waste Envelopes Definition*, and Specification 8, *High-Level Waste Envelope Definition*, concentration maximums.

The Contractor should evaluate the process chemistry predictions based on the material balance results. Unresolved process chemistry predictions should be verified through additional literature reviews and process chemistry testing.

Electronic copies of the Tank Utilization Assessments shall be provided to DOE with each completed assessment.

5. Under the authority of Contract Clause I. 82, *FAR 52.243-2 Changes – Cost Reimbursement (AUG 1987) – Alternate III (APR 1984)*, Contract Section C, *Statement of Work, C.5, Description of Contract Requirements and Deliverables*, Table C.5-1.1, *Deliverables* is revised as follows:

From:

2.5	Operations Research Assessment	Standard 2 [Std. 2 (b)(1) & Std 3 (c)(6)(ii)(A)]	C	D	COR (M131)	12/19/2008, 6/19/2010, 6/19/2011 with bi-annual updates thereafter
2.6	WTP Tank Utilization Assessment	Standard 2 [Std. 2 (b)(2)]	C	D	COR (M131)	12/19/2008, 6/19/2010, 6/19/2011 with bi-annual updates thereafter

2.7	Material Balance and Process Flowsheet	Standard 2 [Std. 2 (b)(4)]	C	D	COR (M131)	12/19/2008, 6/19/2010, 6/19/2011 with bi-annual updates thereafter
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To:

2.5	Operations Research Assessment	Standard 2 [Std. 2 (b)(1) & Std 3 (c)(6)(ii)(A)]	C	D	COR (M131)	12/19/2008, 6/19/2010, 6/19/2011, FEBRUARY of 2012, 2014 and 2016 and after completion of Cold Commissioning and completion of Hot Commissioning (230)
2.6	WTP Tank Utilization Assessment	Standard 2 [Std. 2 (b)(2)]	C	D	COR (M131)	12/19/2008, 6/19/2010, 6/19/2011, FEBRUARY 2012, NOVEMBER 2013, NOVEMBER 2014, and after completion of Cold Commissioning and completion of Hot Commissioning (230)
2.7	DELETED (230)					

6. Under the authority of Contract Clause I. 82, *FAR 52.243-2 Changes – Cost Reimbursement (AUG 1987) – Alternate III (APR 1984)*, Contract Section C, *Statement of Work*, Clause C.6, *Standards*, Standard 2, *Research, Technology, and Modeling*, paragraph (b), sub-paragraph (4) is deleted in its entirety. The requirements contained herein are included in the revision to Clause C.6, Standard 2, paragraph (b), sub-paragraph (2). Contract Section C, Clause C.6, paragraph (b), sub-paragraph (4) is deleted in its entirety and replaced as follows:

(4) Deleted (230)

7. Under the authority of Contract Clause I. 82, *FAR 52.243-2 Changes – Cost Reimbursement (AUG 1987) – Alternate III (APR 1984)*, Contract Section J, *List of Attachments*, Attachment J, *Advance Understanding of Costs*, Sub-Attachment B, *List of*

Exclusions from Equitable Adjustment Settlement, Trend No. TN-24590-06-03861, *Received Vendor and Subcontractor Claims Due to DOE Impacts* is updated to reflect several Vendor and Subcontractor REAs that will not be submitted. Contract Section J, Attachment J, Sub-Attachment B, is revised as follows:

FROM:

TN-24590-06-03861	Received Vendor & Subcontractor Claims Due to DOE Impacts	
	Vendor & Subcontract Claims Due to DOE Impacts - Oregon Iron Works (Note this is a portion of TN-24590-06-03861)	A167

TO:

TN-24590-06-03861	Received Vendor & Subcontractor Claims Due to DOE Impacts	
	Vendor & Subcontract Claims Due to DOE Impacts - Oregon Iron Works (Note this is a portion of TN-24590-06-03861)	A167
	Vendor & Subcontract Claims Due to DOE Impacts – FD Thomas, Inc. REA will not be submitted. (Note this is a portion of TN-24590-06-03861)	230
	Vendor & Subcontract Claims Due to DOE Impacts – Cobra Roofing Services, Inc. REA will not be submitted. (Note this is a portion of TN-24590-06-03861)	230
	Vendor & Subcontract Claims Due to DOE Impacts – Quality Inspection Services International, Inc (QISI) REA will not be submitted. (Note this is a portion of TN-24590-06-03861)	230
	Vendor & Subcontract Claims Due to DOE Impacts – Central Pre-Mix Concrete Company, Inc. REA 2010-020 will not be submitted. (Note this is a portion of TN-24590-06-03861)	230
	Vendor & Subcontract Claims Due to DOE Impacts – Apollo Sheet Metal, Inc. REA 2010-019 will not be submitted. (Note this is a portion of TN-24590-06-03861)	230
	Vendor & Subcontract Claims Due to DOE Impacts – Ellis & Watts, Inc. REA 2010-018 will not be submitted. (Note this is a portion of TN-24590-06-03861)	230

8. Contractor's Statement of Release: In consideration of the Modification agreed to herein as complete equitable adjustment, 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 changes as noted in this modification.
9. All other terms and conditions remain unchanged.

(End of Modification)

Attachment
to
11-AMD-310

Contract Mod No. 230

Total number of pages, 7