

The purpose of this modification is to make the following changes:

1. The Contractor is directed to proceed with the changes to control systems for ICD-5, ICD-6, ICD-30 and ICD-31, as identified in CCN-323014. The contractor is authorized to incur costs up to a not-to-exceed (NTE) value of \$420,000 consistent with the other contract terms and conditions and pending definitization of this change.
2. The table in Section B, *Supplies or Services and Prices/Costs*, Section B.3, *Obligation and Availability of Funds and Contract Value*, paragraph (c), is revised to add the Not-to-Exceed value of \$420,000.
3. Section J, List of Attachments, Attachment J, Advance Understandings on Costs, table 13-B. Not-To-Exceeds Not Included in Modification No. A143 Definitization (M155) is revised to add the NTE to incorporate changes to the control system interface between the Tank Operations Contractor (TOC) facilities and Hanford Tank Waste Treatment and Immobilization Plant (WTP) facilities for systems under interface control documents (ICD) ICD-05, ICD-06, ICD-30, and ICD-31, as identified in the CCN-323014.
4. BNI shall submit, within 45 days of date of this modification, a detailed technical and price proposal. Negotiations will commence within 90 days after proposal submittal date. A bi-lateral modification definitizing this change order shall be executed as soon as possible after the proposal is submitted, not to exceed 180 days.
5. Contractor shall provide change order accounting in accordance with Clause I.83, FAR 52.243-6, Change Order Accounting (APR 1984).
6. 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.3, *Obligation and Availability of Funds and Contract Value*, and clause I.66, FAR 52.232-22 Limitation of Funds (Apr 1984).

Modification Description:

1. A Not-to-Exceed value of \$420,000 is hereby established. As a result, the table in Section B, *Supplies or Services and Prices/Costs*, Section B.3, *Obligation and Availability of Funds and Contract Value*, paragraph (c) is revised as follows:
 - The Cost Category (A) Total Estimated Contract Cost (TECC) in the amount of \$14,087,658,024.13 is carried forward from Contract Modification 505.

- The Cost Category B.1, CLIN 1.0: Design, Construct, and Commission LBL in the DFLAW Configuration, Increased by Mod No. 506, is \$420,000.00.
- The Cost Category B.1, CLIN 1.0: Design, Construct, and Commission LBL in the DFLAW Configuration, Total CLIN Estimated Cost, is increased by \$420,000.00 from \$6,393,078,870.13 to \$6,393,498,870.13.
- The Revised Total Estimated Contract Cost (TECC) is increased by \$420,000.00 from \$14,087,658,024.13 to \$14,088,078,024.13.
- The Total Estimated Contract Price (TECP) is increased by \$420,000.00 from \$14,664,266,701.27 to \$14,664,686,701.27.

2. The table in Section B, *Supplies or Services and Prices/Costs*, Contract Section B.3 *Obligation and Availability of Funds and Contract Value*, paragraph (a), is deleted in its entirety and replaced in full as follows:

Table B.1 – Total Estimated Contract Price

		Cost		
Total Estimated Contract Cost (TECC) through Mod No. 505				\$14,087,658,024.13
Total Estimated Contract Cost (502)		CLIN Estimated Cost	Increased/ Decreased by Mod 506	Total CLIN Estimated Cost
B.1	CLIN 1.0: Design, Construct, and Commission LBL in the DFLAW Configuration	\$6,393,078,870.13	\$420,000.00	\$6,393,498,870.13
B.2	CLIN 2.0: WTP Facility Modifications Necessary to Support DFLAW			
	Sub-CLIN 2.1: DFLAW Design (Target Cost)	\$76,359,283		\$76,359,283
	Sub-CLINs 2.2 /2.3 DFLAW Procurement/ Construction	\$481,157,678 <small>(Previous NTE Values)</small>		\$481,157,678
B.3	CLIN 3.0 HLW Facility	\$2,741,179,982		\$2,741,179,982
B.4	CLIN 4.0: PT Facility	\$4,395,882,211		\$4,395,882,211
Revised Total Estimated Contract Cost (TECC) through Mod No. 506				\$14,088,078,024.13
Fee				
		Available		Earned
Earned before Mod No. 384				Total
A1	Final Fee Determination – Pre-Mod No. A143			\$102,622,325
A2	Final Fee Earned Mod No. A143 – Mod No. 384			\$131,573,553
Fixed Fee Payment (Attachment B-2-C)***		\$0		\$60,000,000
Pending Activity Milestones (Attachment B-2-B)		\$0		\$6,667,000
Maximum Available Award Fee (CY 2016–2022) (Attachment B-2-D)		\$23,617,811		\$19,818,954.28
CLIN 1.0: Design, Construct, and Commission LBL in the DFLAW Configuration				
E1	LBL Construction Complete Performance Based Incentives (Attachment B-2-E)	\$0		\$65,400,000
E2	Commission LBL in the DFLAW Configuration Performance Based Incentive (Attachment B-2-F)	\$139,650,000		\$19,950,000

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Modification No. 506
SF-30 Continuation

		Cost			
E3	Schedule Incentive Hot Commissioning (Attachment B-2-F)	+/- \$60,000,000 (Max)			
E4	Cost Share Incentive (Attachment B-2-G)	+/- \$50,000,000 (Max)			
E5	REA Fee Negotiated After Mod 384 (504)			\$874,957.86	
CLIN 2.1: Performance-Based Incentive for DFLAW Design Completion (Attachment B-2-H)		\$0		\$6,434,076	
Total Maximum Available Fee****		\$163,267,811			
Total Fee Earned (505)				\$413,340,866.14	
Total Estimated Contract Price (TECP) (Total Maximum Available Fee + Total Earned Fee + TECC) (506)					\$14,664,686,701.27

3. Contract Section J, *List of Attachments*, Attachment J, *Advance Understanding on Costs*, Table 13-B, *Not-to-Exceeds Not Included in Modification No. A143 Definitization (M155)*, is deleted in its entirety and replaced in full as follows:

13-B. Not-To-Exceeds Not Included in Modification No. A143 Definitization (M155)		
DOCUMENT ID.	TITLE	DEFINITIZATION MODIFICATION NO.
BCP-24590-06-02279	Expansion of DWP Requirements (permit modifications) (122) (130)	A193
ORP 08-NSD-011 (05/20/08) (CCN:179512) TN 24590-06-03487	ORP Direction to Implement New Preliminary Safety Analysis Report (PSAR) Updates (136)	A164
ORP 08-NSD-057 (10/09/08) (CCN:188218) TN 24590-06-03752	Direction to Implement New Safety Classification Process for the Waste Treatment and Immobilization Plant (WTP) (141)	276
ORP 08-NSD-059 (10/15/08) (CCN 188217) TN 24590-06-03753	Direction to Implement New Justification for Continued Design, Procurement, and Installation (JCDPI) (M152)	164
Modification No. M090 & 09-AMD-205 (07/18/08) (CCN: 202423) TN 24590-06-02145 & - 02381	Direction to Implement DOE 205.1A, Cyber Security Management Program (155)	217
Modification No. M154	Direction to Implement Pretreatment Engineering Platform (PEP) dry layup (155)	167

TN 24590-06-04133		
Modification No. M196 BCP 24590-06-04489 BCP 24590-06-04784 BCP 24590-06-05085	Direction to Implement Multiple Operational Readiness Strategy (218)	282
Modification No. M196 BCP 24590-06-04853 ORP 10-AMD-139 (05/06/10; CCN: 218244)	Direction to Implement CXP Equipment Option (218)	317
Modification No. 221 ORP 11-WTP-219 (06/17/11; CCN: 236247); Modification No. 247 ORP 11-WTP-437 (12/01/11; CCN: 242351); Modification No. 264 ORP 12-WTP-0109 (03/15/12; CCN: 245985); Modification No. 286 ORP 12-WTP-317 (09/24/12)	Direction to Proceed with Large Scale Testing (221, 247, 264, 286)	299 - 384
Modification No. 273	Direction to participate in the Hanford Site Organizational Climate and Safety Conscious Work Environment (SCWE) Survey	290
Modification No. 245 ORP 11-WTP-429	Direction to proceed with the implementation of DOE Order (O) 420.1B, <i>Facility Safety</i> , Chapter V, <i>Systems Engineer Program</i> . (245)	276
Modification No. 300 ORP 13-CPM-0099 (05/06/13); Modification No. 304 ORP 13-CPM-0133 (06/05/13); Modification No. 313 ORP 13-CPM-0299 (11/25/13)	Direction to Proceed with Full Scale Vessel Testing Program in lieu of the existing Computational Fluid Dynamics and Large Scale Vessel testing Program as a Design Verification Tool (300, 304, 313)	384
Modification No. 329 ORP 14-CPM-0172	Direction to proceed with Section C, Statement of Work, Standard 3 Design, paragraph (i) Design of BOF Utility Modifications	350
Modification No. 330 ORP 14-CPM-0181	Direction to proceed with Section C, Statement of Work, Standard 3 Design,	350

	paragraph (j) Design of BOF Effluent Management Facility	
Modification No. 334 ORP 14-CPM-0228, ORP 15-CPM-0300 (358) 16-CPM-0088 (372)	Direction to proceed with Pretreatment Facility vessel mixing design verification.	384
Modification No. 339 ORP 15-CPM-0008	Direction to proceed with Section C, Statement of Work, Standard 3 Design, paragraph (k) Design of Balance of Facilities Underground and Site-Wide modifications necessary to support the Direct Feed of LAW (DFLAW)	350
Modification No. 342 ORP 15-CPM-0064, ORP 16-CPM 0012 (364)	Direction to proceed with the implementation of DOE Order 433.1B, Maintenance Management Program for DOE Facilities and DOE/RL-92-36, Hoisting and Rigging Manual. (342)	384
Modification No. 344 ORP 15-CPM-0092	Direction to proceed with initiation of procurement of BOF modifications and LAW Valve Vault materials to support DFLAW; add Interface Control Documents 30 and 31	384
Modification No. 348 ORP 15-CPM-0128	Direction to proceed with initiation of BOF isolation construction to support DFLAW	384
Modification No. 349 ORP 15-CPM-0136	Direction to proceed with the implementation of DOE Order 414.1D, CRD, Chg. 1, Quality Assurance. (349)	454
Modification No. 354 ORP 15-CPM-0195, ORP 16-CPM-0154 (380)	Direction to proceed with procurement of Effluent Management Facility (EMF) equipment and effluent transfer lines and limited EMF construction (354)	384
Modification No. 371 ORP-16-CPM-0085, ORP-16-CPM-0091	Conduct supplementary analysis of vessels RLD-VSL-00007 and RLD-VSL-00008 beyond the WTP Code of Record and modify the RLD-VSL-00007 and RLD-VSL-00008 vessel design.	441
Modification No. 375 ORP-16-CPM-0111, 17-CPM-0038, (388), ORP-17-CPM-0185 (412)	Update the Natural Phenomena Hazards (NPH) Assessment by generating a revised site-specific response analysis and design response spectra for WTP incorporating Hanford site-wide Probabilistic Seismic Hazard Analysis (PSHA) report from PNNL, dated November 21, 2014. (375)	429
Modification No. 381 ORP-16-CPM-0155 (381)	Authorization to proceed with the development of an engineering redraft process for Standard 3: Design (c) (22).	403
Modification No. 385 ORP-16-CPM-0174, ORP-17-CPM-0181 (411)	Authorization to proceed with the engineering redraft process developed in Standard 3, subparagraph (c) (22) to reclassify the required portions of the LAW C5 ventilation system from non-safety to safety significant as described in 24590-LAW-PL-NS-16-0005 Rev. 0, <i>Safety Strategy Summary Document (SSSD) – Oxides of Nitrogen/Melter Offgas Releases</i> .	426

Modification 389 17-CPM-0044 (389), 18-CPM- 0105 (428)	Authorization to proceed with engineering and nuclear safety activities necessary to implement the changes to engineered safety controls documented in the Caustic Safety Strategy Summary Document (SSSD) under Standard 3, subparagraph (c) (24)	433
Modification No. 397, ORP-17- CPM-0094; 18- CPM-0143 (438)	DOE included a deliverable to implement the CGD extent of condition review and impacts in Section C, <i>Statement of Work, Table C.5-1.1. Deliverables, 7.11</i> (397)	455
Modification No. 406, ORP-17- CPM- 0151 (406)	DOE Updated DOE Order 232.2A as referenced in Section C, Standard 1, (d)(5)(6) and updated Section J deliverables.(406)	
Modification No. 415, ORP-18-CPM – 0004, 18-CPM- 0105 (428)	CGD Implementation Plan for Parking Lot Items 1, 2, 7, 9, 12 and 17 in Section C, Statement of Work, Standard 7, Environment, Safety, Quality, and Health, (3) Quality Assurance, (ii), d.	443
Modification No. 432, ORP-18- CPM-0123 (432)	Authorized to perform Design and Procurement of the Actuated On/Off Valve as referenced in Section C, Statement of Work, Subsection C.7 Facility Specification, paragraph (a) (3)	453
Modification No. 506	Incorporate changes to the control system interface between the Tank Operations Contractor (TOC) facilities and Hanford Tank Waste Treatment and Immobilization Plant (WTP) facilities for systems under interface control documents (ICD) ICD-05, ICD-06, ICD-30, and ICD-31, as identified in the CCN-323014	

4. All other terms and conditions remain unchanged.

(End of Modification)