



**The purpose of this modification is as follows:**

1. Issue a revision for the Not To Exceed (NTE) value established in the change order to conduct supplementary Vessel Analysis with respect to the High Level Waste Facility black cell vessels RLD-VSL-00007 and RLD-VSL-00008, per recommendation of the Independent Expert Review Team (IERT), modify the design of these vessels as necessary, and incorporate fabrication risk mitigation strategies incorporated in modification 371 as follows:
  - a. The Contractor is authorized to incur costs up to a NTE value that is changed from \$1,500,000 by \$900,000 to **\$2,400,000** consistent with the other contract terms and conditions and pending definitization of this change. The NTE only applies to paragraph (j) Supplemental analysis of HLW vessels RLD-VSL-00007 and RLD-VSL-00008.
  - b. Contractor shall continue following change order accounting in accordance with Clause I.83, FAR 52.243-6, Change Order Accounting (APR 1984).
  - c. 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 \$2,400,000 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 \$14,080,057,190 is carried forward from Contract Modification 389.
  - The Cost Category (B.1) CLIN 1.0: Design, Construct, and Commission LBL in the DFLAW Configuration, Increased by Mod no. 396 value, is \$900,000.
  - The Cost Category (B.1) CLIN 1.0: Design, Construct, and Commission LBL in the DFLAW Configuration, Total CLIN Estimated Cost, is increased by \$900,000 from \$6,505,275,320 to \$6,506,175,320.

- The Revised Total Estimated Contract Cost (TECC) is increased by \$900,000 from \$14,080,057,190 to \$14,080,957,190.
- The Total Estimated Contract Price (TECP) is increased by \$900,000 from \$14,675,355,688 to \$14,676,255,688.

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 (c), 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. 389					<b>\$14,080,057,190</b>
Total Estimated Contract Cost (396)		CLIN Estimated Cost	Increased by Mod No. 396	Total CLIN Estimated Cost	
B.1	CLIN 1.0: Design, Construct, and Commission LBL in the DFLAW Configuration	\$6,505,275,320	\$900,000	\$6,506,175,320	\$900,000
B.2	CLIN 2.0: WTP Facility Modifications Necessary to Support DFLAW				
	Sub-CLIN 2.1: DFLAW Design (Target Cost)	\$75,000,000	\$0	\$75,000,000	\$0
	Sub-CLINs 2.2 /2.3 DFLAW Procurement/ Construction	\$362,600,000 <small>(Previous NTE Values)</small>	\$0	\$362,600,000	\$0
B.3	CLIN 3.0 Reserved for HLW Facility	**	0		
B.4	CLIN 4.0: Reserved for PT Facility	**	0		
Revised Total Estimated Contract Cost (TECC) through Mod No. 396					<b>\$14,080,957,190</b>
Fee					
		Available		Earned	Total
Earned before Mod No. 384					
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)		\$57,435,620			
CLIN 1.0: Design, Construct, and Commission LBL in the DFLAW Configuration					
E1	LBL Construction Complete Performance Based Incentives (Attachment B-2-E)	\$64,125,000		\$4,275,000	
E2	Commission LBL in the DFLAW Configuration Performance Based Incentive (Attachment B-2-F)	\$159,600,000			
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)			
CLIN 2.1: Performance-Based Incentive for DFLAW Design Completion (Attachment B-2-H)		\$8,000,000		\$1,000,000	
Total Maximum Available Fee****		\$289,160,620			
Total Fee Earned				\$306,137,878	
Total Estimated Contract Price (TECP) (Total Maximum Available Fee + Total Earned Fee + TECC) 396					<b>\$14,676,255,688</b>

\*\* Estimated cost for interim work plans within the agreed funding profile for CLINs 3.0 and 4.0 is included in Total Estimated Contract Cost (TECC).

\*\*\* Payment is in satisfaction of all fee entitlement for work accomplished under the Contract from contract Modification No. A143 through the date of this modification (384) that is not included in A2 above.

\*\*\*\* Exclusive of Cost Share and Schedule Incentives.

\* Sub-CLIN 2.1 DFLAW (Target Cost) amount decreased by total amount of Change Orders 329, 330 & 339 (\$32,431,444) definitized in Modification 350. \$75,000,000 - \$32,431,444 = \$42,568,556.

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:

<b>Table 13-B. Not-To-Exceeds Not Included in Modification No. A143 Definitization (155)</b>		
<b>DOCUMENT ID.</b>	<b>TITLE</b>	<b>DEFINITIZATION MODIFICATION NO.</b>
BCP-24590-06-02279	Expansion of DWP Requirements (permit modifications) <b>(122) (130)</b>	<b>A193</b>
ORP 08-NSD-011 (05/20/08) (CCN: 179512)  TN 24590-06-03487	ORP Direction to Implement New Preliminary Safety Analysis Report (PSAR) Updates <b>(136)</b>	<b>A164</b>
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) <b>(141)</b>	<b>276</b>
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) <b>(152)</b>	<b>164</b>
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 <b>(155)</b>	<b>217</b>
Modification No. M154  TN 24590-06-04133	Direction to Implement Pretreatment Engineering Platform (PEP) dry layup <b>(155)</b>	<b>167</b>
Modification No. M196	Direction to Implement Multiple Operational Readiness Strategy <b>(218)</b>	<b>282</b>

<p>BCP 24590-06-04489 BCP 24590-06-04784 BCP 24590-06-05085</p>		
<p>Modification No. M196 BCP 24590-06-04853 ORP 10-AMD-139 (05/06/10; CCN: 218244)</p>	<p>Direction to Implement CXP Equipment Option <b>(218)</b></p>	<p><b>317</b></p>
<p>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)</p>	<p>Direction to Proceed with Large Scale Testing <b>(221, 247, 264, 286)</b></p>	<p><b>299 – Partial (384)</b></p>
<p>Modification No. 273</p>	<p>Direction to participate in the Hanford Site Organizational Climate and Safety Conscious Work Environment (SCWE) Survey</p>	<p><b>290</b></p>
<p>Modification No. 245 ORP 11-WTP-429</p>	<p>Direction to proceed with the implementation of DOE Order (O) 420.1B, <i>Facility Safety</i>, Chapter V, <i>Systems Engineer Program</i>. <b>(245)</b></p>	<p><b>276</b></p>

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," paragraph (j) Design of BOF Effluent Management Facility	350
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 sitewide 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 O 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 O 414.1D, CRD, Chg. 1, Quality Assurance. (349)	

Modification No. 354 ORP 15-CPM-0195	Direction to proceed with procurement of Effluent Management Facility (EMF) equipment and effluent transfer lines and limited EMF construction <b>(354)</b>	384
Modification No. 371 ORP 16-CPM-0085, <b>ORP-17-CPM-0091, (396)</b>	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.	
Modification No. 375 ORP16-CPM-0111, 17-CPM-0038, (388)	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 <b>(375)</b>	
Modification 381 ORP 16-CPM-0155 (381)	Authorization to proceed with the development of an engineering redraft process for Standard 3: Design (c)(22).	
Modification 385 ORP 16-CPM-0174 (385)	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, Safety Strategy Summary Document (SSSD) – Oxides of Nitrogen/Melter Offgas Releases.	
Modification 389 ORP 17-CPM-0044 (389)	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)	

4. All other terms and conditions remain unchanged.

***(End of Modification)***