

**Final Approval of
Tri-Party Agreement
Modifications for**

Hanford Tank Waste Treatment



Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Modifications related to Hanford Tank Waste Treatment

Contents

Tri-Party Agreement Change Forms:

M-36-09-01 Hanford Federal Facility Agreement and Consent Order Milestone Modifications to add milestone M-036 for the Life-Cycle Scope, Schedule, and Cost Report, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.

M-42-09-01 Hanford Federal Facility Agreement and Consent Order Milestone Modifications to M-42-00 for Double-Shell Tanks, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.

M-45-09-01 Hanford Federal Facility Agreement and Consent Order Milestone Modifications to the M-045-00 series for Single-Shell Tank Retrieval and Closure of Single-Shell Tanks, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.

M-47-09-01 Hanford Federal Facility Agreement and Consent Order Milestone Modifications to M-047-00 for High-Level Radioactive Tank Waste Treatment, Storage and Disposal Facilities, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.

M-50-09-01 Hanford Federal Facility Agreement and Consent Order Milestone Modifications to M-050-00 for Pretreatment Processing of Hanford Tank Waste, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.

M-51-09-01 Hanford Federal Facility Agreement and Consent Order Milestone Modifications to M-051-00 for the Vitrification of Hanford High Level Tank Waste, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.

M-61-09-01 Hanford Federal Facility Agreement and Consent Order Milestone Modifications to M-061-00 for Pretreatment and Immobilization of Hanford Low Activity Waste, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.

Modifications related to Hanford Tank Waste Treatment

Contents (continued)

M-62-09-01 Hanford Federal Facility Agreement and Consent Order Milestone Modifications to M-062-00 for Pretreatment Processing and Vitrification of Hanford High Level (HLW) and Low Activity (LAW) Tank Wastes, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.

M-90-09-01 Hanford Federal Facility Agreement and Consent Order Milestone Modifications to M-090-00 for Acquisition of Facilities for Storage of Hanford Site IHLW and ILAW and Disposal of ILAW, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.

P-09-09-02 Hanford Federal Facility Agreement and Consent Order Modifications to Action Plan Section 9, Primary Document List, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.

I-09-01 Hanford Federal Facility Agreement and Consent Order Modifications to Action Plan Appendix I, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.

Change Number M-36-09-01	Federal Facility Agreement and Consent Order Change Control Form <small>Do not use blue ink. Type or print using black ink.</small>	Date October 5, 2010
---	---	------------------------------------

Originator The U.S. Department of Energy, the State of Washington Department of Ecology, and the U.S. Environmental Protection Agency.	Phone
--	--------------


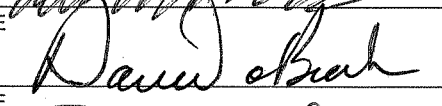
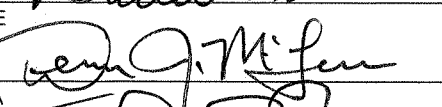

Class of Change <input type="checkbox"/> I - Signatories <input checked="" type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager
--

Change Title Hanford Federal Facility Agreement and Consent Order Milestone Modifications to add milestone M-036 for the Life-Cycle Scope, Schedule, and Cost Report, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.
--

Description/Justification of Change This change form reflects the results of the 2007 - 2009 Hanford negotiations on milestones for M-036 for the Life-Cycle Scope, Schedule, and Cost Report and carries out modifications to the milestones in the HFFACO.
--

Impact of Change The modifications in this document are conditioned upon approval of the following TPA change packages M-36-09-01, M-42-09-01, M-45-09-01, M-47-09-01, M-50-09-01, M-51-09-01, M-61-09-01, M-62-09-01, M-90-09-01, P-09-09-02 and I-09-01, and shall go into effect upon entry of the Consent Decree in <i>Washington v. DOE</i> , Case No. 08-5085-FVS.
--

Affected Documents The <u>Hanford Federal Facility Agreement and Consent Order</u> , as amended.
--

Approvals			
 _____ DOE	10/4/10 Date	<input checked="" type="checkbox"/> Approved _____ Disapproved	
 _____ DOE	10/4/10 Date	<input checked="" type="checkbox"/> Approved _____ Disapproved	
 _____ EPA	10/4/10 Date	<input checked="" type="checkbox"/> Approved _____ Disapproved	
 _____ Ecology	10/5/10 Date	<input checked="" type="checkbox"/> Approved _____ Disapproved	Page 1 of 4

Milestones to be added to the Tri-Party Agreement are displayed below. Lead Regulatory Agency is established as dual lead.

M-036-01A (SUBSEQUENT ANNUAL MILESTONES TO BE LETTERED B, C, D ETC.)	<p>THE USDOE SHALL PREPARE AND SUBMIT TO EPA AND ECOLOGY A REPORT SETTING OUT THE LIFECYCLE SCOPE, SCHEDULE AND COST FOR COMPLETION OF THE HANFORD SITE CLEANUP MISSION. THE REPORT SHALL REFLECT ALL OF THOSE ACTIONS NECESSARY FOR THE USDOE TO FULLY MEET ALL APPLICABLE ENVIRONMENTAL OBLIGATIONS INCLUDING THOSE UNDER THE HFFACO, THE CONSENT DECREE IN <i>WASHINGTON V. DOE</i>, CASE NO. 08-5085-FVS, AND THE HANFORD RCRA/HWMA PERMIT. THE REPORT SHALL INCLUDE SCOPE, SCHEDULE AND COST FOR COMPLETING WORK AT EACH OF THE OPERABLE UNITS AND RCRA TSD GROUPS/UNITS THAT ARE LISTED IN APPENDIXES B AND C OF THE HFFACO, IN THE CONSENT DECREE IN <i>WASHINGTON V. DOE</i>, CASE NO. 08-5085-FVS, AND IN THE HANFORD RCRA/HWMA PERMIT, INCLUDING THE HANFORD WASTE TREATMENT AND IMMOBILIZATION PLANT. THE REPORT WILL INCLUDE ALL OTHER CLEANUP AND MONITORING ACTIVITIES (INCLUDING POST-CLOSURE ACTIVITIES) AND ALL RELATED ACTIONS NECESSARY TO COMPLETE THE CLEANUP MISSION TO PROVIDE A COMPLETE UNDERSTANDING OF THE RESOURCES NECESSARY FOR THE HANFORD CLEANUP MISSION.</p> <p>THIS REPORT SHALL TAKE INTO ACCOUNT CIRCUMSTANCES EXISTING AS OF THE END OF THE FISCAL YEAR PRECEDING THE MONTH OF THE REPORT, INCLUDING FUNDS APPROPRIATED BY CONGRESS FOR THE HANFORD CLEANUP, BUT SHALL NOT ASSUME ANY LIMITATION ON FUNDING FOR FUTURE YEARS. HOWEVER, THE REPORT WILL TAKE INTO CONSIDERATION CRITICAL RESOURCE AVAILABILITY NOT BASED UPON ASSUMED FUTURE FUNDING LIMITATIONS AND THE PRACTICAL LIMITS OF PROJECT ACCELERATION WHEN DEVELOPING AN EXECUTABLE PLAN. USDOE MAY ALSO INCLUDE COSTS OTHER THAN THOSE DIRECTLY RELATED TO ENVIRONMENTAL OBLIGATIONS (SUCH AS SECURITY COSTS) BUT SHALL CLEARLY DISTINGUISH EXPENDITURES FOR ENVIRONMENTAL OBLIGATIONS</p>	DUE DATE TO SUBMIT THE REPORT TO BE JANUARY 31 AND ANNUALLY THEREAFTER, EXCEPT THAT THE FIRST REPORT TO BE DUE NO SOONER THAN 9 MONTHS AFTER INCORPORATION OF THIS MILESTONE IN TPA
---	--	---

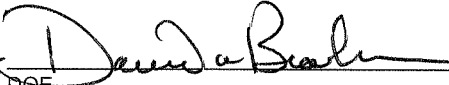
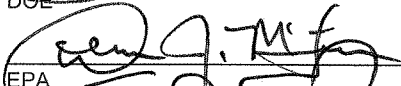

FROM OTHER EXPENDITURES. COSTS SHALL BE DISPLAYED BY PROGRAM BASELINE SUMMARY. ADDITIONAL LEVELS OF DETAIL WILL APPEAR IN APPENDIXES TO THE REPORT. COST INFORMATION WILL PROVIDE SUFFICIENT DETAIL TO VALIDATE CONSISTENCY WITH THE SCOPE AND SCHEDULE FOR INDIVIDUAL CLEANUP PROJECTS. REPORTING IN THE APPENDIXES WILL TYPICALLY BE ONE LEVEL BELOW THE PBS FOR THE LIFECYCLE, AND AT LEVELS BELOW THAT FOR THE NEXT TWO TO FIVE YEARS BEYOND THE EXECUTION YEAR (USUALLY AT THE ACTIVITY LEVEL WITHIN THE BUDGET ASSIGNED TO A SPECIFIC PROJECT , E.G., RL-0011, WBS ELEMENT 011.04.01, NUCLEAR MATERIAL STABILIZATION AND DISPOSITION – PFP, DISPOSITION PFP, TRANSITION 234-5Z). EPA AND ECOLOGY PROJECT MANAGERS MAY REQUEST ADDITIONAL LEVELS OF DETAIL BE PROVIDED BY THEIR DOE COUNTERPARTS.

IN CIRCUMSTANCES WHERE FINAL CLEANUP DECISIONS HAVE NOT YET BEEN MADE, THE REPORT SHALL BE BASED UPON THE REASONABLE UPPER BOUND OF THE RANGE OF PLAUSIBLE ALTERNATIVES OR MAY SET FORTH A RANGE OF ALTERNATIVE COSTS INCLUDING SUCH A REASONABLE UPPER BOUND. IN MAKING ASSUMPTIONS FOR THE PURPOSE OF PREPARING THE INITIAL REPORT, USDOE SHALL TAKE INTO ACCOUNT THE VIEWS OF EPA AND ECOLOGY AND SHALL ALSO TAKE INTO ACCOUNT THE VALUES EXPRESSED BY THE AFFECTED TRIBAL GOVERNMENTS AND HANFORD STAKEHOLDERS REGARDING WORKSCOPE, PRIORITIES AND SCHEDULE. THE REPORT SHALL INCLUDE THE SCOPE, SCHEDULE AND COSTS FOR EACH SUCH PBS LEVEL TWO ELEMENT AND SHALL SET FORTH THE BASES AND ASSUMPTIONS FOR EACH CLEANUP ACTIVITY.

AFTER USDOE SUBMITS THE REPORT, THE USDOE WILL REVISE THE REPORT BASED UPON EPA AND ECOLOGY COMMENTS TO REFLECT A COMMON VISION OF THE SCOPE, SCHEDULE AND BUDGET FOR THE REMAINDER OF THE CLEANUP MISSION. IF THE AGENCIES ARE UNABLE TO REACH RESOLUTION ON SPECIFIC ASPECTS OF THE SCOPE

OF CLEANUP ACTIONS, THE REVISED DOCUMENT WILL PRESENT A RANGE OF POTENTIAL ACTIONS WITH THE ASSOCIATED SCHEDULE AND BUDGET, THEREBY COMPLETING THE MILESTONE. DOE, EPA AND ECOLOGY SHALL ATTEMPT TO REACH AGREEMENT ON THE REPORT SO IT CAN SERVE AS AN AGREED UPON FOUNDATION FOR PREPARING BUDGET REQUESTS AND FOR INFORMATIONAL BRIEFINGS OF AFFECTED TRIBAL GOVERNMENTS AND HANFORD STAKEHOLDERS. THE REPORT SHALL ALSO SERVE AS THE BASIS FOR ANNUAL DISCUSSIONS AMONG USDOE, EPA AND ECOLOGY ON HOW AND WHEN THE USDOE WILL COMPLETE CLEANUP, HOW CONGRESSIONAL APPROPRIATIONS FOR THE HANFORD SITE FOR THAT YEAR MAY AFFECT ASSUMPTIONS PRESENTED IN THE REPORT, AND HOW MILESTONE CHANGES AND ADJUSTMENTS WILL AFFECT LIFECYCLE SCOPE, SCHEDULE AND COST.

WITHOUT LIMITING ANY DOE OBLIGATION UNDER ANY OTHER PROVISIONS OF THIS AGREEMENT, AND WITHOUT LIMITING ANY DOE OBLIGATION TO DISCLOSE INFORMATION THAT IS OTHERWISE PUBLICLY AVAILABLE, NOTHING IN THIS MILESTONE SHALL BE CONSTRUED, EITHER ALONE OR IN COMBINATION WITH ANY OTHER PROVISION OF THE HFFACO, TO REQUIRE DISCLOSURES RELATED TO INTERNAL FEDERAL BUDGET DELIBERATIONS.

Change Number M-42-09-01	Federal Facility Agreement and Consent Order Change Control Form <small>Do not use blue ink. Type or print using black ink.</small>	Date October 5, 2010
Originator The U.S. Department of Energy, the State of Washington Department of Ecology, and the U.S. Environmental Protection Agency.		
Class of Change <input checked="" type="checkbox"/> I - Signatories <input type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager		
Change Title Hanford Federal Facility Agreement and Consent Order Milestone Modifications to M-42-00 for Double-Shell Tanks, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.		
Description/Justification of Change This change form reflects the results of the 2007 - 2009 Hanford negotiations on milestones for Double-Shell Tanks in the M-42-00 series and carries out modifications to the milestones in the HFFACO.		
Impact of Change The modifications in this document are conditioned upon approval of the following TPA change packages M-36-09-01, M-42-09-01, M-45-09-01, M-47-09-01, M-50-09-01, M-51-09-01, M-61-09-01, M-62-09-01, M-90-09-01, P-09-09-02 and I-09-01, and shall go into effect upon entry of the Consent Decree in <i>Washington v. DOE</i> , Case No. 08-5085-FVS.		
Affected Documents The <u>Hanford Federal Facility Agreement and Consent Order, as amended.</u>		
Approvals  <u>10/4/10</u> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved DOE Date  <u>10/4/10</u> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved EPA Date  <u>10/5/10</u> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved Ecology Date		Page 1 of 2

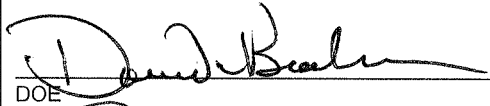
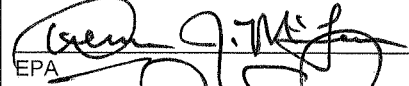
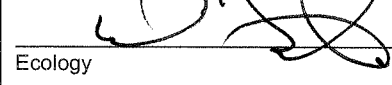
The following Interim Milestone is hereby **added**, as shown by the use of **shading**, to the Hanford Federal Facility Agreement and Consent Order.

This new milestone is established with Ecology as the Lead Regulatory Agency.

M-42-00A	Complete the Closure of All DST Tank Farms.	TBD, based upon completion of retrieval under M-62-45 plus 5 years but no later than 9/30/2052
----------	---	--

The following Major Milestone is hereby **deleted**, as shown by the use of **strikeout**, from the Hanford Federal Facility Agreement and Consent Order.

M-42-00	Provide Additional Double Shell Tank Capacity.	To Be Determined
---------	---	------------------

Change Number M-45-09-01	Federal Facility Agreement and Consent Order Change Control Form <small>Do not use blue ink. Type or print using black ink.</small>	Date October 5, 2010
Originator The U.S. Department of Energy, the State of Washington Department of Ecology, and the U.S. Environmental Protection Agency.		Phone
Class of Change <input checked="" type="checkbox"/> I - Signatories <input type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager		
Change Title Hanford Federal Facility Agreement and Consent Order Milestone Modifications to the M-045-00 series for Single-Shell Tank Retrieval and Closure of Single-Shell Tanks, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.		
Description/Justification of Change This change form reflects the results of the 2007 - 2009 Hanford negotiations on milestones for Single-Shell Tank Retrieval and Closure of Single-Shell Tanks in the M-045-00 series and carries out modifications to the milestones in the HFFACO.		
Impact of Change The modifications in this document are conditioned upon approval of the following TPA change packages M-36-09-01, M-42-09-01, M-45-09-01, M-47-09-01, M-50-09-01, M-51-09-01, M-61-09-01, M-62-09-01, M-90-09-01, P-09-09-02 and I-09-01, and shall go into effect upon entry of the Consent Decree in <i>Washington v. DOE</i> , Case No. 08-5085-FVS.		
Affected Documents The <u>Hanford Federal Facility Agreement and Consent Order</u> , as amended.		
Approvals  <u>10/4/10</u> <input checked="" type="checkbox"/> Approved _____ Disapproved _____ DOE Date  <u>10/4/10</u> <input checked="" type="checkbox"/> Approved _____ Disapproved _____ EPA Date  <u>10/5/10</u> <input checked="" type="checkbox"/> Approved _____ Disapproved _____ Ecology Date		Page 1 of 15

The following Milestones are hereby **added** to the Hanford Federal Facility Agreement and Consent Order.

All new milestones established in this change form are established with Ecology as the Lead Regulatory Agency.

Milestone	Description	Due Date
M-045-70	<p>Complete waste retrieval from all remaining single-shell tanks. Retrieval standards and completion definitions are provided in milestone M-045-00.</p> <p>The schedule reflects retrieval activities on a farm-by-farm basis. It also allows flexibility to retrieve tanks from various farms if desired to support safety issue resolution, pretreatment or disposal feed requirements, or other priorities.</p>	12/31/2040 or earlier as established by M-62-45
M-045-80	Complete those portions of the C-200 Closure Demonstration Plan necessary to complete closure plan development for the SST system. Those portions of the demonstration plan include: (1) description of the radioactive waste determination process that DOE will utilize for the component of Tank Waste residuals subject to DOE authority, (2) a RCRA/CERCLA Integration White Paper, (3) a tank removal engineering study, and (4) an evaluation of alternatives for removal of waste from the C-301 catch tank.	1/31/2011
M-045-81	Implement and complete all remaining activities in the June 6, 2007 C-200 Closure Demonstration Plan (with any revisions as agreed to by Ecology and DOE). Provide a report that documents the results of those activities and provides interpretations and recommendations consistent with the Project Goals, Objectives, and Products described in Section 5 of the Plan.	9/30/2014
M-045-82	Submit complete permit modification requests for Tiers 1, 2, & 3 (see Appendix I) of the SST System, to support final closure requirements for WMA C.	9/30/2015
M-045-83	<p>Complete the Closure of WMA C.</p> <p>The milestone date assumes Ecology will issue a final permit modification decision within 12 months of receiving DOE's modification request under M-045-82. If Ecology does not issue a final permit modification decision within 12 months of receiving DOE's modification request under M-045-82, the milestone date will be extended on a day-for-day basis for each day beyond the 12 month period until a final permit modification decision is issued.</p>	6/30/2019
M-045-84	Complete negotiations of HFFACO interim milestones for closure of the second WMA (including a schedule for submittal of closure plans and risk assessments and final closure dates).	1/31/2017

M-045-85	Complete negotiations of HFFACO interim milestones for closure of the remaining WMAs (including a schedule for 200 West Area closures, the submittal of closure plans and risk assessments and final closure dates for each WMA).	1/31/2022
M-045-86	<p>Submit a retrieval data report to Ecology for the 19 tanks retrieved under the Consent Decree in <i>Washington v. DOE</i>, Case No. 08-5085-FVS, which report shall include the following elements only of Section 2.1.7 of Appendix I to the HFFACO:</p> <ol style="list-style-type: none"> 1) Residual tank waste volume measurement, including associated calculations; 2) The results of residual tank waste characterization; 3) Retrieval technology performance documentation; 4) DOE's updated post-retrieval risk assessment; 5) Opportunities and actions being taken to refine or develop tank waste retrieval technologies, based on lessons learned and, 6) LDMM monitoring and performance results. 	12 months after DOE certifies to Ecology that DOE has completed retrieval of each tank
M-045-90	Complete interim barrier demonstration report for the T-106 interim barrier, which report shall include a recommendation and commitment on whether to proceed with additional interim barriers and an evaluation of the barrier's ability to reduce water infiltration that drives migration of subsurface contamination to groundwater.	9/30/2010
M-045-92	<p>DOE and Ecology will establish, no later than March 31, 2010, selection criteria for installation of additional interim barriers at additional WMAs (beyond the T-106 and TY barriers). DOE and Ecology will meet yearly to review the monitoring data, agree to changes in monitoring (if needed) and assess the performance of the demonstration barrier.</p> <p>DOE shall submit to Ecology for approval, a final design and monitoring plan for TY farm interim barrier by March 31, 2010. Installation of the barrier will be completed by September 30, 2010.</p> <p>By December 31, 2010, complete negotiations to schedule the remaining 4 additional barriers, unless DOE and Ecology agree that monitoring data does not support continued installation of interim barriers.</p> <p>If negotiated, complete installation of 4 additional interim barriers at a rate of one per year, with the first being completed by June 30, 2012. Prior to beginning construction and at least one year before construction is to be complete, DOE will submit to Ecology a final design and monitoring plan for each interim barrier. The design and monitoring plans will be consistent with those developed for WMA T and TY unless DOE and Ecology agree otherwise. Ecology will authorize construction upon approval of these</p>	9/30/2016 or as indicated in the descriptive text of this milestone

	submittals.	
M-045-91	<p>Establish a panel and provide a report on SST integrity assurance review.</p> <p>DOE has selected and established a panel of technical and nationally recognized experts to focus on data available from already-retrieved tanks.</p> <p>The report will contain:</p> <ol style="list-style-type: none"> 1) The panel's evaluation of the existing known conditions of the SSTs; 2) The Panel's evaluation of the proposed future use of the SSTs; 3) The Panel's recommendations for critical modifications and associated schedule aimed at preventing or minimizing further degradation of SST integrity; 4) The Panel's recommendations for additional evaluations and program elements that would improve existing understanding of SST integrity. <p>An agreement change package with interim milestones as necessary to implement the recommendations will be submitted within 90 days of the report.</p>	09/30/2010 or as indicated in the descriptive text of this milestone
M-045-100	<p>Submit to Ecology as an Agreement Primary Document a Catch Tank "assumed leak" response plan. This Plan will include criteria for declaring a tank an assumed leaker, response actions that will be taken, notifications, and provisions to ensure initiation of liquid removal within 90 days.</p>	60 days after this milestone is adopted by the Parties
M-045-101	<p>Submit to Ecology as an agreement primary document a report on all Catch Tanks and associated pipelines that are identified in the SST System Part A or that have otherwise been known to be used for SST tank system operations. The report will identify DOE's proposed closure strategy for each of these tanks, and ancillary equipment. For items that are outside of the WMA boundaries, these items will be assigned either to a specific waste site operable unit (200-IS-1) or to a specific WMA for closure. The report shall provide the regulatory basis and supporting information for such assignments. For items assigned to an Operable Unit, M-16-00 processes and milestones will be followed to ensure completion of remedial actions for all non-tank farm operable units by 9/30/2024 (M-16-00). The schedules for remedial action implementation will be established by regulatory agency approval of the Remedial Design/Remedial Action work plans and is enforceable as a HFFACO requirement. For items assigned to WMAs for closure, closure milestones will be included within the applicable WMA closure schedule and milestones.</p>	60 days after this milestone is adopted by the Parties

Specific Major and Interim Milestones are **modified** as shown by use of ~~strikeout~~ to indicate deleted text and **shading** to indicate added text.

<p>M-045-00 LEAD AGENCY: ECOLOGY</p>	<p>COMPLETE THE CLOSURE OF ALL SINGLE SHELL TANK FARMS.</p> <p>CLOSURE WILL FOLLOW RETRIEVAL OF AS MUCH TANK WASTE AS TECHNICALLY POSSIBLE, WITH TANK WASTE RESIDUES NOT TO EXCEED 360 CUBIC FEET (CU. FT.) IN EACH OF THE 100 SERIES TANKS, 30 CU. FT. IN EACH OF THE 200 SERIES TANKS, OR THE LIMIT OF WASTE RETRIEVAL TECHNOLOGY CAPABILITY, WHICHEVER IS LESS. IF THE DOE BELIEVES THAT WASTE RETRIEVAL TO THESE LEVELS IS NOT POSSIBLE FOR A TANK, THEN DOE WILL SUBMIT A DETAILED EXPLANATION TO EPA AND ECOLOGY EXPLAINING WHY THESE LEVELS CANNOT BE ACHIEVED, AND SPECIFYING THE QUANTITIES OF WASTE THAT THE DOE PROPOSES TO LEAVE IN THE TANK. THE REQUEST WILL BE APPROVED OR DISAPPROVED BY EPA AND ECOLOGY ON A TANK-BY-TANK, OR GROUP OF TANKS, BASIS. PROCEDURES FOR MODIFYING THE RETRIEVAL CRITERIA LISTED ABOVE AND FOR PROCESSING REQUESTS FOR EXCEPTIONS TO THE CRITERIA ARE OUTLINED IN APPENDIX H TO THE AGREEMENT.</p> <p>FOR THE PURPOSES OF THIS AGREEMENT ALL UNITS LOCATED WITHIN THE BOUNDARY OF EACH TANK FARM WILL BE CLOSED IN ACCORDANCE WITH WAC 173-303-610. THIS INCLUDES CONTAMINATED SOIL AND ANCILLARY EQUIPMENT THAT WERE PREVIOUSLY DESIGNATED AS RCRA PAST PRACTICE UNITS. ADOPTING THIS APPROACH WILL ENSURE EFFICIENT USE OF FUNDING AND WILL REDUCE POTENTIAL DUPLICATION OF EFFORT VIA APPLICATION OF DIFFERENT REGULATORY REQUIREMENTS: WAC 173-303-610 FOR CLOSURE OF THE TSD UNITS AND RCRA SECTION 3004(U) FOR REMEDIATION OF RCRA PAST PRACTICE UNITS.</p> <p>ALL PARTIES RECOGNIZE THAT THE RECLASSIFICATION OF PREVIOUSLY IDENTIFIED RCRA PAST PRACTICE UNITS TO ANCILLARY EQUIPMENT ASSOCIATED WITH THE TSD UNIT IS STRICTLY FOR APPLICATION OF A CONSISTENT CLOSURE APPROACH. UPGRADES TO PREVIOUSLY CLASSIFIED RCRA PAST PRACTICE UNITS TO ACHIEVE COMPLIANCE WITH RCRA OR DANGEROUS WASTE INTERIM STATUS TECHNICAL STANDARDS FOR TANK SYSTEMS (I.E., SECONDARY CONTAINMENT, INTEGRITY ASSESSMENTS, ETC.) WILL NOT BE MANDATED AS A RESULT OF THIS ACTION. HOWEVER, ANY EQUIPMENT MODIFIED OR REPLACED WILL MEET INTERIM STATUS STANDARDS. IN EVALUATING CLOSURE OPTIONS FOR SINGLE-SHELL TANKS, CONTAMINATED SOIL, AND ANCILLARY EQUIPMENT, ECOLOGY AND EPA WILL CONSIDER COST, TECHNICAL PRACTICABILITY, AND POTENTIAL EXPOSURE TO RADIATION. CLOSURE OF ALL UNITS WITHIN THE BOUNDARY OF A GIVEN TANK FARM WILL BE ADDRESSED IN A CLOSURE PLAN FOR THE SINGLE-SHELL TANKS.</p> <p>COMPLIANCE WITH THE WORK SCHEDULES SET FORTH IN THIS M-45 MILESTONE SERIES IS DEFINED AS THE PERFORMANCE OF SUFFICIENT WORK TO ASSURE WITH REASONABLE CERTAINTY THAT DOE WILL ACCOMPLISH SERIES M-45 MAJOR AND INTERIM</p>	<p>09/30/2024 01/31/2043</p>
--	--	---

	<p>MILESTONE REQUIREMENTS.</p> <p>DOE INTERNAL WORK SCHEDULES (E.G., DOE APPROVED SCHEDULE BASELINES) AND ASSOCIATED WORK DIRECTIVES AND AUTHORIZATIONS SHALL BE CONSISTENT WITH THE REQUIREMENTS OF THIS AGREEMENT. MODIFICATION OF DOE CONTRACTOR BASELINE(S) AND ISSUANCE OF ASSOCIATED DOE WORK DIRECTIVES AND/OR AUTHORIZATIONS THAT ARE NOT CONSISTENT WITH AGREEMENT REQUIREMENTS SHALL NOT BE FINALIZED PRIOR TO APPROVAL OF AN AGREEMENT CHANGE REQUEST SUBMITTED PURSUANT TO AGREEMENT ACTION PLAN SECTION 12.0. COMPLETION OF THIS MAJOR MILESTONE REQUIRES THE COMPLETION OF THE WORK SCOPE IN ALL PRECEEDING MILESTONES AND TARGET DATES, UNLESS OTHERWISE AGREED TO BY THE PARTIES.</p> <p>ALL WORK UNDER THIS MILESTONE M-45 SERIES SHALL BE CONDUCTED IN COMPLIANCE WITH AGREEMENT REQUIREMENTS INCLUDING BUT NOT LIMITED TO THE PARTIES' AGREEMENT APPENDIX I, "SINGLE-SHELL TANK SYSTEM WASTE RETRIEVAL AND CLOSURE PROCESS", PROVIDED THAT SECTION 2.1, TANK WASTE RETRIEVAL, OF APPENDIX I OF THE HFFACO SHALL NOT APPLY TO THE 19 SSTs COVERED BY THE CONSENT DECREE IN WASHINGTON V. DOE, CASE NO. 08-5085-FVS, EXCEPT AS SET FORTH IN APPENDIX C, PART3, A.1 AND A.2 OF SUCH DECREE.</p>	
<p>M-045-00B</p>	<p>COMPLETE SPECIFIED "NEAR TERM" SST WASTE RETRIEVAL AND INTERIM CLOSURE ACTIVITIES, TO RESULT IN THE RETRIEVAL OF ALL TANK WASTES IN WMA-C SSTs PURSUANT TO THE AGREEMENT CRITERIA IN MILESTONE M-45-00.</p> <p>UNTIL THE WASTE TREATMENT COMPLEX IS OPERATIONAL, THE AMOUNT OF DST SPACE AVAILABLE TO RECEIVE SST WASTE IS LIMITED. THE NEAR TERM FOCUS FOR SST WASTE RETRIEVAL WILL INCLUDE MAXIMIZING THE TRANSFER OF CONTAMINANTS OF CONCERN (LONG-LIVED, MOBILE RADIONUCLIDES) INTO THE DST SYSTEM AND OPTIMIZING WASTE FEED SO AS TO MAINTAIN EFFICIENT WTP OPERATIONS. ADDITIONAL CRITERIA THAT WILL BE CONSIDERED IN TANK SELECTION AND MAY RESULT IN LOWER-RISK TANKS BEING RETRIEVED EARLIER IN THE SEQUENCE, INCLUDE:</p> <ul style="list-style-type: none"> • WORKER SAFETY • FACILITATION OF WMA CLOSURES. • THE OPTIMIZATION OF DST SPACE UTILIZATION CONSIDERING RESOURCE LEVELING AND WASTE TRANSFER INFRASTRUCTURE • RETRIEVAL AND CLOSURE REQUIREMENTS FOR ASSOCIATED ANCILLARY EQUIPMENT. <p>WORK UNDER THIS MILESTONE INCLUDES:</p> <p>COMPLETION OF FOUR "LIMITS OF TECHNOLOGY" RETRIEVAL DEMONSTRATIONS, AND RETRIEVAL OF SUFFICIENT SST WASTE CONTAINING NO LESS THAN 800 CURIES OF CONTAMINANTS OF CONCERN AND OCCUPYING A MINIMUM OF 3 MILLION GALLONS OF DST SPACE. "LIMITS OF TECHNOLOGY" RETRIEVAL DEMONSTRATIONS WILL SEEK TO IMPROVE UPON PAST PRACTICE SLUICING (PPS) BASELINE TECHNOLOGY INCLUDING BUT NOT</p>	<p>09/30/2006 OR AS OTHERWISE INDICATED WITHIN THE DESCRIPTIVE TEXT OF THIS MILESTONE</p>

~~LIMITED TO RETRIEVAL EFFICIENCY, LEAK LOSS DURING RETRIEVAL, AND LEAK DETECTION MITIGATION AND MONITORING (LDMM).~~

~~RETRIEVAL DEMONSTRATIONS SHALL BE CONDUCTED FOR 1) SALTCAKE DISSOLUTION (AT TANK S-112), 2) MODIFIED SLUICING (AT TANK C-106, 3) VACUUM RETRIEVAL (AT DOE'S C-200 SERIES TANKS), AND 4) MRS (ROBOTIC TECHNOLOGIES) + VACUUM RETRIEVAL AT TANK C-110, C-111, OR C-101 (WHICHEVER IS RETRIEVED FIRST).~~

~~WASTE SHALL BE RETRIEVED TO THE DST SYSTEM TO THE LIMITS OF THE TECHNOLOGY (OR TECHNOLOGIES) SELECTED. SELECTED SLUDGE/HARD-HEEL TECHNOLOGY (OR TECHNOLOGIES) MUST SEEK TO IMPROVE UPON THE PAST PRACTICE SLUICING BASELINE IN THE AREAS OF EXPECTED RETRIEVAL EFFICIENCY, LEAK LOSS POTENTIAL, AND SUITABILITY FOR USE IN POTENTIALLY LEAKING TANKS.~~

~~INSTALLATION AND IMPLEMENTATION OF FULL SCALE EXTERNAL-TANK LEAK DETECTION, MONITORING, AND MITIGATION (LDMM) TECHNOLOGIES FOR THE FIRST THREE 100-SERIES TANK RETRIEVALS FOLLOWING TANK S-112. THE BASELINE LDMM-SYSTEM (I.E. DRYWELL LOGGING) IS TO BE SUPPLEMENTED, USING AN EXTERNAL-TANK ELECTRICAL RESISTIVITY (ER) METHOD. THE ELECTRICAL RESISTIVITY SYSTEM WILL BE DESIGNED FOR IMPLEMENTATION AT THE THREE TANKS AND FULLY DEPLOYED AT THE FIRST TANK TO BE RETRIEVED. CRITERIA FOR THE DEMONSTRATION AT THE FIRST TANK SHALL BE AGREED TO BY DOE AND ECOLOGY BEFORE THE TECHNOLOGY IS INSTALLED.~~

- ~~• DOE WILL SUBMIT FOR ECOLOGY APPROVAL A TEST PLAN INCLUDING AN INJECTION TEST, DESCRIBING THE CRITERIA AND METHOD TO TEST THE SELECTED ER. 90 DAYS AFTER THE COMPLETION OF THE TESTING, DOE WILL SUBMIT AN EVALUATION REPORT AND ANY RECOMMENDATION FOR FURTHER DEPLOYMENT.~~
- ~~• IF THE PARTIES AGREE THAT THE METHOD IS SUITABLE, ER WILL BE DEPLOYED IN THE SUBSEQUENT APPROPRIATE RETRIEVAL TANKS.~~
- ~~• IF THE PARTIES DO NOT AGREE THAT ER IS SUITABLE FOR SUBSEQUENT RETRIEVALS, OR IF THE DATA IS INCONCLUSIVE, ECOLOGY WILL REQUIRE APPLICATION AND/OR DEVELOPMENT OF APPROPRIATE LDMM-TECHNOLOGY IN LIEU OF OR IN ADDITION TO ER.~~
- ~~• SUBMITTAL AS AGREEMENT PRIMARY DOCUMENTS, TANK-WASTE RETRIEVAL WORK PLANS FOR TANKS C-101, C-102, C-103, C-104, C-105, C-107, C-108, C-109, C-110, C-111, C-112, C-201, C-202, C-203, AND C-204.~~
 - ~~○ TANKS C-201, C-202, C-203 AND C-204, (PROVIDE SUPPLEMENTAL INFORMATION BY MARCH 31, 2004 TO INCLUDE START OF RETRIEVAL DATE AS PER APPENDIX~~

	<p>(REQUIREMENTS).</p> <ul style="list-style-type: none"> ○ DOE SHALL SUBMIT TWRWP(S) FOR 2 100-SERIES TANKS BY JULY 31, 2004. ○ DOE SHALL SUBMIT TWRWP(S) FOR 4 100-SERIES TANKS BY OCTOBER 31, 2004. ○ DOE SHALL SUBMIT TWRWP(S) FOR 5 100-SERIES TANKS BY JANUARY 31, 2005. <ul style="list-style-type: none"> ● SUBMITTAL TO ECOLOGY OF CERTIFIED COMPONENT CLOSURE ACTIVITY PLANS FOR THE PRECEDING SSTs IN ACCORDANCE WITH AGREEMENT APPENDIX I. ● SUBMITTAL OF WMA INTEGRATION PLANS FOR WMA-C AND ONE ADDITIONAL WMA BY JUNE 30, 2005. <p>THE SELECTION OF ADDITIONAL SSTs FOR WASTE RETRIEVAL SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF AGREEMENT APPENDIX I, SECTION 2.1.2.</p> <p>IN ADDITION TO THE PRECEDING, DOE WILL PROCESS A BASELINE CHANGE CONTROL, AND ASSOCIATED WORK DIRECTIVES AS MAY BE NECESSARY, CONSISTENT WITH THIS AGREEMENT AND THE PARTIES' MILESTONE M-45-04-01 CHANGE REQUEST NO LATER THAN SEPTEMBER 30, 2004.</p> <p>PROCEDURES FOR MODIFYING THE RETRIEVAL CRITERIA LISTED WITHIN THE ASSOCIATED MILESTONES, AND FOR PROCESSING REQUESTS FOR EXCEPTIONS TO THE CRITERIA ARE OUTLINED IN APPENDIX "H" TO THIS AGREEMENT.</p>	
<p>M-045-00C</p>	<p>INITIATE NEGOTIATION OF SST WASTE RETRIEVAL AND CLOSURE ACTIVITIES AND ASSOCIATED SCHEDULES (FOR THE PERIOD FEBRUARY 2007 THROUGH AUGUST 2008).</p> <p>THESE NEGOTIATIONS SHALL TAKE INTO ACCOUNT VARIABLES SUCH AS WORK IN PROGRESS, E.G., DOE'S TANK WASTE TREATMENT COMPLEX ACQUISITION INITIATIVE, INFORMATION PERTINANT TO, AND THE OUTCOME OF THE PARTIES' WTP PROCESSING CAPACITY AND SUPPLEMENTAL TREATMENT TECHNOLOGY VIABILITY NEGOTIATIONS (PURSUANT TO AGREEMENT MILESTONE M-62-08), AND ENVIRONMENTAL AND HUMAN HEALTH RISKS ASSOCIATED WITH RELEASES FROM DOE'S SSTs. NEGOTIATIONS SHALL BE DESIGNED TO ESTABLISH A SUFFICIENT NUMBER OF AGREEMENT MILESTONES AND TARGET DATES TO EFFECTIVELY DRIVE EACH PHASE OF WORK INCLUDING BUT NOT LIMITED TO: 1.) WASTE RETRIEVAL TECHNOLOGY DEVELOPMENT, 2.) RETRIEVAL PERFORMANCE EVALUATIONS, 3.) LEAK DETECTION, MONITORING, AND MITIGATION, 4.) SELECTION OF SST RETRIEVALS, 5.) DESIGN, CONSTRUCTION AND OPERATION OF SST WASTE RETRIEVAL SYSTEMS, 6.) CLOSURE PLANNING AND CLOSURE PLAN DEVELOPMENT, 7.) SCHEDULES FOR WMA ANCILLARY EQUIPMENT WASTE RETRIEVAL AND CLOSURE, 8.) OTHER ACTIVITIES AS MAY BE NECESSARY TO SUPPORT WMA CLOSURES, AND 9.) ACQUISITION OF ADDITIONAL COMPLIANT STORAGE SPACE, E.G., NEW DSTs, IF NEEDED.</p>	<p>09/30/2006</p>

	<p>DOE, AND DOE'S CONTRACTOR(S) WILL RETRIEVE AND TRANSFER SST WASTES INTO THE DST SYSTEM AS SOON AS SPACE IS MADE AVAILABLE, ALLOWING DST SPACE FOR TREATMENT PLANT FEED-STAGING AND SAFETY ISSUE RESOLUTION. TRANSFER OF SST WASTE WILL BE MADE ONCE SUFFICIENT DST SYSTEM SPACE IS AVAILABLE TO ALLOW A TRANSFER OF AN OPERATIONALLY PRACTICABLE VOLUME OF WASTE. SST WASTE WILL BE RETRIEVED ON A PRIORITY BASIS WITH THE GOALS OF REDUCING ENVIRONMENTAL RISK AND TREATMENT PROCESS OPTIMIZATION. DOE AND ECOLOGY WILL AGREE ON THE CRITERIA TO DETERMINE ENVIRONMENTAL RISK REDUCTION.</p> <p>THE ECOLOGY AND DOE NEGOTIATIONS UNDER THIS MILESTONE SHALL BE COMPLETED WITHIN 120 DAYS. IN THE EVENT THE PARTIES DO NOT REACH AGREEMENT WITHIN THIS TIMEFRAME, THE NEGOTIATIONS WILL BE RESOLVED AS A RESOLUTION OF DISPUTE VIA FINAL DETERMINATION OF THE DIRECTOR OF ECOLOGY PURSUANT TO HFFACO ARTICLE VIII. UNLESS OTHERWISE AGREED BY THE ECOLOGY AND DOE, THIS FINAL DETERMINATION WILL BE ISSUED WITHIN 150 DAYS OF INITIATION OF NEGOTIATIONS.</p>	
<p>M-045-00D</p>	<p>INITIATE NEGOTIATION OF THE SST WASTE RETRIEVAL AND CLOSURE ACTIVITIES FOR THE PERIOD SEPTEMBER 2008 TO SEPTEMBER 2013.</p> <p>THESE NEGOTIATIONS SHALL TAKE INTO ACCOUNT VARIABLES SUCH AS WORK IN PROGRESS, E.G., PHASE I RFI REPORTS OF ALL SST WMAs (PURSUANT TO AGREEMENT MILESTONE M-45-55), CORRECTIVE MEASURES STUDIES FOR ALL SST WMAs (PURSUANT TO AGREEMENT MILESTONE M-45-56, DOE'S TANK WASTE TREATMENT COMPLEX ACQUISITION INITIATIVE, INFORMATION PERTINANT TO, AND THE OUTCOME OF THE PARTIES' WTP PROCESSING CAPACITY AND SUPPLEMENTAL TREATMENT TECHNOLOGY VIABILITY NEGOTIATIONS (PURSUANT TO AGREEMENT MILESTONE M-62-08), AND ENVIRONMENTAL AND HUMAN HEALTH RISKS ASSOCIATED WITH RELEASES FROM DOE'S SSTs. NEGOTIATIONS SHALL BE DESIGNED TO ESTABLISH A SUFFICIENT NUMBER OF AGREEMENT MILESTONES AND TARGET DATES TO EFFECTIVELY DRIVE EACH PHASE OF WORK INCLUDING BUT NOT LIMITED TO: 1.) WASTE RETRIEVAL TECHNOLOGY DEVELOPMENT, 2.) RETRIEVAL PERFORMANCE EVALUATIONS, 3.) LEAK DETECTION, MONITORING, AND MITIGATION, 4.) SELECTION OF SST RETRIEVAL SEQUENCE, 5.) DESIGN, CONSTRUCTION AND OPERATION OF SST WASTE RETRIEVAL SYSTEMS, 6.) CLOSURE PLANNING AND CLOSURE PLAN DEVELOPMENT, 7.) SCHEDULES FOR WMA ANCILLARY EQUIPMENT WASTE RETRIEVAL AND CLOSURE, 8.) OTHER ACTIVITIES AS MAY BE NECESSARY TO SUPPORT WMA CLOSURES, AND 9.) ACQUISITION OF ADDITIONAL COMPLIANT STORAGE SPACE, E.G., NEW DSTs, IF NEEDED.</p> <p>DOE, AND DOE'S CONTRACTOR(S) WILL RETRIEVE AND TRANSFER SST WASTE INTO THE DST SYSTEM AS SOON AS SPACE IS MADE AVAILABLE, ALLOWING DST SPACE FOR TREATMENT PLANT FEED-STAGING AND SAFETY ISSUE RESOLUTION. TRANSFER OF SST WASTE WILL BE MADE ONCE SUFFICIENT DST SYSTEM SPACE IS AVAILABLE TO ALLOW A TRANSFER OF AN OPERATIONALLY</p>	<p>01/31/2008</p>

	<p>PRACTICABLE VOLUME OF WASTE. SST WASTE WILL BE RETRIEVED ON USING THE GOALS OF REDUCING ENVIRONMENTAL RISK AND TREATMENT PROCESS OPTIMIZATION.</p> <p>THE ECOLOGY AND DOE NEGOTIATIONS UNDER THIS MILESTONE SHALL BE COMPLETED WITHIN 150 DAYS. IN THE EVENT THE PARTIES DO NOT REACH AGREEMENT WITHIN THIS TIMEFRAME, THE NEGOTIATIONS WILL BE RESOLVED AS A RESOLUTION OF DISPUTE VIA FINAL DETERMINATION OF THE DIRECTOR OF ECOLOGY PURSUANT TO HFFACO ARTICLE VIII. UNLESS OTHERWISE AGREED BY THE ECOLOGY AND DOE, THIS FINAL DETERMINATION WILL BE ISSUED WITHIN 180 DAYS OF INITIATION OF NEGOTIATIONS.</p>	
M-045-00E	<p>INITIATE NEGOTIATION OF SST WASTE RETRIEVAL AND CLOSURE ACTIVITIES FOR THE REMAINDER OF THE SST PROGRAM.</p> <p>THESE NEGOTIATIONS WILL ESTABLISH REGULATORY REQUIREMENTS FOR THE REMAINDER OF THE SST WASTE RETRIEVAL AND CLOSURE PROGRAM (THROUGH COMPLETION OF CLOSURE AT ALL SST WMAs). NEGOTIATIONS WILL INCLUDE MODIFICATION AS MAY BE NECESSARY OF COMPLETION DATES FOR SST WASTE RETRIEVAL AND SST WMA CLOSURE BASED ON EXPERIENCE GAINED FROM PHASE I RFI REPORTS OF ALL SST WMAs (PURSUANT TO AGREEMENT MILESTONE M-45-55), CORRECTIVE MEASURES STUDIES FOR ALL SST WMAs (PURSUANT TO AGREEMENT MILESTONE M-45-56), DOE'S TANK WASTE TREATMENT COMPLEX ACQUISITION INITIATIVE, INFORMATION PERTINANT TO, AND THE OUTCOME OF THE PARTIES' WTP PROCESSING CAPACITY AND SUPPLEMENTAL TREATMENT TECHNOLOGY VIABILITY NEGOTIATIONS (PURSUANT TO AGREEMENT MILESTONE M-62-08), AND ENVIRONMENTAL AND HUMAN HEALTH RISKS ASSOCIATED WITH RELEASES FROM DOE'S SSTs.</p> <p>DOE, AND DOE'S CONTRACTOR(S) WILL RETRIEVE AND TRANSFER SST WASTES INTO THE DST SYSTEM AS SOON AS SPACE IS MADE AVAILABLE, ALLOWING DST SPACE FOR TREATMENT PLANT FEED-STAGING AND SAFETY ISSUE RESOLUTION. TRANSFER OF SST WASTE WILL BE MADE ONCE SUFFICIENT DST SYSTEM SPACE IS AVAILABLE TO ALLOW A TRANSFER OF AN OPERATIONALLY PRACTICABLE VOLUME OF WASTE. SST WASTE WILL BE RETRIEVED ON A PRIORITY BASIS WITH THE CRITERIA OF REDUCING ENVIRONMENTAL RISK AND TREATMENT PROCESS OPTIMIZATION.</p> <p>THE ECOLOGY AND DOE NEGOTIATIONS UNDER THIS MILESTONE SHALL BE COMPLETED WITHIN 120 DAYS. IN THE EVENT THE PARTIES DO NOT REACH AGREEMENT WITHIN THIS TIMEFRAME, THE NEGOTIATIONS WILL BE RESOLVED AS A RESOLUTION OF DISPUTE VIA FINAL DETERMINATION OF THE DIRECTOR OF ECOLOGY PURSUANT TO HFFACO ARTICLE VIII. UNLESS OTHERWISE AGREED BY THE ECOLOGY AND DOE, THIS FINAL DETERMINATION WILL BE ISSUED WITHIN 150 DAYS OF INITIATION OF NEGOTIATIONS.</p>	10/31/2012

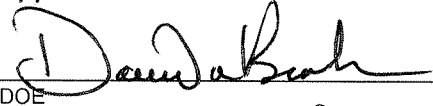
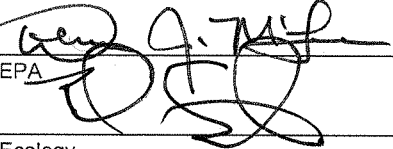

<p>M-045-02</p>	<p>SUBMIT BIENNIAL UPDATE TO SST RETRIEVAL SEQUENCE DOCUMENT (AGREEMENT APPENDIX I. SECTION 2.1.2), DOUBLE SHELL TANK SPACE EVALUATION DOCUMENT AND ECOLOGY CONCURRENCE OF ADDITIONAL TANK ACQUISITION.</p> <p>THIS PROVIDES FOR A BIENNIAL UPDATE OF A SST RETRIEVAL SEQUENCE DOCUMENT THAT WILL DEFINE THE TANK RETRIEVAL SEQUENCE, SELECTION CRITERIA AND, RATIONALE, REFERENCE RETRIEVAL METHOD(S) FOR EACH TANK, AND THE ESTIMATED RETRIEVAL SCHEDULES. THE RETRIEVAL SEQUENCE DOCUMENT WILL LIST RETRIEVAL METHODOLOGIES TO BE EMPLOYED AND ESTIMATED WASTE VOLUMES TO BE GENERATED DURING RETRIEVAL (TO BE TRANSFERRED TO THE DST'S OR OTHER AVAILABLE SAFE STORAGE). THE REPORT WILL ALSO LIST TANK SELECTION RATIONALE BASED ON THE PRIMARY OBJECTIVE OF MAXIMIZING RISK REDUCTION THROUGH THE RETRIEVAL OF MOBILE, LONG-LIVED RADIONUCLIDES OR POTENTIAL AIRBORNE CONTAMINANTS AND PRINCIPLE NON RADIOLOGICAL HAZARDOUS CONSTITUENTS IN A MANNER WHICH IS SENSITIVE TO WASTE TREATMENT FACILITY REQUIREMENTS AND INFRASTRUCTURE CONSTRAINTS. THE SEQUENCING WILL ALSO TAKE IN CONSIDERATION DST SPACE AND DST WASTE COMPATABILITY WHEN SELECTING THE SST RETRIEVAL SEQUENCE. TANK SELECTION FOR RETRIEVAL WILL TAKE INTO CONSIDERATION THE CLOSURE OF WASTE MANAGEMENT AREAS AND RESOURCE OPTIMIZATION. THE BIENNIAL UPDATES WILL BE SUBMITTED TO ECOLOGY FOR APPROVAL AS AGREEMENT PRIMARY DOCUMENTS.</p> <p>THIS ALSO PROVIDES FOR A BIENNIAL UPDATE OF THE DOUBLE SHELL TANK SPACE EVALUATION DOCUMENT. THIS NEW MILESTONE REPLACED MILESTONE M-31-02 AND SUBSEQUENTLY M-46-00K, M-46-00L, AND M-46-00M, ETC. A TANK VOLUME PROJECTION REPORT SHALL BE SUBMITTED ON A BIENNIAL BASIS TO ECOLOGY AND EPA. THIS REPORT SHALL INCLUDE DISCUSSIONS COVERING ALL ASSUMPTIONS WHICH FORM THE BASIS OF THE PROJECTION. THE REPORT SHALL INCLUDE OR SHALL BE ACCOMPANIED BY DOE'S PLANS FOR ACQUISITION OF ADDITIONAL TANKS BASED ON THE TANK VOLUME PROJECTION.</p> <p>ECOLOGY CONCURRENCE OF ADDITIONAL TANK ACQUISITION WITHIN 60 DAYS. WITHIN 60 DAYS OF RECEIVING THE DST TANK SPACE EVALUATION DOCUMENT, THE THREE PARTIES SHALL MEET TO ESTABLISH NEW MILESTONES, IF REQUIRED, FOR ACQUISITION OF ADDITIONAL TANKS.</p>	<p>03/01/2006 OR AS OTHERWISE INDICATED WITHIN THE DESCRIPTIVE TEXT OF THIS MILESTONE</p>
<p>M-045-02N- (Last Paragraph)</p>	<p>ECOLOGY CONCURRENCE OF ADDITIONAL TANK ACQUISITION WITHIN 60 DAYS. WITHIN 60 DAYS OF RECEIVING THE DST TANK SPACE EVALUATION DOCUMENT, THE THREE PARTIES SHALL MEET TO ESTABLISH NEW MILESTONES, IF REQUIRED, FOR ACQUISITION OF ADDITIONAL TANKS.</p>	<p>AS OTHERWISE INDICATED WITHIN THE DESCRIPTIVE TEXT OF THIS MILESTONE</p>
<p>M-045-02 O, P and beyond</p>	<p>SUBMIT BIENNIAL UPDATE TO SST RETRIEVAL SEQUENCE DOCUMENT (AGREEMENT APPENDIX I. SECTION 2.1.2), DOUBLE SHELL TANK SPACE EVALUATION DOCUMENT AND ECOLOGY CONCURRENCE OF ADDITIONAL TANK ACQUISITION.</p> <p>THIS PROVIDES FOR A BIENNIAL UPDATE OF A SST RETRIEVAL SEQUENCE DOCUMENT THAT WILL DEFINE THE TANK RETRIEVAL</p>	<p>03/01/2010 OR AS OTHERWISE INDICATED WITHIN THE DESCRIPTIVE TEXT OF THIS</p>

	<p>SEQUENCE, SELECTION CRITERIA AND, RATIONALE, REFERENCE RETRIEVAL METHOD(S) FOR EACH TANK, AND THE ESTIMATED RETRIEVAL SCHEDULES. THE RETRIEVAL SEQUENCE DOCUMENT WILL LIST RETRIEVAL METHODOLOGIES TO BE EMPLOYED AND ESTIMATED WASTE VOLUMES TO BE GENERATED DURING RETRIEVAL (TO BE TRANSFERRED TO THE DST'S OR OTHER AVAILABLE SAFE STORAGE). THE REPORT WILL ALSO LIST TANK SELECTION RATIONALE BASED ON THE PRIMARY OBJECTIVE OF MAXIMIZING RISK REDUCTION THROUGH THE RETRIEVAL OF MOBILE, LONG-LIVED RADIONUCLIDES OR POTENTIAL AIRBORNE CONTAMINANTS AND PRINCIPLE NON-RADIOLOGICAL HAZARDOUS CONSTITUENTS IN A MANNER WHICH IS SENSITIVE TO WASTE TREATMENT FACILITY REQUIREMENTS AND INFRASTRUCTURE CONSTRAINTS. THE SEQUENCING WILL ALSO TAKE IN CONSIDERATION DST SPACE AND DST WASTE COMPATABILITY WHEN SELECTING THE SST RETRIEVAL SEQUENCE. TANK SELECTION FOR RETRIEVAL WILL TAKE INTO CONSIDERATION THE CLOSURE OF WASTE MANAGEMENT AREAS AND RESOURCE OPTIMIZATION. THE BIENNIAL UPDATES WILL BE SUBMITTED TO ECOLOGY FOR APPROVAL AS AGREEMENT PRIMARY DOCUMENTS.</p> <p>THIS ALSO PROVIDES FOR A BIENNIAL UPDATE OF THE DOUBLE-SHELL TANK SPACE EVALUATION DOCUMENT. THIS NEW MILESTONE REPLACED MILESTONE M-31-02 AND SUBSEQUENTLY M-46-00K, M-46-00L, AND M-46-00M, ETC. A TANK VOLUME PROJECTION REPORT SHALL BE SUBMITTED ON A BIENNIAL BASIS TO ECOLOGY AND EPA. THIS REPORT SHALL INCLUDE DISCUSSIONS COVERING ALL ASSUMPTIONS WHICH FORM THE BASIS OF THE PROJECTION. THE REPORT SHALL INCLUDE OR SHALL BE ACCOMPANIED BY DOE'S PLANS FOR ACQUISITION OF ADDITIONAL TANKS BASED ON THE TANK VOLUME PROJECTION.</p> <p>ECOLOGY CONCURRENCE OF ADDITIONAL TANK ACQUISITION WITHIN 60 DAYS. WITHIN 60 DAYS OF RECEIVING THE DST TANK SPACE EVALUATION DOCUMENT, THE THREE PARTIES SHALL MEET TO ESTABLISH NEW MILESTONES, IF REQUIRED, FOR ACQUISITION OF ADDITIONAL TANKS.</p>	MILESTONE
M-045-05	<p>RETRIEVE WASTE FROM ALL REMAINING SINGLE-SHELL TANKS. COMPLETE WASTE RETRIEVAL FROM ALL REMAINING SINGLE-SHELL TANKS. RETRIEVAL STANDARDS AND COMPLETION DEFINITIONS ARE PROVIDED UNDER THE MAJOR MILESTONE. THE SCHEDULE REFLECTS RETRIEVAL ACTIVITIES ON A FARM-BY-FARM BASIS. IT ALSO ALLOWS FLEXIBILITY TO RETRIEVE TANKS FROM VARIOUS FARMS IF DESIRED TO SUPPORT SAFETY ISSUE RESOLUTION, PRETREATMENT OR DISPOSAL FEED REQUIREMENTS, OR OTHER PRIORITIES.</p>	09/30/2018
M-045-05-T05	<p>INITIATE TANK RETRIEVAL FROM FIVE ADDITIONAL SINGLE-SHELL TANKS.</p>	09/30/2007
M-045-05-T06	<p>INITIATE TANK RETRIEVAL FROM FIVE ADDITIONAL SINGLE-SHELL TANKS.</p>	09/30/2008
M-045-05-T07	<p>INITIATE TANK RETRIEVAL FROM SEVEN ADDITIONAL SINGLE-SHELL TANKS.</p>	09/30/2009

M-045-05-T08	INITIATE TANK RETRIEVAL FROM EIGHT ADDITIONAL SINGLE-SHELL TANKS.	09/30/2010
M-045-05-T09	INITIATE TANK RETRIEVAL FROM TEN ADDITIONAL SINGLE-SHELL TANKS.	09/30/2011
M-045-05-T10	INITIATE TANK RETRIEVAL FROM 12 ADDITIONAL SINGLE-SHELL TANKS.	09/30/2012
M-045-05-T11	INITIATE TANK RETRIEVAL FROM 14 ADDITIONAL SINGLE-SHELL TANKS.	09/30/2013
M-045-05-T12	INITIATE TANK RETRIEVAL FROM 17 ADDITIONAL SINGLE-SHELL TANKS.	09/30/2014
M-045-05-T13	INITIATE TANK RETRIEVAL FROM 20 ADDITIONAL SINGLE-SHELL TANKS.	09/30/2015
M-045-05-T14	INITIATE TANK RETRIEVAL FROM 20 ADDITIONAL SINGLE-SHELL TANKS.	09/30/2016
M-045-05-T15	INITIATE TANK RETRIEVAL FROM 20 ADDITIONAL SINGLE-SHELL TANKS.	09/30/2017
M-045-05A	<p>COMPLETE WASTE RETRIEVAL FROM TANK S-102.</p> <p>THE S-102 WASTE RETRIEVAL TECHNOLOGY (OR TECHNOLOGIES) WILL BE SELECTED BASED ON THE PRINCIPLE CRITERIA OF MAXIMIZING THE RETRIEVAL OF MOBILE, LONG-LIVED RADIOISOTOPES AND NON-RADIOLOGICAL HAZARDOUS CONSTITUENTS. THE PARTIES RECOGNIZE AND AGREE THAT THIS ACTION IS FOR WASTE RETRIEVAL PURPOSES. RETRIEVAL SHALL BE PERFORMED IN ACCORDANCE WITH GOALS AND CRITERIA SPECIFIED IN M-45-00.</p> <p>COMPLETION OF S-102 WASTE RETRIEVAL IS SUBJECT TO SAFE STORAGE SPACE AVAILABILITY CONSISTENT WITH M-45-00B.</p>	03/31/2007
M-045-06	COMPLETE CLOSURE OF ALL SINGLE-SHELL TANK FARMS IN ACCORDANCE WITH APPROVED CLOSURE/POST CLOSURE PLAN(S).	09/30/2024
M-045-06-T03	INITIATE CLOSURE ACTIONS ON A WMA BASIS. CLOSURE SHALL FOLLOW COMPLETION OF THE RETRIEVAL ACTIONS UNDER PROPOSED MILESTONE M-45-05. CLOSURE WILL BE DEFINED IN AN APPROVED CLOSURE PLAN FOR THE DEMONSTRATION FARM. FINAL CLOSURE IS DEFINED AS ECOLOGY ACCEPTANCE OF DOE'S CERTIFICATION OF COMPLETION OF CLOSURE.	03/31/2012
M-045-06-T04	COMPLETE CLOSURE ACTIONS ON ONE WMA.	03/31/2014
M-045-13	<p>INTERIM COMPLETION OF TANK S-112 SST WASTE RETRIEVAL AND CLOSURE DEMONSTRATION PROJECT.</p> <p>THE S-112 SST WASTE RETRIEVAL AND CLOSURE DEMONSTRATION PROJECT WILL BE CONSIDERED INTERIM COMPLETE WHEN THE FOLLOWING CRITERIA HAVE BEEN MET:</p>	06/30/2011 OR AS OTHERWISE INDICATED WITHIN THE DESCRIPTIVE TEXT OF THIS

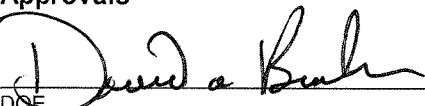
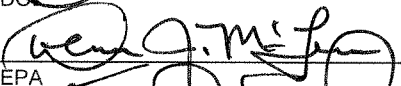

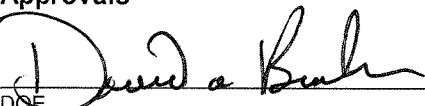
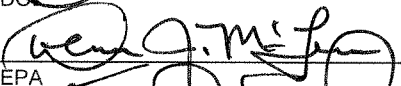

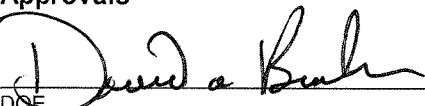
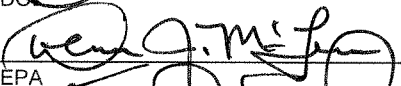

	<ol style="list-style-type: none"> 1. FULL SCALE WASTE RETRIEVAL HAS BEEN COMPLETED IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS INCLUDING WASHINGTON'S HAZARDOUS WASTE MANAGEMENT ACT, REQUIREMENTS SET BY THIS AGREEMENT, AND THE APPROVED S-112 SALTCAKE WASTE RETRIEVAL TECHNOLOGY FUNCTIONS AND REQUIREMENTS DOCUMENT (DOE WILL SUBMIT A RETRIEVAL DATA REPORT PURSUANT TO AGREEMENT APPENDIX I) BY DECEMBER 31, 2007. 2. COMPLETE NEGOTIATIONS FOR INTERIM MILESTONES FOR CLOSURE OF S-112 (INCLUDING A SCHEDULE FOR SUBMITTAL OF CLOSURE PLANS AND RISK ASSESSMENTS AND FINAL CLOSURE DATES) IN ACCORDANCE WITH MILESTONES M-045-84 OR M-045-85. REMAINING WASTES HAVE BEEN ADEQUATELY CHARACTERIZED, AND A RISK ASSESSMENT HAS BEEN COMPLETED FOR RESIDUALS THAT REMAIN IN THE TANK BY DECEMBER 31, 2007. 3. AN UPDATE TO THE S-112 COMPONENT CLOSURE ACTIVITY PLAN HAS BEEN SUBMITTED BY DOE. 4. IF APPROPRIATE, DOE HAS REQUESTED AN EXCEPTION TO WASTE RETRIEVAL CRITERIA PURSUANT TO AGREEMENT APPENDIX H. 	<p>MILESTONE TO BE DETERMINED IN ACCORDANCE WITH MILESTONES M-045-84 OR M-045-85</p>
<p>M-045-15</p>	<p>INTERIM COMPLETION OF TANK S-102 SST WASTE RETRIEVAL AND CLOSURE DEMONSTRATION PROJECT.</p> <p>THE S-102 SST WASTE RETRIEVAL AND CLOSURE DEMONSTRATION PROJECT WILL BE CONSIDERED INTERIM COMPLETE WHEN THE FOLLOWING CRITERIA HAVE BEEN MET:</p> <ol style="list-style-type: none"> 1. FULL SCALE WASTE RETRIEVAL HAS BEEN COMPLETED IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS INCLUDING WASHINGTON'S HAZARDOUS WASTE MANAGEMENT ACT, REQUIREMENTS SET BY THIS AGREEMENT, AND THE APPROVED S- 102 INITIAL WASTE RETRIEVAL FUNCTIONS AND REQUIREMENTS DOCUMENT (DOE WILL SUBMIT A RETRIEVAL DATA REPORT PURSUANT TO AGREEMENT APPENDIX I). NOTE: THIS CRITERION AND DUE DATE DOES NOT MODIFY MILESTONE M-045-05A. 2. REMAINING WASTES HAVE BEEN ADEQUATELY CHARACTERIZED, AND A RISK ASSESSMENT HAS BEEN COMPLETED FOR RESIDUALS THAT REMAIN IN THE TANK. 3. AN UPDATE TO THE S-102 COMPONENT CLOSURE ACTIVITY PLAN HAS BEEN SUBMITTED BY DOE. 4. IF APPROPRIATE, DOE HAS REQUESTED AN EXCEPTION TO WASTE RETRIEVAL CRITERIA PURSUANT TO AGREEMENT APPENDIX H. 	<p>06/30/2011</p>

<p>M-045-56</p>	<p>COMPLETE IMPLEMENTATION OF AGREED-TO INTERIM MEASURES.</p> <p>SPECIFIC INTERIM MEASURES WILL BE IMPLEMENTED PURSUANT TO AGREEMENT COMMITMENTS (E.G., SEE INTERIM MILESTONE M-45-57). INTERIM MEASURES MAY ALSO BE REQUIRED BY ECOLOGY, PROPOSED BY DOE IN THE SST WMA RFI REPORT (M-45-55) (OR ENGINEERING STUDIES INCLUDING THAT ADDRESSED IN TARGET MILESTONE M-45-56-T01), OR ESTABLISHED BY AGREEMENT OF THE PARTIES AT ANY TIME DURING THE CORRECTIVE ACTION PROCESS. ALSO SEE TABLE 1 OF AGREEMENT CHANGE CONTROL FORM #M-45-98-03.</p> <p>ECOLOGY AND DOE AGREE, AT A MINIMUM, TO MEET YEARLY (BY JULY OR AS NEEDED TO SUPPORT ANNUAL BUDGETING) FOR THE SPECIFIC PURPOSE OF ASSESSING THE ADEQUACY OF INFORMATION, AND THE NEED FOR THE ESTABLISHMENT OF ADDITIONAL AGREEMENT INTERIM MEASURES. ADDITIONAL AGREEMENT INTERIM MEASURES SHALL BE DOCUMENTED THROUGH ESTABLISHMENT OF INTERIM MILESTONES AND ASSOCIATED TARGET DATES AS AGREED NECESSARY BY THE PARTIES.</p>	<p>To Be Determined</p>
<p>M-045-59</p>	<p>CONTROL SURFACE WATER INFILTRATION PATHWAYS AS NEEDED TO CONTROL OR SIGNIFICANTLY REDUCE THE LIKELIHOOD OF MIGRATION OF SUBSURFACE CONTAMINATION TO GROUNDWATER AT THE SST WMAS (PENDING THE CMS REPORT, MILESTONE M-45-58, AND IMPLEMENTATION OF OTHER INTERIM CORRECTIVE MEASURES.</p> <p>DECISIONS ON CONTROLLING SURFACE WATER INFILTRATION PATHWAYS WILL BE MADE BY EVALUATING THE ROLE OF SURFACE WATER INFILTRATION AND THE TRANSPORT OF SUBSURFACE CONTAMINATION TO GROUNDWATER. BASED ON THE CORRECTIVE MEASURES STUDY (M-45-58) INTERIM SURFACE BARRIERS AND/OR OTHER INFILTRATION CONTROLS MAY BE REQUIRED.</p>	<p>To Be Determined</p>
<p>M-045-61</p>	<p>SUBMIT TO ECOLOGY FOR REVIEW AND APPROVAL AS AN AGREEMENT PRIMARY DOCUMENT, A PHASE 2 RCRA FACILITY INVESTIGATION/CORRECTIVE MEASURES STUDY REPORT FOR WMA C.</p>	<p>12/31/2014</p>
<p>M-045-62</p>	<p>SUBMIT TO ECOLOGY FOR REVIEW AND APPROVAL AS AN AGREEMENT PRIMARY DOCUMENT A PHASE 2 CORRECTIVE MEASURES IMPLEMENTATION WORK PLAN FOR WMA C.</p>	<p>07/31/2012 06/30/2015</p>

Change Number M-47-09-01	Federal Facility Agreement and Consent Order Change Control Form <small>Do not use blue ink. Type or print using black ink.</small>	Date October 5, 2010
Originator The U.S. Department of Energy, the State of Washington Department of Ecology, and the U.S. Environmental Protection Agency.		Phone
Class of Change <input checked="" type="checkbox"/> I - Signatories <input type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager		
Change Title Hanford Federal Facility Agreement and Consent Order Milestone Modifications to M-047-00 for High-Level Radioactive Tank Waste Treatment, Storage and Disposal Facilities, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.		
Description/Justification of Change This change form reflects the results of the 2007 - 2009 Hanford negotiations on milestones for High-Level Radioactive Tank Waste Treatment, Storage and Disposal Facilities in the M-047-00 series and carries out modifications to the milestones in the HFFACO.		
Impact of Change The modifications in this document are conditioned upon approval of the following TPA change packages M-36-09-01, M-42-09-01, M-45-09-01, M-47-09-01, M-50-09-01, M-51-09-01, M-61-09-01, M-62-09-01, M-90-09-01, P-09-09-02 and I-09-01, and shall go into effect upon entry of the Consent Decree in <i>Washington v. DOE</i> , Case No. 08-5085-FVS.		
Affected Documents The <u>Hanford Federal Facility Agreement and Consent Order</u> , as amended.		
Approvals <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;">  _____ DOE </div> <div style="width: 30%;"> 10/4/10 Date </div> <div style="width: 30%;"> <input checked="" type="checkbox"/> Approved _____ Disapproved </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 30%;">  _____ EPA </div> <div style="width: 30%;"> 10/4/10 Date </div> <div style="width: 30%;"> <input checked="" type="checkbox"/> Approved _____ Disapproved </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 30%;">  _____ Ecology </div> <div style="width: 30%;"> 10/5/10 Date </div> <div style="width: 30%;"> <input checked="" type="checkbox"/> Approved _____ Disapproved </div> </div>		Page 1 of 2

The following Major and Interim Milestones are hereby modified, as shown by use of ~~strikeout~~, to indicate text deleted and **shading** to indicate text to be added.

<p>M-047-00</p>	<p>DOE, AND ASSOCIATED CONTRACTORS SHALL COMPLETE ALL WORK NECESSARY IN SUPPORT OF THE ACQUISITION AND OPERATION OF HANFORD SITE HIGH-LEVEL RADIOACTIVE TANK-WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES. WORK INCLUDED UNDER THIS MILESTONE SERIES SHALL INCLUDE BUT IS NOT LIMITED TO WORK NECESSARY TO: (1) PROVIDE TIMELY TANK-WASTE FEED TO TANK WASTE TREATMENT FACILITIES, (2) PROVIDE ADEQUATE DOUBLE-SHELL TANK (DST) SPACE, (3) TO PROVIDE NECESSARY FACILITIES INFRASTRUCTURE INCLUDING FOR MANAGEMENT OF SECONDARY WASTE FROM THE WTP SOLID WASTE SERVICES AND SECONDARY WASTE TREATMENT (E.G., TANK WASTE TREATMENT FACILITY LIQUID EFFLUENTS). SEE ALSO MILESTONE SERIES M-90-00. THE PARTIES WILL REVISE OR CONFIRM THE DUE DATES FOR MILESTONES M-47-01, M-47-02, M-47-03, M-47-03A, M-47-04, M-47-05 AND M-47-05A WITHIN SIX (6) MONTHS OF AUTHORIZATION TO PROCEED (SEE MILESTONE M-62-04). REVISION, IF NECESSARY, SHALL BE CONSISTENT WITH COMPLETION OF HOT COMMISSIONING BY 1/31/2011, AND COMPLETION OF THE PRETREATMENT AND VITRIFICATION OF NO LESS THAN 10% OF HANFORD'S TANK WASTE BY MASS AND 25% BY ACTIVITY BY 2/28/2018. COMPLIANCE WITH THE WORK SCHEDULES SET FORTH IN THIS M-47 SERIES IS DEFINED AS THE PERFORMANCE OF SUFFICIENT WORK TO ASSURE WITH REASONABLE CERTAINTY THAT DOE WILL ACCOMPLISH SERIES M-47 MAJOR AND INTERIM MILESTONE REQUIREMENTS. DOE INTERNAL WORK SCHEDULES (I.E., DOE APPROVED SCHEDULE BASELINES) AND ASSOCIATED WORK DIRECTIVES AND AUTHORIZATIONS SHALL BE CONSISTENT WITH THE REQUIREMENTS OF THIS AGREEMENT. MODIFICATION OF DOE CONTRACTOR BASELINE(S) AND ISSUANCE OF ASSOCIATED DOE WORK DIRECTIVES AND/OR AUTHORIZATIONS THAT ARE NOT CONSISTENT WITH AGREEMENT REQUIREMENTS SHALL NOT BE FINALIZED PRIOR TO APPROVAL OF AN AGREEMENT CHANGE REQUEST SUBMITTED PURSUANT TO AGREEMENT ACTION PLAN SECTION 12.0.</p>	<p>02/28/2018 THE DATE THAT THE WTP ACHIEVES INITIAL PLANT OPERATIONS</p>
<p>M-047-03A</p>	<p>COMPLETE STARTUP AND TURNOVER ACTIVITIES FOR WASTE RETRIEVAL AND MOBILIZATION SYSTEMS FOR SELECTED INITIAL-HIGH-LEVEL WASTE FEED TANK.</p>	<p>03/31/2009</p>
<p>M-047-06</p>	<p>COMPLETE NEGOTIATION OF ADDITIONAL AGREEMENT REQUIREMENTS (NO MORE THAN TWO INTERIM MILESTONES, TARGET DATES, AND ASSOCIATED LANGUAGE) GOVERNING WORK NECESSARY TO SUPPORT COMPLETION OF M-047-00 TREATMENT-COMPLEX OPERATIONS BY 2018. SUCH INTERIM MILESTONES SHALL BE CONSISTENT WITH MILESTONES ESTABLISHED UNDER M-062-45.</p>	<p>06/30/2010 2012</p>

Change Number M-50-09-01	Federal Facility Agreement and Consent Order Change Control Form <small>Do not use blue ink. Type or print using black ink.</small>	Date October 5, 2010									
Originator The U.S. Department of Energy, the State of Washington Department of Ecology, and the U.S. Environmental Protection Agency.		Phone									
Class of Change <input checked="" type="checkbox"/> I - Signatories <input type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager											
Change Title Hanford Federal Facility Agreement and Consent Order Milestone Modifications to M-050-00 for Pretreatment Processing of Hanford Tank Waste, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.											
Description/Justification of Change This change form reflects the results of the 2007 - 2009 Hanford negotiations on milestones for Pretreatment Processing of Hanford Tank Waste in the M-050-00 series and carries out modifications to the milestones in the HFFACO.											
Impact of Change The modifications in this document are conditioned upon approval of the following TPA change packages M-36-09-01, M-42-09-01, M-45-09-01, M-47-09-01, M-50-09-01, M-51-09-01, M-61-09-01, M-62-09-01, M-90-09-01, P-09-09-02 and I-09-01, and shall go into effect upon entry of the Consent Decree in <i>Washington v. DOE</i> , Case No. 08-5085-FVS.											
Affected Documents The <u>Hanford Federal Facility Agreement and Consent Order</u> , as amended.											
Approvals <table border="0"> <tr> <td data-bbox="89 1606 609 1711">  DOE </td> <td data-bbox="625 1627 771 1722"> 10/4/10 Date </td> <td data-bbox="803 1648 1161 1701"> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved </td> </tr> <tr> <td data-bbox="89 1711 609 1795">  EPA </td> <td data-bbox="625 1732 771 1806"> 10/4/10 Date </td> <td data-bbox="803 1743 1161 1795"> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved </td> </tr> <tr> <td data-bbox="89 1795 609 1879">  Ecology </td> <td data-bbox="625 1795 771 1879"> 10/5/10 Date </td> <td data-bbox="803 1816 1161 1869"> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved </td> </tr> </table>		 DOE	10/4/10 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved	 EPA	10/4/10 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved	 Ecology	10/5/10 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved	Page 1 of 2
 DOE	10/4/10 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved									
 EPA	10/4/10 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved									
 Ecology	10/5/10 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved									

The following Major Milestone is hereby **deleted**, as shown by use of ~~strikeout~~, from the Hanford Federal Facility Agreement and Consent Order.

M-50-00	COMPLETE PRETREATMENT PROCESSING OF HANFORD TANK WASTE.	12/31/2028
---------	--	------------

Change Number M-51-09-01	Federal Facility Agreement and Consent Order Change Control Form <small>Do not use blue ink. Type or print using black ink.</small>	Date October 5, 2010
---	--	---------------------------------------

Originator The U.S. Department of Energy, the State of Washington Department of Ecology, and the U.S. Environmental Protection Agency.	Phone
--	--------------

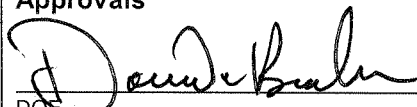
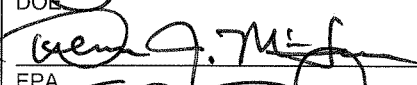
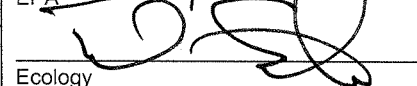
Class of Change <input checked="" type="checkbox"/> I - Signatories <input type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager
--

Change Title Hanford Federal Facility Agreement and Consent Order Milestone Modifications to M-051-00 for the Vitrification of Hanford High Level Tank Waste, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.
--

Description/Justification of Change This change form reflects the results of the 2007 - 2009 Hanford negotiations on milestones for Vitrification of Hanford High Level Tank Waste in the M-051-00 series and carries out modifications to the milestones in the HFFACO.
--

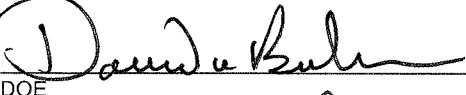
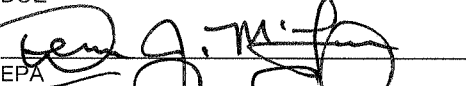
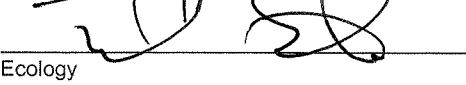
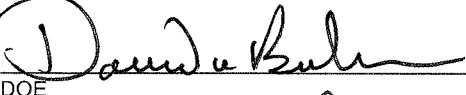
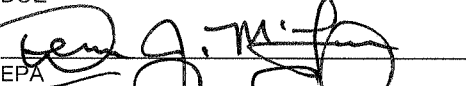
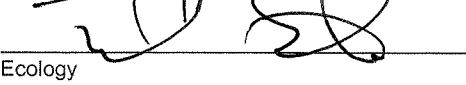
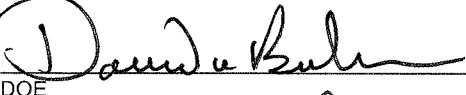
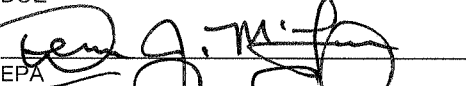
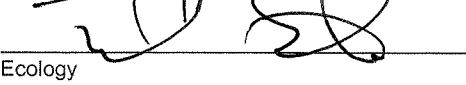
Impact of Change The modifications in this document are conditioned upon approval of the following TPA change packages M-36-09-01, M-42-09-01, M-45-09-01, M-47-09-01, M-50-09-01, M-51-09-01, M-61-09-01, M-62-09-01, M-90-09-01, P-09-09-02 and I-09-01, and shall go into effect upon entry of the Consent Decree in <i>Washington v. DOE</i> , Case No. 08-5085-FVS.
--

Affected Documents The <u>Hanford Federal Facility Agreement and Consent Order</u> , as amended.
--

Approvals  _____ <u>10/4/10</u> <input checked="" type="checkbox"/> Approved _____ Disapproved <small>DOE</small> <small>Date</small>  _____ <u>10/4/10</u> <input checked="" type="checkbox"/> Approved _____ Disapproved <small>EPA</small> <small>Date</small>  _____ <u>10/5/10</u> <input checked="" type="checkbox"/> Approved _____ Disapproved <small>Ecology</small> <small>Date</small>	Page 1 of 2
---	-------------

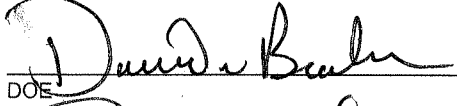
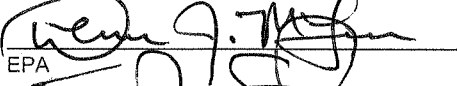

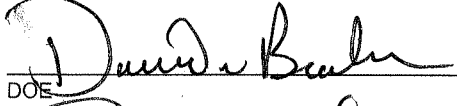
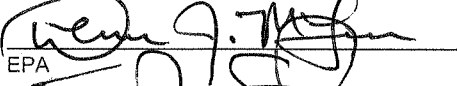

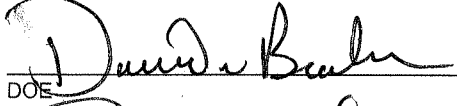
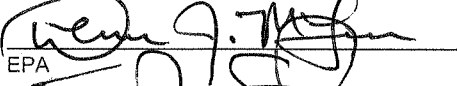

The following Major Milestone is hereby **deleted**, as shown by use of ~~strikeout~~, from the Hanford Federal Facility Agreement and Consent Order.

M-051-00	COMPLETE VITRIFICATION OF HANFORD HIGH LEVEL TANK WASTE.	12/31/2028
----------	---	------------

Change Number M-61-09-01	Federal Facility Agreement and Consent Order Change Control Form <small>Do not use blue ink. Type or print using black ink.</small>	Date October 5, 2010									
Originator The U.S. Department of Energy, the State of Washington Department of Ecology, and the U.S. Environmental Protection Agency.		Phone									
Class of Change <input checked="" type="checkbox"/> I - Signatories <input type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager											
Change Title Hanford Federal Facility Agreement and Consent Order Milestone Modifications to M-061-00 for Pretreatment and Immobilization of Hanford Low Activity Waste, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.											
Description/Justification of Change This change form reflects the results of the 2007 - 2009 Hanford negotiations on milestones for Pretreatment and Immobilization of Hanford Low Activity Waste in the M-061-00 series and carries out modifications to the milestones in the HFFACO.											
Impact of Change The modifications in this document are conditioned upon approval of the following TPA change packages M-36-09-01, M-42-09-01, M-45-09-01, M-47-09-01, M-50-09-01, M-51-09-01, M-61-09-01, M-62-09-01, M-90-09-01, P-09-09-02 and I-09-01, and shall go into effect upon entry of the Consent Decree in <i>Washington v. DOE</i> , Case No. 08-5085-FVS.											
Affected Documents The <u>Hanford Federal Facility Agreement and Consent Order</u> , as amended.											
Approvals <table border="0"> <tr> <td data-bbox="89 1554 552 1648">  DOE </td> <td data-bbox="617 1554 763 1648"> 10/4/10 Date </td> <td data-bbox="795 1554 1161 1648"> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved </td> </tr> <tr> <td data-bbox="89 1648 552 1732">  EPA </td> <td data-bbox="617 1648 763 1732"> 10/4/10 Date </td> <td data-bbox="795 1648 1161 1732"> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved </td> </tr> <tr> <td data-bbox="89 1732 552 1816">  Ecology </td> <td data-bbox="617 1732 763 1816"> 10/5/10 Date </td> <td data-bbox="795 1732 1161 1816"> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved </td> </tr> </table>		 DOE	10/4/10 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved	 EPA	10/4/10 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved	 Ecology	10/5/10 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved	Page 1 of 2
 DOE	10/4/10 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved									
 EPA	10/4/10 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved									
 Ecology	10/5/10 Date	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved									

The following Major Milestone is hereby **deleted**, as shown by use of ~~strikeout~~, from the Hanford Federal Facility Agreement and Consent Order.

M-061-00	COMPLETE PRETREATMENT AND IMMOBILIZATION OF HANFORD- LOW ACTIVITY WASTE (LAW).	12/31/2028
----------	---	------------

Change Number M-62-09-01	Federal Facility Agreement and Consent Order Change Control Form <small>Do not use blue ink. Type or print using black ink.</small>	Date October 5, 2010									
Originator The U.S. Department of Energy, the State of Washington Department of Ecology, and the U.S. Environmental Protection Agency.		Phone									
Class of Change <input checked="" type="checkbox"/> I - Signatories <input type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager											
Change Title Hanford Federal Facility Agreement and Consent Order Milestone Modifications to M-062-00 for Pretreatment Processing and Vitrification of Hanford High Level (HLW) and Low Activity (LAW) Tank Wastes, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.											
Description/Justification of Change This change form reflects the results of the 2007 - 2009 Hanford negotiations on milestones for Pretreatment Processing and Vitrification of Hanford High Level (HLW) and Low Activity (LAW) Tank Wastes in the M-062-00 series and carries out modifications to the milestones in the HFFACO.											
Impact of Change The modifications in this document are conditioned upon approval of the following TPA change packages M-36-09-01, M-42-09-01, M-45-09-01, M-47-09-01, M-50-09-01, M-51-09-01, M-61-09-01, M-62-09-01, M-90-09-01, P-09-09-02 and I-09-01, and shall go into effect upon entry of the Consent Decree in <i>Washington v. DOE</i> , Case No. 08-5085-FVS.											
Affected Documents The <u>Hanford Federal Facility Agreement and Consent Order</u> , as amended.											
Approvals <table border="0"> <tr> <td data-bbox="66 1522 609 1627">  _____ DOE </td> <td data-bbox="609 1522 787 1627"> 10/4/10 Date </td> <td data-bbox="787 1522 1258 1627"> <input checked="" type="checkbox"/> Approved _____ Disapproved </td> </tr> <tr> <td data-bbox="66 1627 609 1711">  _____ EPA </td> <td data-bbox="609 1627 787 1711"> 10/4/10 Date </td> <td data-bbox="787 1627 1258 1711"> <input checked="" type="checkbox"/> Approved _____ Disapproved </td> </tr> <tr> <td data-bbox="66 1711 609 1827">  _____ Ecology </td> <td data-bbox="609 1711 787 1827"> 10/5/10 Date </td> <td data-bbox="787 1711 1258 1827"> <input checked="" type="checkbox"/> Approved _____ Disapproved </td> </tr> </table>		 _____ DOE	10/4/10 Date	<input checked="" type="checkbox"/> Approved _____ Disapproved	 _____ EPA	10/4/10 Date	<input checked="" type="checkbox"/> Approved _____ Disapproved	 _____ Ecology	10/5/10 Date	<input checked="" type="checkbox"/> Approved _____ Disapproved	Page 1 of 14
 _____ DOE	10/4/10 Date	<input checked="" type="checkbox"/> Approved _____ Disapproved									
 _____ EPA	10/4/10 Date	<input checked="" type="checkbox"/> Approved _____ Disapproved									
 _____ Ecology	10/5/10 Date	<input checked="" type="checkbox"/> Approved _____ Disapproved									

The following Interim Milestones are hereby **added** to the Hanford Federal Facility Agreement and Consent Order.

All new milestones established in this change form are established with the State of Washington Department of Ecology as the Lead Regulatory Agency.

M-062-20	<p>Close all 28 issues, as originally identified, in <i>Comprehensive Review of the Hanford Waste Treatment Plant Flowsheet and Throughput Assessment Conducted by an Independent Team of External Experts</i>, issued in March 2006.</p> <p>For purposes of this milestone M-062-20, "close" is defined as the Technology Steering Committee's approval signature of closeout documentation for each issue.</p>	12/31/2010
M-062-21	<p>On an annual basis, submit data, whose accuracy is certified in accordance with WAC 173-303-810(13), and which demonstrates on a rolling three year average, operation of WTP, and any supplemental treatment if needed, at a rate sufficient to accomplish treatment of all Hanford tank waste in accordance with the date required by milestone M-062-00, taking into account that treatment rates are expected to vary based upon a number of factors, including the character of the waste treated, or alternatively describe plans to increase the rate beyond that previously anticipated in order to achieve treatment of all Hanford tank waste by the M-062-00 milestone date.</p>	2/28/2023 and annually thereafter
M-062-30	<p>Without restricting the discretion reserved to DOE and Ecology under M-062-45 item #3 to make the supplemental treatment decision in accordance with M-062-45 item #3 under that milestone, DOE and Ecology shall complete negotiations establishing milestones for implementing near-term (2011-2016) actions, such as those identified in the 2008 External Technical Review of System Planning for Low-Activity Waste Treatment at Hanford report, for enhancing WTP tank waste treatment and advancing the evaluation of supplemental treatment options. Such actions may include, among other actions: enhancing WTP LAW melter production rates; installing a third melter in the WTP LAW Facility; cold and hot testing strategies for bulk vitrification; and evaluating and implementing sodium mitigation strategies.</p>	Twelve (12) months after milestone M-062-30 is adopted by the parties
M-062-31-T01	<p>Complete Final Design and Submit a complete RCRA Part B Permit Modification request for Enhanced WTP and/or Supplemental Vitrification Treatment Facility based on the M-062-45 decision.</p>	12 months after M-062-45 item #3 decision on supplemental treatment

<p>M-062-32-T01 See * in M-062-45</p>	<p>Start construction of Supplemental Vitrification Treatment Facility and/or WTP Enhancements.</p>	<p>36 months after M-062-45 item #3 decision on supplemental treatment, provided that Ecology has issued a final permit modification at least twelve (12) months earlier</p>
<p>M-062-33-T01 See * in M-062-45</p>	<p>Complete construction of Supplemental Treatment Vitrification Facility and/or WTP Enhancements.</p>	<p>72 months after M-062-45 item #3 decision on supplemental treatment</p>
<p>M-062-34-T01 See * in M-062-45</p>	<p>Complete Hot Commissioning of Supplemental Treatment Vitrification Facility and/or WTP Enhancements.</p>	<p>92 months after M-062-45 item #3 decision on supplemental treatment</p>
<p>M-062-40</p>	<p>Submit a System Plan to Ecology describing the disposition of all tank waste managed by the Office of River Protection, including the retrieval of all tanks not addressed by the Consent Decree in <i>Washington v. DOE</i>, Case No. 08-5085-FVS, and the completion of the treatment mission.</p> <p>The Plan will be updated and submitted to Ecology every three years to document any further optimization of retrieval and waste treatment capabilities to, in the case of SST retrievals, complete such retrievals as quickly as is technically feasible (but not later than the date established in milestone M-045-70), and, in the case of tank waste treatment, complete such treatment as quickly as is technically feasible (but not later than the date established in milestone M-062-00), both with and without consideration of (i) whether such further optimization would be excessively difficult or expensive within the context of such activities and (ii) any impact on the overall cleanup mission.</p> <p>One year prior to the issuance of the System Plan, DOE and Ecology will each select the scenarios (including underlying common and scenario-specific assumptions) that will be analyzed in the System Plan, with DOE and Ecology each having the right to select a minimum of three scenarios each.</p> <p>The Plan will include the following elements:</p> <p>OVERALL MINIMUM REQUIREMENTS</p> <p>The Plan will present the following minimum information for each</p>	<p>Starting October 31, 2010, and every three years thereafter, Ecology and DOE will each have the right to select a minimum of three scenarios that will be analyzed in the System Plan.</p> <p>Beginning October 31, 2011, and every three years thereafter, issue the System Plan.</p>

scenario evaluated:

- A system description for each system utilized in the planning
- Planning bases for each case
- A description of key issues, assumptions, and vulnerabilities for each scenario evaluated; a description of how such issues, assumptions and vulnerabilities are addressed in the evaluation.
- Sensitivities analysis of selected key assumptions
- Estimated schedule impacts of alternative cases relative to the baseline, including cost comparisons for a limited subset of scenarios that DOE and Ecology wish to analyze further.
- Identification of new equipment, technology, or actions needed for the scenario (e.g., new evaporators or DSTs; new retrieval technologies; waste treatment enhancements or mitigations, such as sodium, sulfate, aluminum and chrome mitigation measures).
- Identification of issues, techniques or technologies that need to be further evaluated or addressed in order to accelerate tank retrievals and tank waste treatment
- Impacts on closure activities for each scenario.

TANK WASTE TREATMENT

The Plan will evaluate scenarios and identify potential near and long-term actions to optimize tank waste treatment so that the treatment mission is completed as quickly as is technically feasible but not later than the date established in milestone M-062-00, with and without consideration of (i) whether such further optimization would be excessively difficult or expensive within the context of such activities and (ii) any impact on the overall cleanup mission.

The Plan will, at a minimum, describe how the tank waste treatment mission can:

- Pretreat 100% of the retrievable tank waste (at a rate sufficient to operate the HLW facility, LAW facility, and Supplemental Treatment system simultaneously at their estimated average production rates).
- Vitrify 100% of the separated high-level waste stream at estimated average production rates.
- Vitrify 100% of separated low-activity waste stream at estimated average production rates.

- Appropriately manage secondary waste streams.

The Plan will take into account the results from testing of the Pretreatment Engineering Platform and other studies.

SUPPLEMENTAL TREATMENT

The Plan will also describe:

- How much total sodium will need to be treated.
- The needed capacity for supplemental treatment to have all the tank waste treated by a date that is as quickly as is technically feasible but not later than the date established in milestone M-062-00, with and without consideration of (i) whether such further optimization would be excessively difficult or expensive within the context of such activities and (ii) any impact on the overall cleanup mission.

The System Plan will outline specific options to treat all the LAW. Such options include:

- Build and operate a 2nd LAW Vitrification Facility.
- Build and operate a Bulk Vitrification Facility.

Not later than the System Plan Report due date of 10/31/2014, DOE will submit a one-time Hanford Tank Waste Supplemental Treatment Technologies Report, which will be required if a tank waste supplemental treatment technology is proposed, other than a 2nd LAW Vitrification Facility.

This report will:

- Describe additional treatment facilities and technologies, and cost which in combination with the WTP are needed to vitrify all of Hanford's tank waste by a date that is as quickly as is technically feasible but not later than the date established in milestone M-062-00, with and without consideration of (i) whether such further optimization would be excessively difficult or expensive within the context of such activities and (ii) any impact on the overall cleanup mission.
- Apply the same selection criteria to all options and include a 2nd LAW Vitrification Facility as an option.
- Include all the results from all waste form performance data (compared against the performance of borosilicate glass) for all the treatment technologies being considered.
- Describe the technologies being considered (including size,

throughput, sodium loading, quantity of waste to be processed, quantity of final waste forms, secondary waste quantity and nature, technical viability, and life cycle cost and schedule estimates).

- Include data from both cold and hot testing if bulk vitrification is to be retained as an option.

TANK WASTE RETRIEVAL

The Plan will evaluate scenarios and identify potential near and long-term actions to optimize tank waste retrieval so that the single-shell tank retrievals are completed as quickly as is technically feasible but not later than the date established in milestone M-045-70, with and without consideration of (i) whether such further optimization would be excessively difficult or expensive within the context of such activities and (ii) any impact on the overall cleanup mission.

The Plan will consider:

- SST integrity information, including the SST integrity assurance review provided under milestone M-045-91 and any further integrity assessments.
- Waste retrieval rate sufficient to operate all waste treatment facilities at their full capacities, considering optimized waste feed rates.
- The effect on waste retrieval rates of the waste retrieval technologies selected through the TWRWP process.
- Sequences for remaining SSTs and DSTs to be retrieved based on a risk prioritization strategy, waste treatment feed optimization as affected by blending, and Waste Management Waste Area Closure considerations.

The Plan will also take into account the results from previous waste retrievals and other waste treatment studies. This shall include:

- The retrieval methodologies that could be employed and estimated waste volumes to be generated for transfer to the DST or other safe storage.
- DST space evaluations for the waste retrieval sequence.
- Proposed improvements to reduce waste retrieval durations.

CONTINGENCY PLANNING

The Plan will identify and consider possible contingency measures to address the following risks:

	<ul style="list-style-type: none"> • Results from SST integrity evaluations. • If retrievals take longer than originally anticipated and there is potential impact to the schedule for retrieving specified tanks under this agreement. • If DST space is not sufficient or is not available to support continued retrievals on schedule. • If any portion of the WTP does not initiate cold commissioning on schedule. • If any portion of the WTP does not complete hot start on schedule. • If operation of the WTP does not meet treatment rates that are adequate to complete retrievals under the schedule in this agreement. For example, the contingency measures will address estimated pretreatment facility throughput as affected by ultrafiltration capacity and oxidative leaching requirements. <p>The contingency measures identified for consideration should include, but not be limited to, providing new, compliant tanks with sufficient capacity and in sufficient time to complete retrievals under this agreement, regardless of WTP operational deficiencies or retrieval conditions.</p>	
<p>M-062-45</p>	<p>Every six years, within six months of the issuance of the last revision of the System Plan, the parties will negotiate the following:</p> <ol style="list-style-type: none"> 1. Commencing as target milestones in 2015 and enforceable milestones in 2021 and each negotiation thereafter, tank waste retrieval sequencing and milestones, and milestones for installation of infrastructure to feed tank waste from the DST system to the tank waste treatment system, for the next eight years. 2. Contingency actions and milestones, if and as necessary, for providing new, compliant tanks with sufficient capacity and in sufficient time to complete retrievals under this agreement, regardless of WTP operational deficiencies or retrieval conditions. 3. Supplemental treatment selection (a one time selection to be made not later than April 30, 2015) and milestones, which must be consistent with M-062-00 as established by M-062-45 item #5. A 2nd LAW Vitrification Facility must be considered as one of the options. *Milestones M-062-31-T01 through M-062-34-T01 are initially set as target dates and will be established (as may be modified) as interim milestones when they are converted to interim milestones in accordance with applicable HFFACO procedures at the 	<p>April 30, 2015, and every six years thereafter.</p>

conclusion of this negotiation.

4. The date in milestone M-045-70 for completion of the tank waste retrievals as expeditiously as possible.
5. The date in milestone M-062-00 for completion of tank waste treatment as expeditiously as possible.
6. Milestones for the provision of IHLW canister storage capacity for the six year period of WTP operation for the operating period that begins in January 2022. Additional milestones for the provision of such canister capacity will be established as needed every six years thereafter for the storage of IHLW for the subsequent six year period of WTP operations.
7. Reevaluate milestones to establish facilities to manage secondary waste streams from the WTP by the date that the WTP achieves initial plant operations.

As used in paragraphs 4 and 5, above, the phrase 'as expeditiously as possible' means, in the case of SST retrievals, completing such retrievals as quickly as is technically feasible but not later than the date established in milestone M-045-70, and in the case of tank waste treatment, completing such treatment as quickly as is technically feasible but not later than the date established in milestone M-062-00, and in each case without excessive difficulty or expense within the context of such activities, and in consideration of any impact on the overall cleanup mission.

By the milestone due date, the parties will complete negotiations on the above matters. Although multiple scenarios may be considered in the course of the negotiations, and none may be considered wholly appropriate, the final decisions in items 1 through 7 above will be consistent with a single scenario, including any agreed-upon supplemental sensitivity analyses. The parties agree that the chosen scenario alone need not dictate matters in the negotiations and that other information may be considered as the parties deem appropriate.

In the event Ecology and DOE do not reach agreement for the matters in M-062-45 paragraphs 1, 2, 3, 6, and 7 the dispute between Ecology and DOE will be resolved pursuant to the HFFACO Article VIII.

The dispute resolution process in HFFACO, Article VIII, does not apply to the determinations in M-062-45 paragraphs 4 and 5. Rather, these disputes shall be governed by the Consent Decree in *Washington v. DOE, Case No. 08-5085-FVS*. No later than 12/31/2021, the United States and Ecology shall complete negotiations to establish a mechanism that will apply to resolve future disputes regarding the determinations in M-062-45

	paragraphs 4 and 5. The United States and Ecology have reserved their rights regarding the mechanism that should apply to such future disputes, in the event that they cannot reach agreement.	
M-062-49	<p>Submit a report to the Department of Ecology, with data, whose accuracy is certified in accordance with WAC 173-303-810(13), and which demonstrates that the WTP is designed to accomplish at least the following:</p> <ul style="list-style-type: none">• Pretreat 100% of retrievable tank waste (i.e., 48,000 MT of sodium and 25,000 MT of solids).• Vitrify 100% of the separated high-level waste stream (estimated at 4.2 MTG/d, at the assumed operating efficiency).• WTP LAW combined with supplemental treatment (bulk vitrification or second LAW) can vitrify 100% of separated low-level waste stream (estimated at 21 MTG/d, at the assumed operating efficiency, for WTP LAW).	10/31/2011

Specific Major and Interim Milestones are **modified** as shown by use of ~~strikeout~~ to indicate deleted text and **shading** to indicate added text.


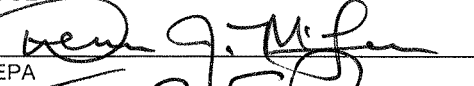
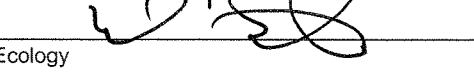
<p>M-062-00</p>	<p>COMPLETE PRETREATMENT PROCESSING AND VITRIFICATION OF HANFORD HIGH LEVEL (HLW) AND LOW ACTIVITY (LAW) TANK WASTES.</p> <p>COMPLIANCE WITH THE WORK SCHEDULES SET FORTH IN THIS M-62 MILESTONE SERIES IS DEFINED AS THE PERFORMANCE OF SUFFICIENT WORK TO ASSURE WITH REASONABLE CERTAINTY THAT DOE WILL ACCOMPLISH SERIES M-62 MAJOR AND INTERIM MILESTONE REQUIREMENTS.</p> <p>DOE INTERNAL WORK SCHEDULES (E.G., DOE APPROVED SCHEDULE BASELINES) AND ASSOCIATED WORK DIRECTIVES AND AUTHORIZATIONS FOR THIS MILESTONE SERIES SHALL BE CONSISTENT WITH THE REQUIREMENTS OF THIS AGREEMENT. MODIFICATION OF DOE CONTRACTOR BASELINE(S) AND ISSUANCE OF ASSOCIATED DOE WORK DIRECTIVES AND/OR AUTHORIZATIONS THAT ARE NOT CONSISTENT WITH AGREEMENT REQUIREMENTS SHALL NOT BE FINALIZED PRIOR TO APPROVAL OF AN AGREEMENT CHANGE REQUEST SUBMITTED PURSUANT TO AGREEMENT ACTION PLAN SECTION 12.0.</p>	<p>12/31/2028 12/31/2047 or earlier as established by M-062-45</p>
<p>M-062-00A</p>	<p>COMPLETE WTP PRETREATMENT PROCESSING AND VITRIFICATION OF HANFORD HLW AND LAW TANK WASTES.</p> <p>TANK WASTE PROCESSING SHALL COMPLETE THE WTP PRETREATMENT AND VITRIFICATION OF NO LESS THAN 10% OF HANFORD'S TANK WASTE BY MASS* AND 25% BY ACTIVITY.</p> <p>*[IN MEETING THIS REQUIREMENT DOE WILL PRETREAT AND VITRIFY NO LESS THAN 6000 METRIC TONS OF SODIUM (IN THE INSTANCE OF LAW FEED) AND 800 METRIC TONS OF WASTE OXIDES (IN THE INSTANCE OF HLW FEED)].</p>	<p>02/28/2018</p>

M-062-01S and beyond	<p>SUBMIT SEMI-ANNUAL PROJECT COMPLIANCE REPORT</p> <p>DOE's MANAGER, OFFICE OF RIVER PROTECTION (ORP), WILL SUBMIT A "PROJECT COMPLIANCE REPORT" TO ECOLOGY SEMI-ANNUALLY (A COPY OF THIS REPORT WILL ALSO BE PROVIDED TO EPA's REGION 10 OFFICE OF WASTE AND CHEMICALS MANAGEMENT). THIS REPORT WILL DOCUMENT DOE COMPLIANCE WITH AGREEMENT REQUIREMENTS AND SHALL BE SEQUENTIALLY UPDATED BY INFORMATION DOCUMENTING WORK PERFORMED AND ISSUES ENCOUNTERED DURING THE PREVIOUS REPORT PERIOD. THE ORP PROJECT COMPLIANCE REPORT WILL BE PROVIDED AS PART OF THE PARTIES' INTER AGENCY MANAGEMENT INTEGRATION TEAM (IAMIT) MEETINGS, AND SHALL DOCUMENT THE STATUS OF PROGRESS TO DATE, PROGRESS MADE DURING THE REPORT PERIOD, AND ACTIVITIES EXPECTED IN THE FORSEEABLE FUTURE. THE REPORT WILL INCLUDE, BUT IS NOT LIMITED TO: (1) A CONCISE DESCRIPTION OF PROJECT ACCOMPLISHMENTS AND ISSUES INCLUDING THOSE ENCOUNTERED DURING THE PREVIOUS YEAR AND THOSE EXPECTED IN THE NEAR TERM, (2) WHEN APPLICABLE, A DESCRIPTION OF ACTIONS INITIATED OR OTHERWISE TAKEN TO RECOVER ANY AGREEMENT SCHEDULE SLIPPAGE, (3) A BUDGET AND COST STATUS, (4) A STATEMENT DOCUMENTING WHETHER OR NOT DOE AND DOE'S CONTRACTOR(S) REMAIN IN COMPLIANCE WITH AGREEMENT REQUIREMENTS, I.E., WHETHER OR NOT "DOE AND DOE'S CONTRACTOR(S) HAVE COMPLETED SUFFICIENT WORK TO ALLOW ACHIEVEMENT OF AGREEMENT REQUIREMENTS.", AND (5) CONCISE DESCRIPTIONS OF ANY NONCOMPLIANCE. COPIES OF ALL PERTINANT DOE WORK DIRECTIVES AND/OR AUTHORIZATIONS ISSUED TO DOE'S CONTRACTOR(S) SHALL BE PROVIDED ON REQUEST.</p>	07/31/2009 Semi-annually beginning July 31, 2001
M-062-01T and beyond	<p>SUBMIT SEMI-ANNUAL PROJECT COMPLIANCE REPORT</p> <p>DOE's MANAGER, OFFICE OF RIVER PROTECTION (ORP), WILL SUBMIT A "PROJECT COMPLIANCE REPORT" TO ECOLOGY SEMI-ANNUALLY (A COPY OF THIS REPORT WILL ALSO BE PROVIDED TO EPA's REGION 10 OFFICE OF WASTE AND CHEMICALS MANAGEMENT). THIS REPORT WILL DOCUMENT DOE COMPLIANCE WITH AGREEMENT REQUIREMENTS AND SHALL BE SEQUENTIALLY UPDATED BY INFORMATION DOCUMENTING WORK PERFORMED AND ISSUES ENCOUNTERED DURING THE PREVIOUS REPORT PERIOD. THE ORP PROJECT COMPLIANCE REPORT WILL BE PROVIDED AS PART OF THE PARTIES' INTER AGENCY MANAGEMENT INTEGRATION TEAM (IAMIT) MEETINGS, AND SHALL DOCUMENT THE STATUS OF PROGRESS TO DATE, PROGRESS MADE DURING THE REPORT PERIOD, AND</p>	01/31/2010 Semi-annually beginning July 31, 2001

	<p>ACTIVITIES EXPECTED IN THE FORSEEABLE FUTURE. THE REPORT WILL INCLUDE, BUT IS NOT LIMITED TO: (1) A CONCISE DESCRIPTION OF PROJECT ACCOMPLISHMENTS AND ISSUES INCLUDING THOSE ENCOUNTERED DURING THE PREVIOUS YEAR AND THOSE EXPECTED IN THE NEAR TERM, (2) WHEN APPLICABLE, A DESCRIPTION OF ACTIONS INITIATED OR OTHERWISE TAKEN TO RECOVER ANY AGREEMENT SCHEDULE SLIPPAGE, (3) A BUDGET AND COST STATUS, (4) A STATEMENT DOCUMENTING WHETHER OR NOT DOE AND DOE'S CONTRACTOR(S) REMAIN IN COMPLIANCE WITH AGREEMENT REQUIREMENTS, I.E., WHETHER OR NOT "DOE AND DOE'S CONTRACTOR(S) HAVE COMPLETED SUFFICIENT WORK TO ALLOW ACHIEVEMENT OF AGREEMENT REQUIREMENTS.", AND (5) CONCISE DESCRIPTIONS OF ANY NONCOMPLIANCE. COPIES OF ALL PERTINANT DOE WORK DIRECTIVES AND/OR AUTHORIZATIONS ISSUED TO DOE'S CONTRACTOR(S) SHALL BE PROVIDED ON REQUEST.</p>	
<p>M-062-07B</p>	<p>COMPLETE ASSEMBLY OF LOW ACTIVITY WASTE-VITRIFICATION FACILITY MELTER #1 SO THAT IT IS READY FOR TRANSPORT AND INSTALLATION IN THE LAW-VITRIFICATION BUILDING (BNI BASELINE SCHEDULE ACTIVITY 4DL321A200 AS PART OF DOE CONTRACT No. DE-AC27-01RV14136), AND COMPLETE SCHEDULE ACTIVITY ID-4DH46102A2 - MOVE #1 MELTER INTO THE HIGH LEVEL WASTE VITRIFICATION FACILITY.</p> <p>This milestone represents 1) the assembly of LAW Melter #1 to the point it is ready for Refractory as part of BNI Baseline activities 3EL3212A00 Specifications and Analysis, 4DL321A000 LAW - Procure Material & Equipment for Melters and 4DL321A200 LAW - Assemble Melter #1 (Contract No. DE-AC27-01RV14136). In addition, activities 4DL121U100 LAW - Elev +3 South Melter FREP and 4DL131D000 LAW - Elev +28 Columns, Beams & Q-Decking at +48 shall be substantially completed, 2) moving the first HLW melter into the HLW facility as defined in BNI baseline activities ID-4DH46102A2.</p> <p>Completion of this milestone will be met when 1) LAW melter #1 will have been fully fabricated, assembled and ready for refractory material to be installed. Assembly of the melter is scheduled to occur near the end of LAW construction when the facility is most ready to have the assembled melter moved into the LAW cell where the refractory material will be installed. Meeting this milestone therefore represents significant accomplishment of the engineering, design and construction of the LAW facility; and 2) HLW melter #1 has been fully fabricated and moved into the HLW vitrification facility.</p>	<p>12/31/2007</p>


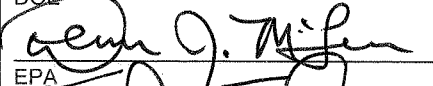

M-062-08	<p>SUBMITTAL OF HANFORD TANK WASTE SUPPLEMENTAL TREATMENT TECHNOLOGIES REPORT, DRAFT HANFORD TANK WASTE TREATMENT BASELINE, AND DRAFT NEGOTIATIONS AGREEMENT IN PRINCIPLE (AIP).</p> <p>DOE WILL SUBMIT A SUPPLEMENTAL TREATMENT TECHNOLOGIES REPORT THAT DESCRIBES THE TECHNICAL, FINANCIAL, AND CONTRACTUAL ALTERNATIVES WHICH IN COMBINATION WITH THE WTP AND ANY REQUIRED ADDITIONAL LAW VITRIFICATION FACILITIES, ARE NEEDED TO TREAT ALL OF HANFORD'S TANK WASTES. THE REPORT WILL IDENTIFY AND DESCRIBE VIABLE PATH(S) FORWARD TO COMPLETE TREATMENT OF ALL TANK WASTES BY 12/31/2028. THE REPORT SHALL APPLY THE SAME SELECTION CRITERIA TO ALL OPTIONS AND INCLUDE THE 2ND LAW VITRIFICATION FACILITY AS AN OPTION. THE REPORT WILL INCLUDE: THE RESULTS OF ALL WASTE FORM PERFORMANCE DATA (COMPARED AGAINST THE PERFORMANCE OF BOROSILICATE GLASS) FOR ALL THE TREATMENT TECHNOLOGIES BEING CONSIDERED; PERFORMANCE DATA WILL BE ADEQUATE TO MAKE DECISIONS AS TO THE ACCEPTABILITY OF ANY PROPOSED WASTE FORM FOR THE WASTE BEING CONSIDERED, AND DESCRIPTION OF THE CONSIDERED TREATMENT TECHNOLOGIES (INCLUDING SIZE, THROUGHPUT, TECHNICAL VIABILITY, AND LIFE CYCLE COST ESTIMATES).</p> <p>THIS REPORT WILL ALSO INCLUDE A DISCUSSION OF WASTE TREATMENT PLANT THROUGHPUT COMMITMENTS AND THE REALISTIC POTENTIAL FOR ENHANCING THE THROUGHPUT OF CURRENTLY PLANNED MELTERS, PROPOSED ADDITIONAL MELTERS AND POTENTIAL SECOND-GENERATION MELTERS INSTALLED AT FIRST MELTER CHANGE OUT.</p> <p>THE DRAFT BASELINE WILL CONTAIN DOE'S PROPOSED APPROACH FOR TREATING ALL HANFORD TANK WASTES (HLW, LAW, AND TRU) BY 12/31/2028 INCLUDING LIFE CYCLE COST ESTIMATES THAT INDICATE PROJECTED FUNDING REQUIREMENTS THROUGH COMPLETION OF THE RIVER PROTECTION PROJECT MISSION, A SCHEDULE FOR CONSTRUCTION AND OPERATION OF PROPOSED NEW FACILITIES AND/OR ENHANCEMENTS TO THE WTP, AND PROJECTED THROUGHPUT FOR EACH FACILITY.</p> <p>THE REPORT AND BASELINE WILL BE ACCOMPANIED BY A DRAFT NEGOTIATIONS AGREEMENT IN PRINCIPLE (AIP) AND DRAFT AGREEMENT CHANGE REQUEST CONTAINING MILESTONES AND ASSOCIATED AGREEMENT REQUIREMENTS SUFFICIENT TO EFFECTIVELY DRIVE ALL REQUIRED WORK, INCLUDING BUT NOT LIMITED TO: 1) THE ESTABLISHMENT OF REQUIREMENTS REGARDING ANY</p>	06/30/2006
----------	--	------------

	<p>NECESSARY WTP MODIFICATION(S), 2) THE ESTABLISHMENT OF REQUIREMENTS SCHEDULING THE ACQUISITION AND OPERATION OF ANY APPROVED TREATMENT TECHNOLOGY SYSTEMS, 3) THE ESTABLISHMENT OF PRODUCTION METRICS FOR TREATMENT COMPLEX (WTP PLUS ANY SUPPLEMENTAL TREATMENT SYSTEM OR SECOND LAW VITRIFICATION FACILITY) CONSISTENT WITH COMPLETION OF TREATMENT BY 12/31/2028, 4) THE ESTABLISHMENT OF REQUIREMENTS SCHEDULING ACQUISITION AND OPERATION OF FEED DELIVERY SYSTEMS FOR ANY APPROVED SUPPLEMENTAL TECHNOLOGY (M-47 MILESTONES). THE AIP WILL BE FINALIZED WITHIN 30 DAYS OF SUBMITTAL AND PROVIDE THAT NEGOTIATIONS WILL BE COMPLETED WITHIN ONE HUNDRED AND EIGHTY (180) DAYS OF AIP FINALIZATION, AND WILL PROVIDE THAT, IN THE EVENT THE PARTIES DO NOT REACH AGREEMENT WITHIN THIS TIMEFRAME, THE NEGOTIATIONS WILL BE RESOLVED AS A RESOLUTION OF A DISPUTE VIA FINAL DETERMINATION OF THE DIRECTOR OF ECOLOGY PURSUANT TO HFFACO ARTICLE VIII. UNLESS OTHERWISE AGREED BY THE PARTIES, THIS FINAL DETERMINATION WILL BE ISSUED WITHIN SEVEN MONTHS OF AIP FINALIZATION.</p>	
<p>M-062-09</p>	<p>START COLD COMMISSIONING WASTE TREATMENT PLANT.</p> <p>DOE WILL START COLD COMMISSIONING OF ITS TANK WASTE TREATMENT PLANT. START OF COLD COMMISSIONING IS DEFINED AS INTRODUCTION OF FIRST FEED SIMULANT INTO A PROCESS BUILDING.</p>	<p>02/28/2009</p>
<p>M-062-10</p>	<p>COMPLETE HOT COMMISSIONING WASTE TREATMENT PLANT</p> <p>DOE WILL ACHIEVE SUSTAINED THROUGHPUT OF PRETREATMENT, LOW ACTIVITY WASTE VITRIFICATION AND HIGH LEVEL WASTE VITRIFICATION PROCESSES, AND DEMONSTRATE WTP TREATMENT COMPLEX AVAILABILITY TO COMPLETE TREATMENT OF NO LESS THAN 10% OF THE TANK WASTE BY MASS AND 25% OF THE TANK WASTE BY ACTIVITY BY DECEMBER 2018.</p>	<p>01/31/2011</p>
<p>M-062-11</p>	<p>SUBMIT A FINAL HANFORD TANK WASTE TREATMENT BASELINE.</p> <p>FOLLOWING THE COMPLETION OF NEGOTIATIONS REQUIRED IN M-62-08, DOE WILL MODIFY ITS DRAFT BASELINE AS REQUIRED AND SUBMIT ITS REVISED, AGREED TO, BASELINE FOR TREATING ALL HANFORD TANK WASTE (HLW, LAW, AND TRU) BY 12/31/2028.</p>	<p>06/30/2007</p>

Change Number M-90-09-01	Federal Facility Agreement and Consent Order Change Control Form <small>Do not use blue ink. Type or print using black ink.</small>	Date October 5, 2010
Originator The U.S. Department of Energy, the State of Washington Department of Ecology, and the U.S. Environmental Protection Agency.		Phone
Class of Change <input checked="" type="checkbox"/> I - Signatories <input type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager		
Change Title Hanford Federal Facility Agreement and Consent Order Milestone Modifications to M-090-00 for Acquisition of Facilities for Storage of Hanford Site IHLW and ILAW and Disposal of ILAW, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.		
Description/Justification of Change This change form reflects the results of the 2007 - 2009 Hanford negotiations on milestones for Acquisition of Facilities for Storage of Hanford Site IHLW and ILAW and Disposal of ILAW in the M-090-00 series and carries out modifications to the milestones in the HFFACO.		
Impact of Change The modifications in this document are conditioned upon approval of the following TPA change packages M-36-09-01, M-42-09-01, M-45-09-01, M-47-09-01, M-50-09-01, M-51-09-01, M-61-09-01, M-62-09-01, M-90-09-01, P-09-09-02 and I-09-01, and shall go into effect upon entry of the Consent Decree in <i>Washington v. DOE</i> , Case No. 08-5085-FVS.		
Affected Documents The <u>Hanford Federal Facility Agreement and Consent Order</u> , as amended.		
Approvals <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;">  DOE </div> <div style="width: 30%;"> 10/4/10 X Date </div> <div style="width: 30%;"> Approved _____ Disapproved _____ </div> </div> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-top: 10px;"> <div style="width: 30%;">  EPA </div> <div style="width: 30%;"> 10/4/10 X Date </div> <div style="width: 30%;"> Approved _____ Disapproved _____ </div> </div> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-top: 10px;"> <div style="width: 30%;">  Ecology </div> <div style="width: 30%;"> 10/5/10 X Date </div> <div style="width: 30%;"> Approved _____ Disapproved _____ </div> </div>		Page 1 of 2

The following Tri-Party Agreement Major and Interim Milestones are hereby **modified** as indicated by ~~strikeout~~ to indicate text to be deleted and **shading** to indicate text to be added.

<p>M-090-00</p>	<p>COMPLETE ACQUISITION OF NEW FACILITIES, MODIFICATION OF EXISTING FACILITIES, AND/OR MODIFICATION OF PLANNED FACILITIES AS NECESSARY FOR STORAGE OF THE FIRST TWO YEARS OF HANFORD SITE IHLW FROM WTP OPERATIONS AND ILAW, AND DISPOSAL OF ILAW.</p> <p>COMPLIANCE WITH THE WORK SCHEDULES SET FORTH IN THIS M-90 SERIES IS DEFINED AS THE PERFORMANCE OF SUFFICIENT WORK TO ASSURE WITH REASONABLE CERTAINTY THAT DOE WILL ACCOMPLISH SERIES M-90 MAJOR AND INTERIM MILESTONE REQUIREMENTS.</p> <p>DOE INTERNAL WORK SCHEDULES (E.G., DOE APPROVED SCHEDULE BASELINES) AND ASSOCIATED WORK DIRECTIVES AND AUTHORIZATIONS SHALL BE CONSISTENT WITH THE REQUIREMENTS OF THIS AGREEMENT. MODIFICATION OF DOE CONTRACTOR BASELINE(S) AND ISSUANCE OF ASSOCIATED DOE WORK DIRECTIVES AND/OR AUTHORIZATIONS THAT ARE NOT CONSISTENT WITH AGREEMENT REQUIREMENTS SHALL NOT BE FINALIZED PRIOR TO APPROVAL OF AN AGREEMENT CHANGE REQUEST SUBMITTED PURSUANT TO AGREEMENT ACTION PLAN SECTION 12.0.</p>	<p>To Be Established 6-Months After Approval of Project Management Plan The date that the WTP achieves hot start</p>
<p>M-090-11</p>	<p>COMPLETE THE NEGOTIATION OF NO MORE THAN TWO COMPLETE CANISTER STORAGE FACILITY CONSTRUCTION INTERIM MILESTONES.</p> <p>COMPLETION OF THIS MILESTONE REQUIRES THE COMPLETION OF ALL CONSTRUCTION, INTERNAL/EXTERNAL FACILITY(S) MODIFICATIONS AND STARTUP ACTIVITIES NECESSARY FOR CANISTER STORAGE FACILITY RECEIPT OF ALL HANFORD SITE HIGH LEVEL WASTE CANISTERS FROM TANK WASTE TREATMENT PLANT RESULTING FROM COMPLIANCE WITH 62-00A. FOR PURPOSES OF THESE INTERIM MILESTONES IHLW CANISTER STORAGE IS DEFINED AS THE CAPABILITY FOR STORAGE OF AT LEAST 600 THE FIRST TWO YEARS OF HANFORD SITE IHLW CANISTERS FROM WTP OPERATIONS. INTERIM MILESTONES AND ASSOCIATED TARGET DATES ESTABLISHING WORK SCHEDULES FOR</p> <p>ADDITIONAL IHLW CANISTER STORAGE WILL BE ESTABLISHED DURING NEGOTIATIONS REQUIRED BY MILESTONE M-62-08. FOR PERMITTING PURPOSES DETAIL DESIGNS OF CRITICAL SYSTEMS INCLUDES THE CANISTER STORAGE TUBE SYSTEM.</p>	<p>08/31/2010 12/31/2012</p>

Change Number P-09-09-02	Federal Facility Agreement and Consent Order Change Control Form <small>Do not use blue ink. Type or print using black ink.</small>	Date October 5, 2010
Originator Phone The U.S. Department of Energy, the State of Washington Department of Ecology, and the U.S. Environmental Protection Agency.		
Class of Change <input type="checkbox"/> I - Signatories <input checked="" type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager		
Change Title Hanford Federal Facility Agreement and Consent Order Modifications to Action Plan Section 9, Primary Document List, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.		
Description/Justification of Change This change form reflects the results of the 2007 - 2009 Hanford negotiations on modifications to TPA Action Plan Section 9, Primary Document List.		
Impact of Change The modifications in this document are conditioned upon approval of the following TPA change packages M-36-09-01, M-42-09-01, M-45-09-01, M-47-09-01, M-50-09-01, M-51-09-01, M-61-09-01, M-62-09-01, M-90-09-01, P-09-09-02 and I-09-01, and shall go into effect upon entry of the Consent Decree in <i>Washington v. DOE</i> , Case No. 08-5085-FVS.		
Affected Documents The <u>Hanford Federal Facility Agreement and Consent Order</u> , as amended.		
Approvals <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;">  DOE </div> <div style="width: 30%;"> 10/4/10 X Date Approved _____ Disapproved _____ </div> </div> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-top: 10px;"> <div style="width: 30%;">  EPA </div> <div style="width: 30%;"> 10/4/10 X Date Approved _____ Disapproved _____ </div> </div> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-top: 10px;"> <div style="width: 30%;">  Ecology </div> <div style="width: 30%;"> 10/5/10 X Date Approved _____ Disapproved _____ </div> </div>		Page 1 of 2

Description/Justification of Change (continued)

The following documents are hereby **added**, as shown by the use of **shading**, to the Hanford Federal Facility Agreement and Consent Order Action Plan list of Primary Document in Table 9-1.

Table 9-1. Primary Documents.

Remedial investigation/feasibility study (RI/FS) work plan

Remedial investigation (RI) Phase II report

Feasibility study (FS) Phases I and II report

FS Phase III report

Preclosure Work Plan

Proposed plan

Remedial design (RD) report

Remedial action (RA) work plan

Remedial design and remedial action (RD/RA) work plan

Operation and maintenance (O&M) plan

Closure plan

Part B permit application (for operation and/or postclosure)

RCRA facility assessment (RFA) report

RCRA facility investigation/corrective measures study (RFI/CMS) work plan

RCRA facility investigation (RFI) report (final)

Corrective measures study (CMS) report (preliminary and final)

Corrective measures implementation (CMI) work plan

Corrective measures design (CMD) report

Interim response action (IRA) proposal

Interim measure (IM) proposal

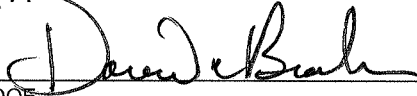
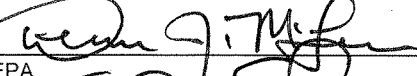
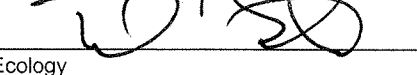
Waste/Material Stream Project Management (Work) Plans (see Action Plan Section 11.5).

Catch tank assumed leak response plan

Report on all catch tanks and associated pipelines identified in the SST System Part A or that have otherwise been known to be used for SST tank system operations

Other work plans (as specified in Section 11.6)

Other documents as specified elsewhere in the Agreement

Change Number I-09-01	Federal Facility Agreement and Consent Order Change Control Form <small>Do not use blue ink. Type or print using black ink.</small>	Date October 5, 2010
Originator Phone The U.S. Department of Energy, the State of Washington Department of Ecology, and the U.S. Environmental Protection Agency.		
Class of Change <input type="checkbox"/> I - Signatories <input checked="" type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager		
Change Title Hanford Federal Facility Agreement and Consent Order Modifications to Action Plan Appendix I, resulting from the 2007 - 2009 Hanford negotiations on changes to the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement or TPA.		
Description/Justification of Change This change form reflects the results of the 2007 - 2009 Hanford negotiations and carries out modifications to TPA Action Plan Appendix I in the HFFACO.		
Impact of Change The modifications in this document are conditioned upon approval of the following TPA change packages M-36-09-01, M-42-09-01, M-45-09-01, M-47-09-01, M-50-09-01, M-51-09-01, M-61-09-01, M-62-09-01, M-90-09-01, P-09-09-02 and I-09-01, and shall go into effect upon entry of the Consent Decree in <i>Washington v. DOE</i> , Case No. 08-5085-FVS.		
Affected Documents The <u>Hanford Federal Facility Agreement and Consent Order</u> , as amended.		
Approvals <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;">  DOE </div> <div style="width: 30%;"> 10/4/10 Date </div> <div style="width: 30%;"> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved </div> </div> <hr/> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;">  EPA </div> <div style="width: 30%;"> 10/4/10 Date </div> <div style="width: 30%;"> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved </div> </div> <hr/> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;">  Ecology </div> <div style="width: 30%;"> 10/5/10 Date </div> <div style="width: 30%;"> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved </div> </div>		Page 1 of 2

Description/Justification of Change (continued)

The following text is hereby **added**, as shown by the use of **shading**, to the Hanford Federal Facility Agreement and Consent Order Action Plan Appendix I, Section 2.1.

APPENDIX I - SINGLE-SHELL TANK SYSTEM WASTE RETRIEVAL AND CLOSURE PROCESS

2.1 TANK WASTE RETRIEVAL

Waste retrieval is a major activity in the process of SST system closure. Criteria applicable to SST waste retrieval activities, as stated in Milestone M-45-00, are: "...retrieval of as much waste as technically possible, with tank residues not to exceed 360 cubic feet (cu. ft.) in each of the 100-series tanks, 30 cu. ft. in each of the 200-series tanks, or the limit of waste retrieval technology capability, whichever is less." If these waste retrieval criteria are not met for a specific tank using the selected technology(s), DOE may use the procedure delineated in Agreement Appendix H to request Ecology approval of an exception to the waste retrieval criteria for that specific tank. This section shall not apply to the 19 SSTs covered by the Consent Decree in *Washington v. DOE*, Case No. 08-5085-FVS, except as set forth in Appendix C, Part 3, A.1 and A.2 of such decree.

The Parties' waste retrieval and closure process is described in the following sections: