



U.S. Department of Energy  
**Office of River Protection**

P.O. Box 450, MSIN H6-60  
Richland, Washington 99352

0073380

07-TPD-033

JUL 24 2007

Ms. Jane A. Hedges, Program Manager  
Nuclear Waste Program  
Washington State  
Department of Ecology  
3100 Port of Benton Blvd.  
Richland, Washington 99354

Dear Ms. Hedges:

PROPOSED CHANGES TO HANFORD FEDERAL FACILITY AGREEMENT AND  
CONSENT ORDER (HFFACO [TRI-PARTY AGREEMENT]) TANK FARM CORRECTIVE  
ACTION MILESTONES M-45-55, M-45-55-T04, M-45-58, M-45-59, AND M-45-60

Reference: ORP letter from R. J. Schepens to J. Hedges, Ecology, "Proposed Changes to  
Hanford Federal Facility Agreement and Consent Order (HFFACO) Tank Farm  
Corrective Action Milestones M-45-55, M-45-55-T04, M-45-56, M-45-58, M-45-  
59, and M-45-60," 06-TPD-026, dated May 4, 2006.

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The U.S. Department of Energy (DOE), Office of River Protection (ORP) is transmitting the HFFACO Change Control Form M-45-06-03 (Enclosure) for approval by the Washington State Department of Ecology (Ecology). The enclosure proposes changes to HFFACO Milestones M-45-55, M-45-58, M-45-59, M-45-60, target date M-45-55-T04, and HFFACO Appendix I, Section 2.3, pertaining to Resource Conservation and Recovery Act Corrective Action activities for Single-Shell Tank Farms.

This change request meets the majority of the objectives of ongoing negotiations underway between ORP and Ecology since May 2006 (Reference). The enclosed change package is scoped to finalize Phase One Corrective Action characterization and interim measures while providing a framework for completion of corrective measures through implementation for C-Farm. The package also identifies a plan for integration of corrective action with other site groundwater and vadose zone cleanup efforts on the Hanford Central Plateau.

Additional interim corrective actions with regard to interim barriers other than T-106 are under discussion and should be formally established through the ongoing Tri-Party Agreement negotiations.

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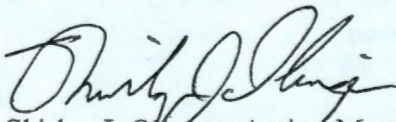
Ms. Jane A. Hedges  
07-TPD-033

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JUL 24 2007

If you have any questions, you may contact me, or your staff may contact Delmar L. Noyes, Acting Assistant Manager for Tank Farms Project, (509) 376-5166.

Sincerely,



Shirley J. Olinger, Acting Manager  
Office of River Protection

TPD:RWL

Enclosure

cc w/encl:

M. N. Jaraysi, CH2M HILL

S. Harris, CTUIR

J. J. Lyon, Ecology

C. L. Whalen, Ecology

T. C. Post, EPA

S. L. Leckband, HAB

G. Bohnee, NPT

K. Niles, Oregon Energy

R. Jim, YN

Administrative Record 5-2-4

CH2M HILL Correspondence

Environmental Portal, LMSI

**Enclosure  
07-TPD-033**

**HFFACO Change Control Form, Change Number M-45-06-03**

**(13 pages total, including coversheet)**

<b>Change Number</b>  M-45-06-03	<b>Federal Facility Agreement and Consent Order Change Control Form</b> <small>Do not use blue ink. Type or print using black ink.</small>	<b>Date</b>
<b>Originator</b> US DOE-ORP		<b>Phone</b> 376-2247
<b>Class of Change</b>  <input type="checkbox"/> I - Signatories <input checked="" type="checkbox"/> II - Executive Manager <input type="checkbox"/> III - Project Manager		
<b>Change Title</b> Modification of Tank Farm Corrective Measures and Interim Measures milestones.		
<b>Description/Justification of Change</b>  <p>This HFFACO modification establishes an updated plan and process for finalizing phase 1 corrective action characterization and interim measure studies, and leads the Tri-Parties towards the development of a clear vision for the planning and execution of phase 2 final corrective action characterization, corrective measures studies, implementation of certain interim measures and integration of corrective measures with other site ground water and vadose zone clean up efforts on the Hanford Central Plateau.</p> <p>This change package establishes a framework for completion of corrective measures within C-farm and a Phase 2 Tank Farm Corrective Action Master Work Plan to define the overall corrective action completion approach and sequence for other tank farms. In addition, installation and evaluation of an interim barrier is established as a specific milestone.</p> <p>Other modifications in this change package include:</p> <p>M-45-55-T04, the Field Investigation Report (FIR), is herein combined with M-45-55, the RCRA Facility Investigation (RFI) rollup. The schedule for completion of the RFI is modified to allow for additional field soil characterization and analysis of data to be obtained. New characterization technologies developed during Phase 1 of this milestone series provide improved data quality and cost reduction. The use of Surface Geophysical Exploration and Direct Push technologies have been presented to regulatory staff for use in data collection prior to proceeding with corrective measures planning. The deployment of new technologies and analysis of the data extends the duration of the time needed to collect data for the FIR. Consolidation of the FIR and RFI reduces the amount of time required for document preparation and reporting information needed in target date M-45-55-T04 and milestone M-45-55.</p> <p>Although milestone M-45-55 (RFI Report) and target date M-45-55-T04 (A-AX, C, and U FIR) delivery dates of January 2007 and April 2006, respectively, were not met, the proposed modifications to these deliverables and the justifications for not meeting these dates were discussed with and supported by the lead technical staff of Ecology. As mentioned above, these changes are being made to ensure the development of a defensible and effective RCRA Corrective Action process within the Tank Farms.</p> <p>New milestones are created to track progress towards completion of the RCRA Correction Actions in WMA C. These milestones include WMA C Phase RCRA Facility Investigation (M-45-61) and WMA C Corrective Measures implementation Work Plan.(M-45-62).</p>		
<b>Impact of Change</b> <ul style="list-style-type: none"> <li>o The scope of M-45-55-T04 is combined with M-45-55 (RFI Roll Up) to reduce reporting.</li> <li>o The schedule for completion of the RFI Roll Up is deferred to allow for additional technical information to be included (M-45-55).</li> <li>o The Phase 2 C-Farm RCRA Facility Investigation/ Corrective Measures Study is moved to M-45-61 and replaced with a Master Work Plan describing the approach for other Waste Management Areas (M-45-58).</li> <li>o A milestone is established for T-106 interim barrier installation, testing and reporting (M-45-59).</li> <li>o A revised milestone is added for submittal of WMA C Phase 2 RFI/CMS Work Plan and Sampling and Analytical Plan (M-45-60).</li> <li>o A new milestone is added for submittal of the Phase 2 RCRA RFI/CMS for WMA C (M-45-61).</li> </ul>		

- o A new milestone is added for submittal of the WMA C Corrective Measures Implementation Plan (M-45-62).
- o HFFACO Appendix I, Section 2.3 is modified to describe the contents of the Phase II RCRA Corrective Action Master Work Plan

## Affected Documents

- o Hanford Federal Facility Agreement and Consent Order
- o Phase 1 RCRA Field Investigation Report

M-045-00  
LEAD

AGENCY:  
ECOLOGY

COMPLETE CLOSURE OF ALL SINGLE SHELL TANK FARMS.

09/30/2024

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 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.

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.

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.

COMPLIANCE WITH THE WORK SCHEDULES SET FORTH IN THIS M-45 SERIES IS DEFINED AS THE PERFORMANCE OF SUFFICIENT WORK TO ASSURE WITH REASONABLE CERTAINTY THAT DOE WILL ACCOMPLISH SERIES M-45 MAJOR AND INTERIM MILESTONE REQUIREMENTS.

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 PRECEDING MILESTONES AND TARGET DATES, UNLESS OTHERWISE AGREED TO BY THE PARTIES.

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".	
M-045-00B	<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"> <li>• WORKER SAFETY</li> <li>• FACILITATION OF WMA CLOSURES.</li> <li>• THE OPTIMIZATION OF DST SPACE UTILIZATION CONSIDERING RESOURCE LEVELING AND WASTE TRANSFER INFRASTRUCTURE</li> <li>• RETRIEVAL AND CLOSURE REQUIREMENTS FOR ASSOCIATED ANCILLARY EQUIPMENT.</li> </ul> <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 LIMITED TO RETRIEVAL EFFICIENCY, LEAK LOSS DURING RETRIEVAL, AND LEAK DETECTION MITIGATION AND MONITORING (LDMM).</p> <p>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).</p> <p>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.</p> <p>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.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• IF THE PARTIES AGREE THAT THE METHOD IS SUITABLE,</li> </ul>	<p>09/30/2006 OR AS OTHERWISE INDICATED WITHIN THE DESCRIPTIVE TEXT OF THIS MILESTONE</p>

	<p>ER WILL BE DEPLOYED IN THE SUBSEQUENT APPROPRIATE RETRIEVAL TANKS.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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 <ul style="list-style-type: none"> <li>○ 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 I REQUIREMENTS).</li> <li>○ DOE SHALL SUBMIT TWRWP(S) FOR 2 100-SERIES TANKS BY JULY 31, 2004.</li> <li>○ DOE SHALL SUBMIT TWRWP(S) FOR 4 100-SERIES TANKS BY OCTOBER 31, 2004.</li> <li>○ DOE SHALL SUBMIT TWRWP(S) FOR 5 100-SERIES TANKS BY JANUARY 31, 2005.</li> </ul> </li> <li>• SUBMITTAL TO ECOLOGY OF CERTIFIED COMPONENT CLOSURE ACTIVITY PLANS FOR THE PRECEDING SSTs IN ACCORDANCE WITH AGREEMENT APPENDIX I.</li> <li>• SUBMITTAL OF WMA INTEGRATION PLANS FOR WMA-C AND ONE ADDITIONAL WMA BY JUNE 30, 2005.</li> </ul> <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>	
M-045-00C	<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>	09/30/2006

	<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>	
M-045-00D	<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 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>	01/31/2008
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).</p>	10/31/2012

	<p>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>	
M-045-02M	<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. ECOLOGY CONCURRENCE OF ADDITIONAL TANK ACQUISITION WITHIN 60 DAYS. WITHIN 60 DAYS OF RECEIVING THE DST TANK SPACE EVALUATION DOCUMENT, THE THREE PARTIES SHALL</p>	<p>03/01/2006 OR AS OTHERWISE INDICATED WITHIN THE DESCRIPTIVE TEXT OF THIS MILESTONE</p>

	MEET TO ESTABLISH NEW MILESTONES, IF REQUIRED, FOR ACQUISITION OF ADDITIONAL TANKS..	
M-045-02N	SUBMIT BIENNIAL UPDATE OF SST RETRIEVAL SEQUENCE DOCUMENT (AGREEMENT APPENDIX I. SECTION 2.1.2), AND DOUBLE SHELL TANK SPACE EVALUATION DOCUMENT AND ECOLOGY CONCURRENCE OF ADDITIONAL TANK ACQUISITION WITHIN 60 DAYS. SEE TEXT OF M-45-02M FOR FURTHER DETAILS).	03/01/2008
M-045-02O	SUBMIT BIENNIAL UPDATE OF SST RETRIEVAL SEQUENCE DOCUMENT (AGREEMENT APPENDIX I. SECTION 2.1.2), AND DOUBLE SHELL TANK SPACE EVALUATION DOCUMENT AND ECOLOGY CONCURRENCE OF ADDITIONAL TANK ACQUISITION WITHIN 60 DAYS. SEE TEXT OF M-45-02M FOR FURTHER DETAILS).	03/01/2010
M-045-02P	SUBMIT BIENNIAL UPDATE OF SST RETRIEVAL SEQUENCE DOCUMENT (AGREEMENT APPENDIX I. SECTION 2.1.2), AND DOUBLE SHELL TANK SPACE EVALUATION DOCUMENT AND ECOLOGY CONCURRENCE OF ADDITIONAL TANK ACQUISITION WITHIN 60 DAYS. (SEE TEXT OF M-45-02M FOR FURTHER DETAILS).	03/01/2012
M-045-02Q	SUBMIT BIENNIAL UPDATE OF SST RETRIEVAL SEQUENCE DOCUMENT (AGREEMENT APPENDIX I. SECTION 2.1.2), AND DOUBLE SHELL TANK SPACE EVALUATION DOCUMENT AND ECOLOGY CONCURRENCE OF ADDITIONAL TANK ACQUISITION WITHIN 60 DAYS. (SEE TEXT OF M-45-02M FOR FURTHER DETAILS).	03/01/2014
M-045-02R	SUBMIT BIENNIAL UPDATE OF SST RETRIEVAL SEQUENCE DOCUMENT (AGREEMENT APPENDIX I. SECTION 2.1.2), AND DOUBLE SHELL TANK SPACE EVALUATION DOCUMENT AND ECOLOGY CONCURRENCE OF ADDITIONAL TANK ACQUISITION WITHIN 60 DAYS. SEE TEXT OF M-45-02M FOR FURTHER DETAILS).	03/01/2016
M-045-02S	SUBMIT BIENNIAL UPDATE OF SST RETRIEVAL SEQUENCE DOCUMENT (AGREEMENT APPENDIX I. SECTION 2.1.2), AND DOUBLE SHELL TANK SPACE EVALUATION DOCUMENT AND ECOLOGY CONCURRENCE OF ADDITIONAL TANK ACQUISITION WITHIN 60 DAYS. SEE TEXT OF M-45-02M FOR FURTHER DETAILS).	03/01/2018 AND BIENNIALY THEREAFTER
M-045-05	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.	09/30/2018
M-045-05-T05	INITIATE TANK RETRIEVAL FROM FIVE ADDITIONAL SINGLE-SHELL TANKS.	09/30/2007
M-045-05-T06	INITIATE TANK RETRIEVAL FROM FIVE ADDITIONAL SINGLE-SHELL TANKS.	09/30/2008
M-045-05-T07	INITIATE TANK RETRIEVAL FROM SEVEN ADDITIONAL SINGLE-SHELL TANKS.	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-	INITIATE TANK RETRIEVAL FROM 17 ADDITIONAL SINGLE-SHELL	09/30/2014

05-T12	TANKS.	
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> <ol style="list-style-type: none"> <li>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 DOCUMENT PROJECT DATA AND RESULTS IN A WASTE RETRIEVAL AND CLOSURE DEMONSTRATION PROJECT REPORT).</li> <li>2. REMAINING WASTES HAVE BEEN ADEQUATELY CHARACTERIZED, AND A RISK ASSESSMENT, APPROVED BY ECOLOGY, HAS BEEN COMPLETED FOR RESIDUALS THAT REMAIN IN THE TANK.</li> <li>3. THE S-112 WASTE RETRIEVAL AND CLOSURE DEMONSTRATION PLAN HAS BEEN SUBMITTED BY DOE AND APPROVED BY ECOLOGY, I.E. INCORPORATED INTO THE SITE-WIDE PERMIT.</li> <li>4. IF APPROPRIATE, DOE HAS REQUESTED, AND ECOLOGY HAS APPROVED AN EXCEPTION TO WASTE RETRIEVAL CRITERIA PURSUANT TO AGREEMENT APPENDIX H.</li> </ol>	12/31/2007
M-045-15	<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"> <li>1. FULL SCALE WASTE RETRIEVAL HAS BEEN COMPLETED IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS</li> </ol>	12/31/2007

	<p>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 DOCUMENT PROJECT DATA AND RESULTS IN A WASTE RETRIEVAL AND CLOSURE DEMONSTRATION PROJECT REPORT).</p> <p>2. REMAINING WASTES HAVE BEEN ADEQUATELY CHARACTERIZED, AND A RISK ASSESSMENT, APPROVED BY ECOLOGY, HAS BEEN COMPLETED FOR RESIDUALS THAT REMAIN IN THE TANK.</p> <p>3. THE S-102 WASTE RETRIEVAL AND CLOSURE DEMONSTRATION PLAN HAS BEEN SUBMITTED BY DOE AND APPROVED BY ECOLOGY, I.E. INCORPORATED INTO THE SITE-WIDE PERMIT.</p> <p>4. IF APPROPRIATE, DOE HAS REQUESTED, AND ECOLOGY HAS APPROVED AN EXCEPTION TO WASTE RETRIEVAL CRITERIA PURSUANT TO AGREEMENT APPENDIX H.</p>	
M-045-55	<p>SUBMIT TO ECOLOGY FOR REVIEW AND APPROVAL AS AN AGREEMENT PRIMARY DOCUMENT A PHASE 1 RFI REPORT INTEGRATING RESULTS OF DATA GATHERING ACTIVITIES AND EVALUATIONS FOR ALL SST WMAS, INCLUDING A SUMMARY OF IMPACTS FROM THE INITIAL SST PERFORMANCE ASSESSMENT, WITH CONCLUSIONS AND RECOMMENDATIONS. RESULTS FROM WMAS A-AX, AND C AND U WILL BE INCLUDED AS APPENDICES TO THE RFI ROLLUP REPORT ADDRESSING THE SST WMAS UNDER RCRA CORRECTIVE ACTION, SO THAT A SINGLE DOCUMENT CONTAINS AVAILABLE INFORMATION FOR THE 200 AREA SST WMAS AND WILL SUPPORT SST RETRIEVAL AND CLOSURE.</p>	<p>01/31/2007 01/31/2008</p>
M-045-55 T04	<p><del>SUBMIT TO ECOLOGY FOR REVIEW AND COMMENT A DRAFT FIELD INVESTIGATION REPORT COMBINING THE RESULTS OF FIELD INVESTIGATIONS AND ANALYSIS FOR WMAS A AX, C &amp; U PURSUANT TO THE SITE SPECIFIC SST WMA PHASE 1 RFI/CMS WORK PLAN ADDENDA FOR WMA A AX, C AND U.</del></p>	<p>04/30/2006</p>
M-045-56	<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>
M-045-58	<p>SUBMIT TO ECOLOGY FOR REVIEW AND APPROVAL AS AN AGREEMENT PRIMARY DOCUMENT A <del>CORRECTIVE MEASURES STUDY FOR INTERIM-CORRECTIVE MEASURES FOR ALL SST WMA'S (PENDING RESULTS AND CONCLUSIONS IN THE PHASE 1 RFI REPORT MILESTONE M 45 55 OR SUBSEQUENT RFI REPORT) PHASE II MASTER WORKPLAN THAT DESCRIBES THE PROPOSED APPROACH FOR THE COMPLETION OF CORRECTIVE ACTION TO MEET FINAL CLOSURE REQUIREMENTS IN THE WASTE MANAGEMENT AREA'S AS DESCRIBED IN APPENDIX 1, SECTION 2.3.</del></p>	<p>06/30/2007 12/31/2008</p>
M-045-59	<p><del>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.</del></p> <p><del>DECISIONS ON CONTROLLING SURFACE WATER INFILTRATION PATHWAYS WILL BE MADE BY EVALUATING THE ROLE OF SURFACE WATER</del></p>	<p>To Be Determined</p>

	<p><del>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.</del></p> <p>INSTALL, TEST, AND REPORT ON THE PERFORMANCE OF A T-FARM (t-106) INTERIM BARRIER DEMONSTRATION FOR THE BARRIER'S ABILITY TO REDUCE WATER INFILTRATION THAT DRIVES MIGRATION OF SUBSURFACE CONTAMINATION TO GROUNDWATER.</p>	9/30/2010
M-045-60	SUBMIT TO ECOLOGY FOR REVIEW AND APPROVAL AS AN AGREEMENT PRIMARY DOCUMENT, DOE'S PHASE 2 RFI/CMS WORK PLAN AND SAMPLING AND ANALYSIS PLAN (SAP) FOR ALL SST WMAS C.	09/30/2007 12/31/2008
M-45-61	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.	12/31/2010
M-45-62	SUBMIT TO ECOLOGY FOR REVIEW AND APPROVAL AS AN AGREEMENT PRIMARY DOCUMENT A PHASE 2 CORRECTIVE MEASURES IMPLEMENTATION WORK PLAN FOR WMA C.	7/31/2012
<b>Approvals</b>  <div> <div>_____</div> <div>DOE</div> </div> <div> <div>_____</div> <div>Date</div> </div> <div> <div>_____</div> <div>Approved_____</div> </div> <div> <div>_____</div> <div>Disapproved</div> </div> <div> <div>_____</div> <div>EPA</div> </div> <div> <div>_____</div> <div>Date</div> </div> <div> <div>_____</div> <div>Approved_____</div> </div> <div> <div>_____</div> <div>Disapproved</div> </div> <div> <div>_____</div> <div>Ecology</div> </div> <div> <div>_____</div> <div>Date</div> </div> <div> <div>_____</div> <div>Approved_____</div> </div> <div> <div>_____</div> <div>Disapproved</div> </div>		

## APPENDIX I

### SINGLE-SHELL TANK SYSTEM WASTE RETRIEVAL AND CLOSURE PROCESS

#### 2.3 WMA CORRECTIVE ACTIONS

Closure decisions for SST system soils will be made through the RCRA corrective action process pursuant to Agreement Milestones M-45-55 through -62 and its established process for the development of interim measures where appropriate, RCRA facility investigation/corrective measures study (RFI/CMS) work plans, remedial field investigations, and corrective measures studies. It is expected that the Phase I corrective action process required by the specified milestones will result in adequate characterization to make final closure decisions. Ecology reserves the right to require additional characterization either through a Phase II corrective action process or through the development of a component closure activity plan if additional characterization is required.

A Phase II corrective action process Master Work Plan will describe the overall corrective action completion approach for the single shell tank farms. The milestones outlining the corrective action process for WMA C are shown in milestones M-45-60, 61, & 62. The Phase II Master Work Plan will describe the proposed approach for corrective action in the remaining waste management areas. Elements of the work plan will include:

- Discussion of the approach to complete the Phase II data quality objective process including confirmation of developmental characterization tools such as high resolution resistivity (SGE).
- Discussion of integration with the groundwater program, tank closure and adjacent operable units, as appropriate.
- Discussion of the WMA approach to corrective action and closure.
- Selection criteria for implementing Phase II RCRA corrective actions at subsequent WMAs.

It is expected that in some cases, the RCRA corrective action process will be used to investigate and analyze alternatives for remediation of selected soils/ancillary equipment. The regulatory process to be used to satisfy closure requirements for each ancillary equipment component will be selected through approval of the WMA closure action plan and incorporated into the Site-Wide Permit.