# **Change Number Federal Facility Agreement and Consent Order Date Change Control Form** Draft M-62-04-01 Do not use blue ink. Type or print using black ink. **December 6, 2004** U. S. Department of Energy, Office of River Protection Phone 376-2247 Class of Change [ ] – Signatories [X] II – Executive Manager [ ] III – Project Manager **Change Title** Extension of due dates for Hanford Federal Facility Agreement and Consent Order (HFFACO) milestones M-62-08 and M-62-11 to allow for collection of sufficient waste form performance data from the Demonstration Bulk Vitrification System to support completion of the Hanford Tank Waste Supplemental Treatment Technologies Report and Draft Hanford Tank Waste Treatment Baseline. **Description/Justification of Change** This change request extends the due dates for interim milestones M-62-08 to June 30, 2006 and M-62-11 to June 30. 2007. This allows for gathering of sufficient waste form performance data to complete analysis of supplemental treatment technology alternatives for the Hanford Tank Waste Supplemental Treatment Technologies Report and draft Hanford Tank Waste Treatment Baseline which will provide DOE's proposed approach for treating all tank wastes (HLW, LAW and TRU) by 12/31/2028 (M-62-08) and allow one year to finalize negotiation that support completion of a final Tank Waste Treatment Baseline (M-62-11). This extension will also allow for information to be available to the negotiators from the Tank Closure Environmental Impact Statement analysis. Impact of Change This change request Modifies Hanford Federal Facility Agreement and Consent Order (HFFACO) Interim Milestones M-62-08 and M-62-11 by extending the due date for M-62-08 to June 30, 2006, and M-62-11 to June 30, 2007. **Affected Documents** The Hanford Federal Facility Agreement and Consent Order, as amended, including HFFACO Action Plan Appendix D, and Hanford site internal planning, management, and budget documents (e.g., DOE and DOE contractor Baselines, Baseline Change Control documents; Site-wide System Engineering Control documents; Project Management Plans; and the Hanford Site Integrated Priority List (IPL).

Date

Date

Approved

Approved Disapproved

Disapproved

**Approvals** 

**Ecology** 

DOE - ORP

07/31/2005

Modifications to the M-62-00 milestone incorporated into the HFFACO by approval of this M-62-08 and M-62-11 Change Request are shown here as either **shaded** additions, or **strikethrough** deletions.

| MS Number | Milestone Description  | Due Date   |
|-----------|--|------------|
| M-062-00  | COMPLETE PRETREATMENT PROCESSING AND VITRIFICATION OF HANFORD HIGH LEVEL (HLW) AND LOW ACTIVITY (LAW) TANK WASTES.   | 12/31/2028 |
|           | COMPLIANCE WITH THE WORK SCHEDULES SET FORTH IN THIS M-62 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.   |            |
|           | 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.   |            |
| M-062-00A | COMPLETE WTP PRETREATMENT PROCESSING AND VITRIFICATION OF HANFORD HLW AND LAW TANK WASTES.   | 02/28/2018 |
|           | 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.  |            |
|           | *[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)]   |            |
| M-062-01J | SUBMIT SEMI-ANNUAL PROJECT COMPLIANCE REPORT.  | 01/31/2005 |
|           | 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 CONTRACTOR(S) HAVE COMPLETED SUFFICIENT WORK TO ALLOW ACHIEVEMENT OF AGREEMENT REQUIREMENTS," AND (5) CONCISE DESCRIPTIONS OF ANY NONCOMPLIANCE. COPIES OF ALL PERTINENT DOE WORK DIRECTIVES AND/OR AUTHORIZATIONS ISSUED TO DOE'S CONTRACTOR(S) SHALL BE |            |
|           | PROVIDED ON REQUEST.   | 07/21/2005 |

SUBMIT SEMI-ANNUAL PROJECT COMPLIANCE REPORT.

M-062-01K

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 CONTRACTOR(S) HAVE COMPLETED SUFFICIENT WORK TO ALLOW ACHIEVEMENT OF AGREEMENT REQUIREMENTS," AND (5) CONCISE DESCRIPTIONS OF ANY NONCOMPLIANCE. COPIES OF ALL PERTINENT DOE WORK DIRECTIVES AND/OR AUTHORIZATIONS ISSUED TO DOE'S CONTRACTOR(S) SHALL BE PROVIDED ON REQUEST.

M-062-01L SUBMIT SEMI-ANNUAL PROJECT COMPLIANCE REPORT.

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 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 CONTRACTOR(S) HAVE COMPLETED SUFFICIENT WORK TO ALLOW ACHIEVEMENT OF AGREEMENT REQUIREMENTS," AND (5) CONCISE DESCRIPTIONS OF ANY NONCOMPLIANCE. COPIES OF ALL PERTINENT DOE WORK DIRECTIVES AND/OR AUTHORIZATIONS ISSUED TO DOE'S CONTRACTOR(S) SHALL BE PROVIDED ON REQUEST.

M-062-03 SUBMIT DOE PETITION FOR RCRA DELISTING OF VITRIFIED HLW.

DOE WILL SUBMIT ITS PETITION FOR DELISTING OF THE IMMOBILIZED HIGH-LEVEL WASTE (HLW) FROM THE WASTE TREATMENT PLANT FROM RCRA AND THE WASHINGTON STATE HWMA (DELISTING PETITION) IN

12/31/2006

01/31/2006 SEMI-

ANNUALLY

BEGINNING

JULY 31, 2000

| M-62-04-01 CR |  |                          |  |  |
|---------------|--|--------------------------|--|--|
|               | ACCORDANCE WITH 40 CFR 260.22 AND WAC 173-303-072.   |                          |  |  |
| M-062-07B     | 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. DEAC27-01RV14136), AND COMPLETE SCHEDULE ACTIVITY ID 4DH46102A2-MOVE #1 MELTER INTO THE HIGH LEVEL WASTE VITRIFICATION FACILITY.  | 12/31/2007               |  |  |
|               | 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.  |                          |  |  |
|               | 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.   |                          |  |  |
| M-062-08      | SUBMITTAL OF HANFORD TANK WASTE SUPPLEMENTAL TREATMENT TECHNOLOGIES REPORT, DRAFT HANFORD TANK WASTE TREATMENT BASELINE AND DRAFT NEGOTIATIONS AGREEMENT IN PRINCIPLE (AIP).  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 2 <sup>ND</sup> 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 ACCEPTABLITY 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).  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. | 01/30/2005<br>06/30/2006 |  |  |

|          | M-62-04-01 CR   |                          |
|----------|---|--------------------------|
|          | 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.  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 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 |                          |
| W 060 00 | FINALIZATION.   | 00/00/0000               |
| M-062-09 | START COLD COMMISSIONING - WASTE TREATMENT PLANT.  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.  | 02/28/2009               |
| M-062-10 | COMPLETE HOT COMMISSIONING - WASTE TREATMENT PLANT.  DOE WILL ACHIEVE SUSTAINED THROUGHPUT OF PRETREATMENT, LOW-ACTIVITY WASTE VITRIFICATION AND HIGH-LEVEL WASTE VITRIFICATION PROCESSES, AND DEMONSTRATED 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.  | 01/31/2011               |
| M-062-11 | SUBMIT A FINAL HANFORD TANK WASTE TREATMENT BASELINE.  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.   | 01/30/2006<br>06/30/2007 |