Change Number M-62-01-03 <mark>Draft</mark>		ement and Consent Control Form ype or print using black in		Date January 17, 2002
Originator DOE-Offic	ce of River Protection			Phone
Class of Change [] I – Signatories	[X] II – Executive Man	ager	[] III – Project Ma	nager
Change Title Modification of <u>Hanford Federal Facility Agreement and Consent Order</u> (HFFACO) requirements M-62-06, M-62-07, M-62-10 & M-62-11, in order to resolve inconsistencies between HFFACO requirements, completion schedules within the U. S. Department of Energy's (DOE) contract No. DE-AC27-01RV14136 and DOE's Office of River Protection (ORP) baseline schedule.				
Description/Justification of Change Recent delays in the acquisition of tank waste treatment facilities at the Hanford site have been largely based on the failure of efforts to implement a cost effective "privatized" approach to tank waste treatment complex construction. Though efforts by the parties have centered on attempting to minimize programmatic delay, significant inconsistencies have grown between HFFACO requirements and adjusted DOE and DOE contractor schedules.				
Impact of Change This change request Modifies <u>Hanford Federal Facility Agreement and Consent Order</u> (HFFACO) work requirements at M-62-06, M-62-07, M-62-10 & M-62-11 in order to resolve inconsistencies between HFFACO requirements, completion schedules within the U. S. Department of Energy's (DOE) contract No. DE-AC27- 01RV14136 and DOE's Office of River Protection (ORP) baseline schedule.				
Affected Documents The <u>Hanford Federal Facility Agreement and Consent Order</u> , as amended, including HFFACO Action Plan Appendix D, DOE's Annual Land Disposal Restrictions Report, DOE's Tank Farm Closure/Post-Closure Workplan Update and Hanford site internal planning, management, and budget documents (e.g., DOE and DOE contractor Baselines, Baseline Change Control documents; Sitewide Systems Engineering Control documents; Project Management Plans; and the Integrated Priority List (IPL).				
Approvals				
Ecology		Date	Approved _	Disapproved
DOE		Date	Approved	Disapproved
EPA	N/A	Date	Approved _	Disapproved

M-62-01-03 January 17, 2002 Description/Justification of Change (continued)

Due to its concerns about these inconsistencies, the Washington Department of Ecology (Ecology) required that DOE develop and submit a tank waste treatment **Recovery Plan** documenting actions and associated schedules DOE proposes to implement to assure compliance with HFFACO requirements; demonstrating that though start of treatment complex construction has been delayed, the HFFACO December 2007 due date for initial treatment complex hot operations remains achievable, and will be met; and that DOE has in place federal fiscal year 2002 funds and the necessary spending authority from the Bush administration to fully support implementing the recovery plan. (See Ecology tank waste Final Determination of July 26, 2001 and its subsequent August 1, 2001 Notice of Penalty Incurred and Due). Assumptions associated with DOE's recovery plan which if invalid could impact Start of Construction (M-62-06) include the assumption that an approved Risk Assessment Work Plan and Preliminary Risk Assessment are not required before the RCRA permit is issued.. For M-62-11, the RPP baseline shows a completion date of May 2010, which has been accelerated. Due to the complexity associated with this milestone and the timeframes involved, the date proposed in this milestone request reflects the contract date for completion of January 31, 2011. DOE's Recovery Plan (including its initial version of this M-62-01-03 Change Request) was submitted on October 1, 2001.

This M-61-01-03 Change Request: (1) Deletes the HFFACO milestone M-62-06 due date of July 31, 2001, and replaces it with a new due date of December 31, 2002; (2) Establishes two (2) treatment complex construction progress milestones (M-62-07A and M-62-07B) required by existing milestone M-62-07; (3) Modifies HFFACO milestone M-62-10 language which reflected the parties' earlier "privatized" approach and schedule for the initiation of treatment complex hot operations; and (4) modifies the submittal date for DOE's tank waste treatment Phase II plan at M-62-11. In addition, it is noted that due to the timing and workload associated with the development, review, and revision of ORP's recovery plan, the parties have agreed that the HFFACO requirement for a January 2002 Project Compliance Report (See HFFACO milestone M-62-01) is hereby waived. All other M-62-00 series requirements remain unchanged.

Following review by Ecology, and discussions between the parties, DOE and Ecology have agreed to appropriate Recovery Plan modifications including the modification of DOE's tank waste treatment baseline and this M-62-01-03 Change Request.

Modifications to the M-62 milestone series incorporated into the HFFACO by approval of this M-62-01-03 Change Request are shown here as either shaded additions, or strikethrough deletions.

MS Number	Milestone Description	Due Date
M-62-00	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-62-00A	COMPLETE PRETREATMENT PROCESSING AND VITRIFICATION OF HANFORD HLW AND LAW PHASE I TANK WASTES.	2/28/2018

PHASE I TANK WASTE PROCESSING SHALL PRETREAT AND VITRIFY NO LESS THAN 10% OF HANFORD'S TANK WASTE BY MASS¹ AND 25% BY ACTIVITY.

M-62-01 SUBMIT SEMI-ANNUAL PROJECT COMPLIANCE REPORT

Semi-annually beginning July 31, 2001

	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 N 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) REMAIN IN COMPLIANCE WITH AGREEMENT REQUIREMENTS, I.E., WHETHER OR NOT TOE 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.	31, 2001
M-62-02	SUBMITTAL OF HANFORD TANK WASTE TREATMENT ALTERNATIVES REPORT.	3/01/2000
	DOE WILL SUBMITT A REPORT THAT DESCRIBES THE ALTERNATIVES (TECHNICAL, FINANCIAL, AND CONTRACTUAL) TO TREAT HANFORD TANK WASTE. THE REPORT WILL: 1.) IDENTIFY AND DESCRIBE CREDIBLE ALTERNATIVES TO THE CURRENT PRIVATIZATION APPROACH THAT MEET DOE COMMITMENTS TO ACHIEVE HOT OPERATIONS BY DECEMBER, 2007, AND TO TREAT NO LESS THAN 10 PERCENT OF THE TANK WASTE BY MASS AND 25 PERCENT OF THE TANK WASTE BY ACTIVITY BY FEBRUARY, 2018, 2.) SERVE AS A BASIS TO AMEND THE FISCAL YEAR 2001 BUDGET REQUEST FOR AUTHORITY TO IMPLIMENT A CONTINGENCY OPTION (AUTHORITY TO USE PRIVATIZATION SET-ASIDE FUNDS), AND 3.) BE RELEASED CONCURRENTLY TO ECOLOGY, EPA, AND THE PUBLIC.	
M-62-03	SUBMIT DOE PETITION FOR RCRA DELISTING OF VITRIFIED HLW.	12/31/2006
	DOE WILL SUBMIT ITS PETITION FOR DELISTING OF THE IMMOBILIZED HIGH-LEVEL WASTE (HLW) FROM THE PHASE I WASTE TREATMENT PLANT FROM RCRA AND THE WASHINGTON STATE HWMA (DELISTING PETITION) IN ACCORDANCE WITH 40 CFR 260.22 AND WAC 173-303-072.	
M-62-04T	READINESS TO PROCEED – SUPPORT TO PHASE I TREATMENT.	5/01/2000
	DOE AND ITS HANFORD TANK FARMS OPERATIONS CONTRACTOR WILL COMPLETE ALL NECESSARY WORK AND ACHIEVE READINESS TO PROCEED IN SUPPORT OF PART B-2, PHASE I.	
M-62-06	START OF CONSTRUCTION – PHASE I TREATMENT COMPLEX.	7/31/2001

¹ 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-62-01-03 January 17, 2002 Description/Justification of Change (continued)

		12/31/2002
	FIRST PLACEMENT OF STRUCTURAL CONCRETE AT ONE OF THE TREATMENT COMPLEX PRINCIPALE FACILITIES (I.E., PRETREATMENT, LOW-ACTIVITY WASTE VITRIFICATION, OR HIGH-LEVEL WASTE VITRIFICATION FACILITIES).	12/31/2002
M 62 07	CONSTRUCTION PROGRESS MILESTONES (2) PHASE I TREATMENT COMPLEX.	TBD
	DOE SHALL COMPLETE TWO CONSTRUCTION PROGRESS MILESTONES DURING THE PERIOD BETWEEN START OF CONSTRUCTION AND START OF COMMERCIAL OPERATIONS; THESE MILESTONES WILL BE ESTABLISHED WITHIN 60 DAYS OF ISSUANCE OF THE DOE AUTHORIZATION TO PROCEED WITH PHASE I TREATMENT.	
M-62-07A	INITIAL ERECTION OF LOW-ACTIVITY WASTE VITRIFICATION FACILITY ELEVATION –21' STRUCTURAL STEEL COLUMNS, BEAMS, AND Q DECK AT ELEVATION +3 (BNI BASELINE SCHEDULE ACTIVITY 4DL131B000 AS PART OF DOE CONTRACT No. DE-AC27-01RV14136).	10/30/2003
	This milestone represents the placement of the first structural steel column as part of	
	initiation of BNI Baseline Schedule activity 4DL131B000 –LAW – Elev –21 SS Columns,	
	Beams & Q-Deck at +3 (Contract No. DE-AC27-01RV14136). In addition activity	
	4DL121B100 LAW – Elev –21 Place Basemat Concrete shall be substantially completed	
	and activities 4DL121D000 LAW – Elev –21 Perimeter Walls FREP and 4DL121F000 LAW	
	 Elev –21 Interior Walls FREP shall have been initiated. 	
	Completion of this milestone will be met when the first structural steel column is installed at the –21foot elevation in the LAW facility. This milestone demonstrates a significant progress in design and engineering as well as construction of the LAW facility because basemat concrete will have been poured and construction of walls will have been started. In addition, procurements will have been made, not only for this facility, but for the other major facilities. Erection of structural steel in the LAW facility will also provide a lessons learned opportunity because it will be the first facility to begin this aspect of construction.	
M-62-07B	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 4DL321A300 AS PART OF DOE CONTRACT No. DE-AC27-01RV14136).	11/30/2005
	This milestone represents the assembly of LAW Melter #1 to the point it is ready for	
	Refractory as part of BNI Baseline activities 3EL3212A00 Specifications and Analysis,	
	Refractory as part of BNI Baseline activities 3EL3212A00 Specifications and Analysis,	
	Refractory as part of BNI Baseline activities 3EL3212A00 <i>Specifications and Analysis</i> , 4DL321A000 <i>LAW – Procure Material & Equipment for Melters</i> and 4DL321A200 <i>LAW-</i>	
	Refractory as part of BNI Baseline activities 3EL3212A00 <i>Specifications and Analysis</i> , 4DL321A000 <i>LAW – Procure Material & Equipment for Melters</i> and 4DL321A200 <i>LAW-</i> <i>Assemble Melter #1</i> (Contract No. DE-AC27-01RV14136). In addition, activities	
	Refractory as part of BNI Baseline activities 3EL3212A00 <i>Specifications and Analysis</i> , 4DL321A000 <i>LAW</i> – <i>Procure Material & Equipment for Melters</i> and 4DL321A200 <i>LAW</i> - <i>Assemble Melter #1</i> (Contract No. DE-AC27-01RV14136). In addition, activities 4DL121U100 <i>LAW</i> – <i>Elev</i> +3 <i>South Melter FREP</i> and 4DL131D000 <i>LAW</i> – <i>Elev</i> +28 <i>Columns, Beams & Q-Decking at</i> +48 shall be substantially completed. Completion of this milestone will be met when LAW melter #1 will have been fully	
	Refractory as part of BNI Baseline activities 3EL3212A00 <i>Specifications and Analysis</i> , 4DL321A000 <i>LAW</i> – <i>Procure Material & Equipment for Melters</i> and 4DL321A200 <i>LAW</i> - <i>Assemble Melter #1</i> (Contract No. DE-AC27-01RV14136). In addition, activities 4DL121U100 <i>LAW</i> – <i>Elev</i> +3 <i>South Melter FREP</i> and 4DL131D000 <i>LAW</i> – <i>Elev</i> +28 <i>Columns, Beams & Q-Decking at</i> +48 shall be substantially completed. Completion of this milestone will be met when LAW melter #1 will have been fully fabricated, assembled and ready for refractory material to be installed. Assembly of the	
	Refractory as part of BNI Baseline activities 3EL3212A00 <i>Specifications and Analysis</i> , 4DL321A000 <i>LAW</i> – <i>Procure Material & Equipment for Melters</i> and 4DL321A200 <i>LAW</i> - <i>Assemble Melter #1</i> (Contract No. DE-AC27-01RV14136). In addition, activities 4DL121U100 <i>LAW</i> – <i>Elev</i> +3 <i>South Melter FREP</i> and 4DL131D000 <i>LAW</i> – <i>Elev</i> +28 <i>Columns, Beams & Q-Decking at</i> +48 shall be substantially completed. Completion of this milestone will be met when 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	
	Refractory as part of BNI Baseline activities 3EL3212A00 <i>Specifications and Analysis</i> , 4DL321A000 <i>LAW</i> – <i>Procure Material & Equipment for Melters</i> and 4DL321A200 <i>LAW</i> - <i>Assemble Melter #1</i> (Contract No. DE-AC27-01RV14136). In addition, activities 4DL121U100 <i>LAW</i> – <i>Elev</i> +3 <i>South Melter FREP</i> and 4DL131D000 <i>LAW</i> – <i>Elev</i> +28 <i>Columns, Beams & Q-Decking at</i> +48 shall be substantially completed. Completion of this milestone will be met when 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	
	Refractory as part of BNI Baseline activities 3EL3212A00 <i>Specifications and Analysis</i> , 4DL321A000 <i>LAW</i> – <i>Procure Material & Equipment for Melters</i> and 4DL321A200 <i>LAW</i> - <i>Assemble Melter #1</i> (Contract No. DE-AC27-01RV14136). In addition, activities 4DL121U100 <i>LAW</i> – <i>Elev</i> +3 <i>South Melter FREP</i> and 4DL131D000 <i>LAW</i> – <i>Elev</i> +28 <i>Columns, Beams & Q-Decking at</i> +48 shall be substantially completed. Completion of this milestone will be met when 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	

M-62-01-03 January 17, 2002 Description/Justification of Change (continued)

	first melter provides significant opportunity for lessons learned that can be applied in the	
	assembly of the other two LAW melters as well as the HLW melter.	
M-62-08	SUBMITTAL OF HANFORD TANK WASTE PHASE II TREATMENT ALTERNATIVES REPORT.	7/31/2005
	DOE WILL SUBMIT A PRELIMINARY REPORT THAT DESCRIBES THE TECHNICAL, FINANCIAL, AND CONTRACTUAL ALTERNATIVES TO TREAT THE TANK WASTES REMAINING AFTER COMPLETION OF PHASE I TREATMENT. THE REPORT WILL IDENTIFY CREDIBLE ALTERNATIVES TO COMPLETE TREATMENT OF THE REMAINING WASTES BY 2028, AND AID IN BUDGET PLANNING FOR FUTURE BUDGET AUTHORITY SUBMITTAL. THE REPORT WILL BE UPDATED EVERY TWO YEARS UNTIL THE TANK WASTE TREATMENT PHASE II PLAN IS FINALIZED.	
M-62-09	START (HOT) COMMISSIONING – PHASE I TREATMENT COMPLEX.	12/31/2007
	DOE WILL START HOT COMMISSIONING OF ITS TANK WASTE TREATMENT COMPLEX (DEFINED AS FIRST PRINCIPAL E FACILITY RECIEPT OF RADIOACTIVE TANK WASTE FOR TREATMENT).	
M-62-10	START COMMERCIAL OPERATIONS COMPLETE HOT COMMISSIONING – PHASE I TREATMENT COMPLEX	12/31/2009 1/31/2011
	DOE WILL ACHIEVE SUSTAINED THROUGHPUT OF PRETREATMENT, LOW-ACTIVITY WASTE VITRIFICATION AND HIGH-LEVEL WASTE VITRIFICATION PROCESSES, AND DEMONSTRATE D 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.	
M-62-11	SUBMITTAL OF HANFORD TANK WASTE TREATMENT PHASE II PLAN.	3 years after start of
	DOE WILL SUBMIT TO ECOLOGY A DETAILED PLAN AND PROPOSAL FOR THE PROCESSING OF THE REMAINDER OF DOE'S LAW AND HLW WASTES (PHASE II WASTES). THIS PLAN AND PROPOSAL WILL BE ACCOMANIED BY A DRAFT NEGOTIATIONS AGREEMENT IN PRINCIPLE (AIP), AND DRAFT AGREEMENT CHANGE REQUEST CONTAINING SUFFICIENT ENFORCEABLE MILESTONES AND ASSOCIATED AGREEMENT REQUIREMENTS TO EFFECTIVELY DRIVE PHASE II WORK TO COMPLETION IN ACCORDANCE WITH AGREEMENT REQUIREMENTS. PHASE II AGREEMENT NEGOTIATIONS WILL BE COMPLETED WITHIN SIX (6) MONTHS OF AIP FINALIZATION.	Commercial Operations 1/31/2014 (See M-62-10)
M-62-12	ISSUANCE OF DOE AUTHORIZATION TO PROCEED – PHASE II TREATMENT.	TBD (To be determined by
	DOE WILL AUTHORIZE THE CONTRACT PHASE TO DESIGN, CONSTRUCT, COMMISSION, AND PROVIDE SERVICES FOR HANFORD TANK WASTE PRETREATMENT, LOW-ACTIVITY WASTE VITRIFICATION, AND HIGH-LEVEL WASTE VITRIFICATION OF ALL REMAINING HANFORD TANK WASTE, CONSISTENT WITH COMPLETION OF TREATMENT BY DECEMBER 2028.	negotiations provided for at M-62-11).

Ecy RP comments M62 1-17-2002.doc