Tri-Party Agreement

Final Approval Package for the Tentative Agreement on Hanford Federal Facility Agreement and Consent Order Modifications Regarding Accelerated Groundwater and Soils Milestones/FY 2009 Funding/Waste Management/K Basins and Other Issue Solutions

U.S. Department of Energy
U.S. Environmental Protection Agency
State of Washington Department of Ecology

August 2009

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Change Number	Federal Facility Agreement and Consent Order Change Control Form Do not use blue ink. Type or print using black ink.	Date
M-16-08-07		August 4, 2009

Originator

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Phone

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Class of Change

[X] I - Signatories [ ] II - Executive Manager [ ] III - Project Manager

Change Title

New and Accelerated Groundwater and Columbia River Protection Hanford Federal Facility Agreement and Consent Order Milestones

Description/Justification of Change

This change package defines new Hanford Federal Facility Agreement and Consent Order (HFFACO) interim milestones and cleanup target goals, towards meeting groundwater and soil requirements of the M-16-00 Milestone (Complete remedial actions for all non-tank farm operable units by 09/30/2024).

The parties agree to implement selected groundwater and Columbia River protection activities, described herein. These activities are implemented with the intent of achieving remedial action goals recognizing that such actions may need to be revised or supplemented with additional actions to satisfy remedial action goals and ROD remedial action requirements.

This change package is consistent with the Hanford Site Groundwater Strategy (DOE/RL-2002-59): to restore groundwater to its intended beneficial use to protect human health, the environment, and the Columbia River.

Continued on page 2

Impact of Change

Adds groundwater and soil remediation milestones to accelerate cleanup of contaminated groundwater and soil in the River Corridor and Central Plateau.

Affected Documents

The Hanford Federal Facility Agreement and Consent Order, as amended.

Approvals

DOE	8/10/09 Date	X Approved	____ Disapproved
EPA	8/11/09 Date	X Approved	____ Disapproved
Ecology	8/11/09 Date	X Approved	____ Disapproved

Description/Justification of Change
Continued from page 1

The waste sites with deep vadose zone contamination are being addressed by each of the current operable units. Deep vadose zone contamination for the remainder of the source units in the Central Plateau is not addressed in this change package. The Parties intend to discuss addressing that contamination through development of a comprehensive strategy for deep vadose zone.

The change package includes new milestones that:

- Establish interim action target dates for the containment and remediation of contaminant plumes in the River Corridor area.
- Require interim actions to expand and enhance groundwater containment and remediation in the River Corridor and Central Plateau.
- Augment existing milestones to establish a comprehensive schedule for the submission of RI/FS work plans, RI/FS reports and proposed plans for operable units in the 100, 200, and 300 Areas.
- For the 100 Area Operable Units, groundwater and soils source term Feasibility Studies (FS) will be submitted concurrently with a combined groundwater and soil Proposed Plan (PP) by reactor area.

The Parties have agreed to a goal of issuing CERCLA Records of Decision (RODs) within six months of submittal of the FS and PP. The HFFACO Action Plan Section 11.6 requires submittal of Remedial Design/Remedial Action (RD/RA) Work Plans after a Record of Decision is issued. Approved RD/RA Work Plans contain enforceable schedules for construction of the remedy selection, including yearly measurable requirements. The Parties have agreed to the goal that DOE shall initiate construction six months after the RD/RA Work Plan is approved.

The Primary Document review and comment process prescribed in Section 9.2 of the HFFACO Action Plan will be followed. The Parties intend to utilize this process strictly to resolve issues quickly so that the schedules are not impacted.

All work will be conducted pursuant to approved work plans in accordance with the HFFACO. The schedule for completion of the construction of facilities will reflect the scope and complexity of the selected remedial or corrective action. The schedule for RA implementation will be established in approved RD/RA Work Plans and will be enforceable as a HFFACO requirement.

As per the HFFACO, Section 5.5, Ecology, the EPA, and DOE agree that past-practice authority may provide the most efficient means for addressing mixed-waste groundwater contamination plumes origination from a combination of TSD and past-practice units, subject to Ecology's reservation of corrective action authority in the Hanford Sitewide Permit, Condition II.Y.2.a.iii.

The change package includes substantial increases in pumping rates in the 200-West Area and in selected 100 Area operable units.

It is clear that the increased pumping will significantly affect the existing groundwater flow regime. Drastic (up to 180 degree) changes in flow direction are anticipated. It is likely that groundwater levels will also be drawn down below the bottom of many existing monitoring wells (i.e., some wells will go dry).

The Parties acknowledge that changes in flow direction and groundwater depth may impact DOE's ability to carry out detection and assessment monitoring for treatment, storage, and disposal (TSD) units within the capture zone of pump-and-treat systems. Ecology will consider these circumstances in establishing permit conditions ensuring

compliance with the requirements of (WAC) 173-303-645 through the permitting or permit modification process. DOE may submit permit modifications to propose replacing the requirements for groundwater monitoring for TSD units and corrective action with remedial response and monitoring requirements for the groundwater operable units.

Ecology commits to review and respond to any DOE-initiated, unit-specific permit modifications as provided under WAC 173-303-830 and WAC 173-303-840(10) (as applicable), and consistent with the public participation requirements of the Hanford Community Relations Plan.

Changes to the TPA are displayed by Highlighting to indicate addition of text and by ~~Strikeout~~ to indicate deletion of text.

M-015-00D	DOE shall complete the RI/FS process through the submittal of a Proposed Plan for all 100 and 300 area operable units.	12/31/2012
M-016-110-T01	DOE shall take actions necessary to contain or remediate hexavalent chromium groundwater plumes in each of the 100 Area NPL operable units such that ambient water quality standards for hexavalent chromium are achieved in the hyporheic zone and river water column.	12/31/2012
M-016-110-T02	DOE shall take actions necessary to remediate hexavalent chromium groundwater plumes such that hexavalent chromium will meet drinking water standards in each of the 100 Area NPL operable units.	12/31/2020
M-016-110-T03	DOE shall take actions necessary to contain the Strontium-90 groundwater plume at the 100-NR-2 Operable Unit such that the default ambient water quality standard (8 pCi/L) for strontium-90 is achieved in the hyporheic zone and river water column.	12/31/2016
M-016-110-T04	DOE shall implement remedial actions selected in all 100 Area Records of Decision for Groundwater Operable Units so that no contamination above drinking water standards or ambient water quality standards enters the Columbia River unless otherwise specified in a CERCLA decision.	12/31/2016
M-016-110-T05	DOE will have a remedy in place designed to meet Federal Drinking Water Standards for uranium throughout the groundwater plume in the 300-FF-5 Operable Unit unless otherwise specified in a CERCLA decision document.	12/31/2015
M-016-111A	Expand current pump-and-treat system at 100-KR-4 Operable Unit to be at a total 900 gpm capacity.	05/31/2009
M-016-111B	Expand current pump-and-treat system at 100-HR-3 Operable Unit utilizing ex situ treatment, in situ treatment or a combination of both to a total 500 gpm capacity or as specified in the work plan.	12/31/2010
M-016-111C	Expand current pump-and-treat system at 100-HR-3 Operable Unit utilizing ex situ treatment, in situ treatment or a combination of both to a total 800 gpm capacity or as specified in the work plan.	12/31/2011

M-016-112A	DOE shall complete demonstrations for biostimulation and electrocoagulation according to previously approved test plans ("Treatability Test Plan for Removing Chromium from Groundwater at 100-D Area Using Electrocoagulation," DOE/RL-2006-70, and "Treatability Test Plan for an In Situ Biostimulation Reducing Barrier," PNNL-16424).	12/31/2009
M-015-60	If an amendment to the 100-NR-1/2 Record of Decision for Interim Action is issued, DOE shall submit an RD/RA work Plan.	Six months after the ROD amendment
M-016-00	Complete remedial actions for all non-tank farm operable units. Note: See operable unit LRA designation listing in Appendix C. It is assumed that the Record of Decision will be signed 6 months after the proposed plan is submitted. Per Action Plan Section 11.6 a day-for-day slip in the RD/RA Work Plan due date will be given for each day the remedy decision is not issued past the 6 month date. The document review, comment and approval process prescribed in the action plan of the HFFACO Section 9 will be followed. The schedule for completion of the construction of the remedy will reflect the scope and complexity of the selected remedial action. The schedule for remedial action implementation will be established upon regulatory agency approval of the RD/RA work plans and is enforceable as a HFFACO requirement.	09/30/2024
M-015-61	Submit RI/FS Work Plan for the 100 NR-1 and 100-NR-2 Operable Units.	12/31/2009
M-015-62-T01	Submit a Feasibility Study Report and Proposed Plan for the 100 NR-1 and 100-NR-2 Operable Units including groundwater and soil. The FS report and Proposed Plan will evaluate the permeable reactive barrier technology and other alternatives and will identify a preferred alternative in accordance with CERCLA requirements.	12/31/2011
M-015-63	Submit CERCLA RI/FS Work Plan for the 100-FR-1/100-FR-2, 100-FR-3, 100-IU-2, and 100-IU-6 Operable Units for groundwater and soil.	09/30/2009
M-015-64-T01	Submit CERCLA RI/FS Report and PP for the 100-FR-1/100-FR-2, 100-FR-3, 100-IU-2, and 100-IU-6 Operable Units for groundwater and soil.	11/30/2011
M-015-65	Submit CERCLA RI/FS Work Plan for the 100-KR-1, 100-KR-2 and 100-KR-4 Operable Units for groundwater and soil.	05/31/2009

M-015-66-T01	Submit CERCLA RI/FS Report and PP for the 100-KR-1, 100-KR-2 and 100-KR-4 Operable Units for groundwater and soil.	07/31/2011
M-015-67	Submit CERCLA RI/FS Work Plan for the 100-BC-1, 100-BC-2 and 100-BC-5 Operable Units for groundwater and soil.	09/30/2009
M-015-68-T01	Submit CERCLA RI/FS Report and Proposed Plan for the 100-BC-1, 100-BC-2 and 100-BC-5 Operable Units for groundwater and soil.	11/30/2011
M-015-69	Submit RI/FS Work Plan for the 100-HR-1, 100-HR-2, 100-HR-3, 100-DR-1 and 100-DR-2 Operable Units for groundwater and soil.	05/31/2009
M-015-70-T01	Submit Feasibility Study Report and Proposed Plan for the 100-HR-1, 100-HR-2, 100-HR-3, 100-DR-1 and 100-DR-2 Operable Units for groundwater and soil.	07/30/2011
M-015-71	Submit CERCLA RI/FS Work Plan for the 300-FF-2 and 300-FF-5 Operable Units for groundwater and soil.	10/31/2009
M-015-72-T01	Submit CERCLA RI/FS Report and Proposed Plan for the 300-FF-2 and 300-FF-5 Operable Units for groundwater and soil.	12/31/2011
M-016-119-T01	DOE will have a remedy in place to contain existing groundwater plumes (except iodine, nitrate, and tritium) in the 200 NPL Area(Central Plateau).	12/31/2020
M-016-120	DOE will have a groundwater treatment system (not to exceed 50 gpm pump-and-treat capacity) for the Tc-99 plume at the S/SX Tank Farm within the 200-UP-01 Operable Unit. This milestone may be met by utilizing treatment capacity at another location such as the new 200 west pump and treatment system or the Effluent Treatment Facility.	12/31/2011
M-015-17A	SUBMIT A 200-UP-1 OU COMBINED REMEDIAL INVESTIGATION AND FEASIBILITY STUDY REPORT AS WELL AS A PROPOSED PLAN TO ECOLOGY.	~~11/30/2010~~ 09/30/2010
M-015-82	Submit a treatability test plan as an amendment of 200-BP-5 RI/FS Work Plan for determining if a 50 gpm pump-and-treat system can be sustained in the shallow and discontinuous aquifer to contain and reduce the mass of the uranium and commingled Tc-99 plumes near the B, BX, and BY Tank Farms. The plan will include initial aquifer tests to determine sustained yield. If sufficient sustained yield can be demonstrated, treatability testing will follow in accordance with the approved treatability test plan. Initiate aquifer tests within six months of approval of the treatability test plan. Full-scale deployment of the treatment system will be made via the 200-BP-5 RD/RA Work Plan.	12/31/2010
M-015-21A	SUBMIT 200-BP-5 OU FEASIBILITY STUDY AND PROPOSED PLAN TO EPA.	~~10/31/2010~~ 12/31/2012

M-016-122	Begin Phase I operation of the new 200 west pump and treat system per the Remedial Design Remedial Action Work Plan and the ZP-1 Record of Decision. This action will provide the initial portion of the overall pump-and-treat capacity expected to be required by the 200-ZP-1 and 200-UP-1 Records of Decision. This initial operation can provide treatment for the Tc-99 plume at the S/SX Tank Farm within the 200-UP-1 Operable Unit.	12/31/2011
M-016-123	Submit CERCLA RD/RA Work Plan for the 200-ZP-1 OU. DOE shall initiate construction six months after the RD/RA Work Plan is approved or as specified in the Work Plan schedule. This schedule will become enforceable under the HFFACO upon approval of the RD/RA Work Plan.	03/31/2009
M-015-73	Submit Feasibility Study Report and Proposed Plan for the 200-PO-1 Operable Unit.	12/31/2011

Change Number M-91-08-05	Federal Facility Agreement and Consent Order *Change Control Form* Do not use blue ink. Type or print using black ink.	**Date** August 4, 2009

Originator Matt McCormick **Phone** (509) 373-9971

Class of Change
[X] I – Signatories [ ] II – Executive Manager [ ] III – Project Manager

Change Title
Modification of Hanford Federal Facility Agreement and Consent Order (HFFACO) M-91 Interim Milestones

Description/Justification of Change
DOE has submitted this change request to reach agreement on adjustments in workscope and milestones consistent with available funding for FY09 and with a shift of resources to the river corridor and other high priority work. This shift of resources is expected to require modification of several M-91 interim milestone requirements.

The Parties will continue to work together per HFFACO Article, XLVIII. Cost Schedule, Scope, Integration, Planning and Reporting to establish due dates for the milestones that are being identified in this change package with to be determined due dates.

The proposed changes provide for reduced levels of waste retrieval and treatment for the next few years. The agencies will negotiate a new schedule for completion of this work in the fall of 2009.

Impact of Change
This change aligns the impacted milestone requirements with 2009 Continuing Resolution funding levels.

Affected Documents
The Hanford Federal Facility Agreement and Consent Order, as amended and Hanford Site internal planning management, and budget documents (e.g., USDOE contractor Baseline Change Control documents; M-91-03 Hanford Site TRU mixed/mixed low level waste Project Management Plan, and LDR Report).

Approvals

Ecology	8/11/09 Date	X Approved	____ Disapproved
DOE-RL	8/10/09 Date	X Approved	____ Disapproved
EPA	8/11/09 Date	X Approved	____ Disapproved

Modifications to existing Tri-Party Agreement milestones are denoted with ~~strikeout~~; new milestone/text are denoted with shading.

M-091-00	COMPLETE THE ACQUISITION OF NEW FACILITIES, MODIFICATION OF EXISTING FACILITIES, AND MODIFICATION OF PLANNED FACILITIES NECESSARY FOR RETRIEVAL, STORAGE, AND TREATMENT/PROCESSING, OF ALL HANFORD SITE RCRA MIXED AND SUSPECT MIXED LOW-LEVEL WASTE AND RCRA MIXED AND SUSPECT MIXED TRANSURANIC WASTE. DEFINITIONS THE FOLLOWING DEFINITIONS APPLY TO THIS SERIES OF MILESTONES "SMALL CONTAINERS" AND LARGE CONTAINERS" AS USED HEREIN HAVE DIFFERENT MEANINGS DEPENDING ON WHETHER THEY ARE USED IN REFERENCE TO MLLW/LLW OR TRANSURANIC WASTE. WHEN REFERRING TO MLLW/LLW, SMALL CONTAINERS ARE CONTAINERS LESS THAN 10 CUBIC METERS, INCLUDING 55 GALLON DRUMS. A LARGE CONTAINER IS ANYTHING NOT DEFINED AS A SMALL CONTAINER. WHEN REFERRING TO TRANSURANIC WASTE, SMALL CONTAINERS ARE 55 GALLON DRUMS OR SMALLER CONTAINERS EVEN IF OVER-PACKED IN 85 GALLON DRUMS, AND NEWLY GENERATED WIPP STANDARD WASTE BOXES (SWB). A WIPP SWB IS A 1.8 CUBIC METER STEEL CONTAINER THAT IS APPROXIMATELY O.94 METERS IN HEIGHT, 1.8 METERS IN LENGTH, AND 1.4 METERS IN WIDTH AND WAS QUALIFIED BY THE U.S. DEPARTMENT OF ENERGY (USDOE) IN 1988 AS MEETING THE U.S. DEPARTMENT OF TRANSPORTATION REQUIREMENTS FOR SPECIFICATION 7A TYPE A PACKAGINGS. A LARGE CONTAINER IS ANYTHING NOT DEFINED AS A SMALL CONTAINER. "CERTIFICATION" AS USED HEREIN IS DEFINED AS COMPLETION OF ALL ACTIVITIES ~~REQUIRED FOR APPROVAL IN THE WIPP WASTE INFORMATION SYSTEM FOR ACCEPTANCE INTO WIPP FOR DISPOSAL.~~NECESSARY FOR WASTE TO BE PACKAGED SUCH THAT IT CAN MEET WIPP WASTE ACCEPTANCE CRITERIA (WAC). IF SUBSEQUENT WIPP CERTIFICATION REVEALS THE WASTE CANNOT BE SHIPPED TO WIPP THIS WASTE WILL NOT COUNT TOWARDS MEETING THE MILESTONE VOLUME REQUIREMENTS (AND WILL BE	To Be Determined*

SUBTRACTED FROM MEETING SUCH REQUIREMENTS) UNTIL SUCH TIME AS IT HAS BEEN DETERMINED TO MEET WIPP WASTE ACCEPTANCE CRITERIA, IT HAS BEEN SHIPPED TO IDAHO SUBJECT TO THE SENTENCE BELOW, OR IT HAS OTHERWISE BEEN TREATED TO MEET LDR REQUIREMENTS. TRANSURANIC (TRU) WASTE SHIPPED TO IDAHO MAY ALSO COUNT TOWARD CERTIFICATION BASED UPON ACTUAL SHIPMENT TO IDAHO AND CONTINGENT UPON THE WASTE NOT RETURNING TO THE HANFORD SITE.

"DESIGNATION" AS USED HEREIN IS DEFINED AS THE PROCESS FOR DETERMINING: (1) WHICH CONTAINERS OF LOW-LEVEL WASTE ARE MLLW; AND, (2) WHICH CONTAINERS OF TRANSURANIC WASTE ARE MIXED TRANSURANIC WASTE (CH-TRUM OR RH-TRUM). DESIGNATION OF WASTE WILL BE PERFORMED PURSUANT TO WAC 173-303-070 THROUGH 100. THESE REGULATIONS ALLOW THE USE OF "ACCEPTABLE KNOWLEDGE," SURROGATE SAMPLING AND OTHER MEASURES FOR DESIGNATION TO MINIMIZE WORKERS' RADIATION EXPOSURE AND TO REDUCE COSTS. WHERE APPLICABLE, DOE INTENDS TO USE INFORMATION GATHERED THROUGH THE CERTIFICATION OF TRANSURANIC WASTE IN SUPPORT OF ITS DESIGNATION OF RELATED LOW-LEVEL WASTE STREAMS. WHERE APPROPRIATE, DOE WILL USE MEASURES ALLOWED UNDER STATE AND FEDERAL REGULATIONS TO PERFORM ACCURATE AND COST EFFECTIVE DESIGNATIONS OF LOW-LEVEL WASTE.

"LOW-LEVEL WASTE" AS USED HEREIN IS DEFINED AS RADIOACTIVE WASTE THAT IS NOT SPENT FUEL, HIGH-LEVEL WASTE, TRANSURANIC WASTE, BYPRODUCT MATERIAL, OR NATURALLY OCCURRING RADIOACTIVE MATERIAL. LOW-LEVEL WASTE INCLUDES BOTH "MIXED LOW-LEVEL WASTE" AND "NON-MIXED LOW-LEVEL WASTE." "MIXED LOW-LEVEL WASTE" (MLLW) IS LOW-LEVEL WASTE THAT IS SUBJECT TO RCRA OR 70.105 RCW. "NON-MIXED LOW-LEVEL WASTE" (LLW) IS LOW-LEVEL WASTE THAT IS NOT SUBJECT TO RCRA OR 70.105 RCW. LLW AND MLLW CAN BE CONTACT-HANDLED (CH), I.E., CH-LLW OR CH-MLLW, OR REMOTE-HANDLED (RH), I.E., RH-LLW OR RH-MLLW.

"CONTACT HANDLED" (CH) WASTE IS A WASTE PACKAGE WITH A SURFACE DOSE RATE LESS THAN OR EQUAL TO 200 MILLIREM PER HOUR.

"REMOTE HANDLED" (RH) WASTE IS A WASTE PACKAGE WITH A SURFACE DOSE RATE GREATER THAN 200 MILLIREM PER HOUR.

"RETRIEVABLY STORED WASTE" (RSW) AS USED HEREIN IS

DEFINED AS WASTE THAT IS OR WAS BELIEVED TO BE CONTAMINATED WITH SIGNIFICANT CONCENTRATIONS OF TRANSURANIC ISOTOPES WHEN IT WAS PLACED IN THE 218-W-4B, 218-W-4C, 218-W-3A AND 218-E-12B BURIAL GROUND TRENCHES AFTER MAY 6, 1970. DURING THE RETRIEVAL PROCESS, CONTAINERS OF RSW WILL BE SEGREGATED INTO TWO CATEGORIES: (1) CH RSW AND (2) RH RSW. SUBSEQUENT ANALYSIS AND CATEGORIZATION OF RSW PURSUANT TO CH. 70.105 RCW, THE ATOMIC ENERGY ACT, AND THE WIPP LAND WITHDRAWAL ACT WILL RESULT IN MOST OR ALL OF THIS WASTE BEING CLASSIFIED AS ONE OF THE FOLLOWING TYPES OF WASTE: CH-LLW, RH-LLW, CH-MLLW, RH-MLLW, CH-TRU, CH-TRUM, RH-TRU OR RH-TRUM. RSW DOES NOT INCLUDE WASTE IN CONTAINERS THAT HAVE DETERIORATED TO THE POINT THAT THEY CANNOT BE RETRIEVED AND STABILIZED (E.G. PLACED IN OVERPACKS) IN A MANNER THAT WOULD ALLOW THEM TO BE TRANSPORTED AND DESIGNATED WITHOUT POSING SIGNIFICANT RISKS TO WORKERS, THE PUBLIC OR THE ENVIRONMENT. WITH RESPECT TO ANY SUCH CONTAINERS, AND WITH RESPECT TO ANY RELEASE OF RSW, THE DECISION AS TO HOW TO MOVE FORWARD WILL BE DETERMINED THROUGH THE CLEANUP PROCESS SET FORTH IN RCRA, CH. 70.105 RCW, AND/OR CERCLA AS APPROPRIATE. THOSE PROCESSES MAY RESULT IN ADDITIONAL REQUIREMENTS FOR THE REMEDIATION OF SUCH WASTES.

"CAISSON WASTE" AS USED HEREIN IS DEFINED AS RSW IN THE 218-W-4B BURIAL GROUND CAISSONS ALPHA-1 THROUGH ALPHA-4.

"TRANSURANIC WASTE" AS USED HEREIN IS DEFINED AS WASTE THAT MEETS THE DEFINITION IN SUBSECTION (18) OF SECTION 2 OF THE WASTE ISOLATION PILOT PLANT LAND WITHDRAWAL ACT, PUB. L. 102-579. TRANSURANIC WASTE INCLUDES BOTH MIXED TRANSURANIC (TRUM) WASTE AND NON-MIXED TRANURANIC (TRU) WASTE, AND COMPRISES THE FOLLOWING CATEGORIES: CH-TRU, CH-TRUM, RH-TRU, AND RH-TRUM.

"RETRIEVAL OF CH RSW" IS DEFINED AS UNCOVERING CH WASTES WITHIN DOE'S RSW TRENCHES, REMOVING SUCH CH WASTES FROM THE TRENCHES, AND TRANSFERING THE WASTE TO A PERMITTED AND COMPLIANT TREATMENT, STORAGE OR DISPOSAL UNIT, THE ENVIRONMENTAL RESTORATION AND DISPOSAL FACILITY (ERDF) OR FOR WASTE DESIGNATED IN ACCORDANCE WITH WAC 173-303-070 THROUGH 100 AS NON-MIXED TO A STORAGE OR DISPOSAL UNIT THAT DOE DETERMINES IS APPROPRIATE.

"RETRIEVAL OF RH RSW" IS DEFINED AS UNCOVERING RH

WASTES WITHIN DOE'S RSW TRENCHES AND CAISSONS, REMOVING SUCH RH WASTES FROM THE TRENCHES AND CAISSONS, TRANSFERING THE WASTE TO A PERMITTED AND COMPLIANT TREATMENT, STORAGE OR DISPOSAL UNIT, THE ENVIRONMENTAL RESTORATION AND DISPOSAL FACILITY (ERDF) OR FOR WASTE DESIGNATED IN ACCORDANCE WITH WAC 173-303-070 THROUGH 100 AS NON-MIXED TO A STORAGE OR DISPOSAL UNIT THAT DOE DETERMINES IS APPROPRIATE.

TO PROVIDE FURTHER CLARIFICATION OF HOW VOLUMES SHOULD BE DETERMINED IN DIFFERENT M-91 CONTEXTS, AND TO BE CONSISTENT WITH THE VOLUMES OF WASTE LISTED IN THE HANFORD SITE SOLID WASTE INVENTORY TRACKING SYSTEM (SWITS), THE FOLLOWING DESCRIPTIONS ARE PROVIDED:

- VOLUMES FOR THE PURPOSES OF DETERMINING AMOUNTS RETRIEVED SHALL BE BASED ON THE VOLUME OF THE ORIGINAL CONTAINERS IN RETRIEVABLE STORAGE. FOR EXAMPLE, THE VOLUME OF A 55 GALLON RSW DRUM THAT WOULD BE COUNTED TOWARD "RETRIEVAL" WOULD BE 55 GALLONS (.208 CUBIC METERS), EVEN IF IN THE PROCESS OF RETRIEVAL THE DRUM NEEDED TO BE OVER-PACKED INTO AN 85 GALLON DRUM.

- THE VOLUME OF MLLW "TREATED" WILL BE COUNTED AS THE RETRIEVAL VOLUME (FOR RSW) OR THE MLLW PRE-TREATMENT CONTAINER VOLUME (FOR NEWLY GENERATED AND STORED WASTE).

- THE VOLUME OF TRANSURANIC WASTE COUNTED AS "CERTIFIED" WILL BE THE VOLUME OF THE CERTIFIED CONTAINER CONTAINING THE WASTE UNLESS THE WASTE IS COMPACTED. IN THE EVENT THAT THE WASTE IS COMPACTED, THE VOLUME OF THE PRE-COMPACTION CONTAINER WILL BE COUNTED.

NOTE: THE REQUIREMENTS OF THIS MILESTONE WITH REGARD TO THE ACQUISTION OF NEW FACILITIES, MODIFICATION OF EXISTING FACILITIES, AND MODIFICATION OF PLANNED FACILITIES NECESSARY FOR TREATMENT/PROCESSING OF RCRA MIXED AND SUSPECT MIXED TRANSURANIC WASTE APPLY AS SET FORTH IN THE SETTLEMENT AGREEMENT BETWEEN THE UNITED STATES AND THE STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY, DATED OCTOBER 23, 2003.
*NOTE: THE M-91 SERIES MILESTONES (INCLUDING THIS NOTE) DO NOT INCLUDE ANY REQUIREMENTS TO ESTABLISH SCHEDULES FOR THE MANAGEMENT OF PRE-1971 TRU/TRUM.

	SCHEDULES FOR THE MANAGEMENT OF PRE-1971 TRU/TRUM WILL BE ESTABLISHED, PURSUANT TO APPLICABLE PROVISIONS OF THE HFFACO OTHER THAN THE M-91 SERIES MILESTONES, FOLLOWING THE ISSUANCE OF OPERABLE UNIT RECORDS OF DECISION (RODS).	
M-091-01	COMPLETE THE ACQUISITION OF CAPABILITIES AND/OR ACQUISITION OF NEW FACILITIES, MODIFICATION OF EXISTING FACILITIES, AND/OR MODIFICATION OF PLANNED FACILITIES NECESSARY FOR RETRIEVAL, DESIGNATION, STORAGE, AND TREATMENT/PROCESSING PRIOR TO DISPOSAL OF ALL HANFORD SITE POST 1970 RH TRUM AND SUSPECT RH TRUM, TRUM IN LARGE CONTAINERS, AND SUSPECT TRUM IN LARGE CONTAINERS. NOTE: THE REQUIREMENTS OF THIS MILESTONE WITH REGARD TO COMPLETING THE ACQUISITION OF NEW FACILITIES, MODIFICATION OF EXISTING FACILITIES AND/OR MODIFICATION OF PLANNED FACILITIES NECESSARY FOR TREATMENT/PROCESSING OF HANFORD SITE POST 1970 RH TRUM AND SUSPECT RH TRUM, TRUM IN LARGE CONTAINERS, AND SUSPECT TRUM IN LARGE CONTAINERS APPLY AS SET FORTH IN THE SETTLEMENT AGREEMENT BETWEEN THE UNITED STATES AND THE STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY, DATED OCTOBER 23, 2003.	~~06/30/2012~~ TBD per M-091-45
M-091-03	SUBMIT REVISION OF THE HANFORD SITE TRUM AND MIXED LOW-LEVEL WASTE PROJECT MANAGEMENT PLAN (PMP) TO ECOLOGY PURSUANT TO, AND IN COMPLIANCE WITH THE REQUIREMENTS OF AGREEMENT SECTION 11.5. REVISIONS OF THE PMP SHALL ADDRESS RCRA MIXED AND SUSPECT MIXED TRANSURANIC AND LOW LEVEL WASTE AND WILL CONSIDER AND EXPRESSLY EVALUATE THE IMPACT ON M-91 RETRIEVAL, TREATMENT AND PROCESSING CAPABILITIES, THAT MAY RESULT FROM RETRIEVAL, TREATMENT AND/OR PROCESSING OF ANY OTHER TRANSURANIC OR SUSPECT TRANSURANIC WASTE INCLUDING BUT NOT LIMITED TO OFF-SITE TRANSURANIC WASTE AND HANFORD SITE TRANSURANIC WASTE GENERATED AFTER 1/1/03. ANNUAL REVISIONS OF THE PMP WILL BE SUBMITTED ON JUNE 30 EVERY YEAR STARTING IN 2008 AND CONTINUING UNTIL THE M-91 MILESTONES ARE COMPLETED. THE PMP REVISIONS SHALL INCLUDE PLANS AND SCHEDULES TO MEET ALL THE REQUIREMENTS SET FORTH IN THE M-91 MILESTONE SERIES. EACH REVISION OF THE M-91-03 PMP SHALL, UPON APPROVAL BY ECOLOGY, SUPERSEDE PREVIOUS M-91-03 PMPS. EACH REVISION IS A DISTINCT WORK REQUIREMENT INDEPENDENTLY SUBJECT TO THE ENFORCEMENT PROVISIONS OF THIS AGREEMENT.	DUE DATES AS INDICATED IN THE DESCRIPTIVE TEXT OF THIS MILESTONE

	THE PMP WILL INCLUDE A DESCRIPTION OF COMPLETED AND SCHEDULED WORK RELATING TO RH WASTE AND LARGE CONTAINERS OF RH AND CH WASTE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE M-91 MILESTONE SERIES. THE PMP WILL DOCUMENT WORK COMPLETED DURING THE PREVIOUS FEDERAL FISCAL YEAR AND WORK SCHEDULED FOR THE COMING FISCAL YEAR. THE PMP SHALL IDENTIFY BY CITATION ALL PUBLICLY AVAILABLE REPORTS DESCRIBING PERTINENT PROJECT ISSUES AND ACCOMPLISHMENTS, AND SHALL IDENTIFY ANTICIPATED PROJECTS FOR THE COMING YEAR. WITH RESPECT TO RH TRUM, RH SUSPECT TRUM AND MIXED WASTE AND TRUM, SUSPECT TRUM, AND MIXED WASTE IN LARGE CONTAINERS, THE PMP SUBMITTED YEARLY WILL SPECIFICALLY INCLUDE AT LEAST ONE MEASURABLE ACTION(S) TO BE TAKEN BY DOE TO ACQUIRE CAPABILITIES TO MANAGE SUCH WASTES. THE PMP SUBMITTED ON 12/31/2003 WILL NOT BE REQUIRED TO CONTAIN PLANS AND SCHEDULES FOR THE LDR TREATMENT (OR CERTIFICATION IN LIEU OF SUCH TREATMENT AS PROVIDED FOR IN M-91-42 AND M-91-44)OF TRUM WASTE. DOE SHALL REVISE THE PMP TO INLCUDE PLANS AND SCHEDULES FOR LDR TREATMENT (OR CERTIFICATION IN LIEU OF SUCH TREATMENT AS PROVIDED IN M-91-42 AND M-91-44) OF TRUM WASTE BY 12/28/06. PMP REVISIONS WILL BE SUBMITTED TO ECOLOGY FOR REVIEW AND APPROVAL AS PRIMARY DOCUMENTS PURSUANT TO AGREEMENT ACTION PLAN SECTION 9.2.1. DOE SHALL IMPLEMENT THE PLAN AS APPROVED. NOTE: WITH RESPECT TO PMP REVISIONS, THE REQUIREMENTS OF THIS MILESTONE CONCERNING PMP REVISIONS TO ADDRESS TRUM SHALL APPLY AS SET FORTH IN THE ACCOMPANYING SETTLEMENT AGREEMENT BETWEEN THE UNITED STATES AND THE STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY, DATED OCTOBER 23, 2003.	
M-091-40	REGARDING THE RETRIEVAL AND DESIGNATION OF CONTACT-HANDLED (CH) RETRIEVABLY STORED WASTE (RSW) AND TREATMENT OF SUCH WASTES DESIGNATED AS MIXED TO MEET APPLICABLE FEDERAL AND STATE LAND DISPOSAL RESTRICTION (LDR) STANDARDS (ALL CH RSW WASTE REGARDLESS OF PACKAGE SIZE): 1. DOE SHALL RETRIEVE ALL CH-RSW WITHIN BURIAL GROUNDS 218-W-4C, 218-W-4B, 218-W-3A, AND 218-E-12B ~~BY DECEMBER 31, 2010~~. IN ACHIEVING THIS RETRIEVAL	DUE DATES AS INDICATED IN THE DESCRIPTIVE TEXT OF THIS MILESTONE

REQUIREMENT, DOE SHALL FIRST INITIATE RETRIEVAL AT ITS BURIAL GROUND 218-W-4C NO LATER THAN NOVEMBER 15, 2003, AND SHALL RETRIEVE RSW AT THE FOLLOWING RATES :

- 1,200 CUBIC METERS (CUMULATIVE) BY 12/31/04,
- 2,700 CUBIC METERS (CUMULATIVE) BY 12/31/05,
- 4,700 CUBIC METERS (CUMULATIVE) BY 12/31/06,
- 7,200 CUBIC METERS (CUMULATIVE) BY 12/31/07,
- 9,700 CUBIC METERS (CUMULATIVE) BY 12/31/08,
- TARGET DATE ~~12,200~~ 9,950 CUBIC METERS (CUMULATIVE) BY ~~12/31/09~~ 9/30/09,
- TARGET DATE 10,700 CUBIC METERS (CUMULATIVE) BY 09/30/10,
- TARGET DATE 1000 CUBIC METERS PER YEAR UNTIL COMPLETED.

COMPLETE RETRIEVAL OF CH-RSW BY ~~12/31/2010~~DATE TO BE DETERMINED PER M-091-45.

CONCURRENT RETRIEVAL ACTIONS CAN BE CONDUCTED IN MULTIPLE BURIAL GROUNDS. IF SPECIFIC LARGE CONTAINERS CANNOT BE REMOVED FROM A TRENCH WITHIN 60 DAYS OF BEING EXPOSED DOE SHALL NOTIFY ECOLOGY WITHIN THE 60 DAY PERIOD. ECOLOGY WILL INSPECT THE CONTAINER AND IMPOSE SPECIFIC CONDITIONS FOR THAT WASTE CONTAINER TO PREVENT RELEASES TO THE ENVIRONMENT. IN DETERMINING SUCH CONDITIONS ECOLOGY WILL CONSIDER AMONG OTHER FACTORS; WHETHER THE WASTE CONTAINER HAS BEEN INSPECTED AND FOUND TO BE INTACT AND NOT POSING A THREAT TO HUMAN HEALTH AND THE ENVIRONMENT(OR RE-PACKAGED TO PREVENT RELEASE TO THE ENVIRONMENT)AND EXISTING DOCUMENTATION CONCERNING THE PRESENCE OF FREE LIQUIDS.

2. AS RSW RETRIEVAL PROCEEDS, DOE SHALL SAMPLE AND ANALYZE TRENCH SUBSTRATES WITH THE PURPOSES OF DETERMINING WHETHER OR NOT RELEASES OF CONTAMINANTS TO THE ENVIRONMENT HAVE OCCURRED, AND, IF SO, THE NATURE AND EXTENT OF CONTAMINATION.

   SUCH SAMPLING AND ANALYSIS SHALL BE IN ACCORDANCE WITH ECOLOGY APPROVED SAMPLING AND ANALYSIS PLANS (SAP). THE SAP WILL BE DEVELOPED USING A DQO PROCESS TO ESTABLISH SAMPLING REQUIREMENTS FOR SAMPLING OF BURIAL GROUND VENT RISERS AND SUBSTRATE SOILS. ECOLOGY APPROVED THE 218-W-4C SAP SEPTEMBER 12, 2003, THE 218-E-12B SAP JANUARY 20, 2005, THE 218-W-3A SAP JUNE

15, 2006, AND THE 218-W-4B SAP JULY 25, 2006. DOE WILL IMPLEMENT APPROVED SAPS, AS A REQUIREMENT OF THIS MILESTONE, DURING RETRIEVAL OF ALL RSW.

THE RESULTS OF BURIAL GROUND VENT AND SUBSTRATE SAMPLING AND ANALYSIS PURSUANT TO APPROVED SAPS SHALL BE SUBMITTED TO ECOLOGY BY LETTER REPORTS QUARTERLY. SUCH REPORTS SHALL DOCUMENT RESULTS AND METHODOLOGIES, SHALL ASSESS RESULTS AGAINST REGULATORY REQUIREMENTS, SHALL INCLUDE A DESCRIPTION (OR DESCRIPTIONS)OF DOCUMENTED CONTAMINANT RELEASES TO THE ENVIRONMENT, AND SHALL DESCRIBE PLANNED AND/OR SCHEDULED ADDITIONAL WORK.

3. WITHIN 90 DAYS OF RETRIEVAL, DOE SHALL DESIGNATE ALL CH RSW RETRIEVED FROM THE RSW TRENCHES PURSUANT TO WAC 173-303-070 THROUGH 100, OR SHALL SPECIFICALLY IDENTIFY INDIVIDUAL LARGE CONTAINERS THAT CANNOT BE DESIGNATED BASED ON AVAILABLE PROCESS KNOWLEDGE. FOR THE LARGE CONTAINERS DETERMINED TO BE LOW- LEVEL WASTE THAT CANNOT BE DESIGNATED BASED ON THE AVAILABLE PROCESS KNOWLEDGE, DOE SHALL DESIGNATE SAID WASTE ACCORDING TO THE REQUIREMENTS OF WAC 173-303-070 THROUGH 100, BY DECEMBER 31, 2008. FOR LARGE CONTAINERS DETERMINED TO BE TRANSURANIC WASTE THAT CANNOT BE DESIGNATED BASED ON THE AVAILABLE PROCESS KNOWLEDGE, DOE SHALL DESIGNATE SAID WASTE ACCORDING TO THE REQUIREMENTS OF WAC 173-303-070 THROUGH 100, BY DATE ~~DECEMBER 31, 2012~~ TO BE DETERMINED PER M-091-45.

4. FOR ALL RETRIEVED CH-RSW DETERMINED TO BE LOW LEVEL WASTE AND DESIGNATED IN ACCORDANCE WITH WAC 173-303-070 THROUGH 100, AS MIXED AND AS CONTAINING LDR RESTRICTED CONSTITUENTS, DOE SHALL TREAT SUCH WASTES TO MEET LDR REQUIREMENTS IN ACCORDANCE WITH THE SCHEDULE PROVIDED IN MILESTONE M-91-42(2) AND M-91-43(3).

5. IN REGARD TO THE CARBON TETRACHLORIDE VAPOR PLUME IN THE VADOSE ZONE IN THE VICINITY OF TRENCH 4 IN BURIAL GROUND 218-W-4C, DOE SHALL:

   - START VAPOR EXTRACTION BY NOVEMBER 15, 2003, TO REDUCE CARBON TETRACHLORIDE VAPORS.
   - START RETRIEVAL IN TRENCH 4 BY JANUARY 15, 2004
   - COMPLETE RETRIEVAL OF TRENCH 4 BY DECEMBER

	31, 2006. (WITH THE EXCEPTION OF THOSE LARGE CONTAINERS THAT THE PARTIES HAVE AGREED, IN WRITING, MAY BE RETRIEVED OUT OF SEQUENCE.) RETRIEVAL WILL CONTINUE IN TRENCH 4 UNTIL IT IS COMPLETE. VAPOR EXTRACTION AND RETRIEVAL OPERATIONS IN TRENCH 4 WILL BE INTEGRATED BY DOE TO MINIMIZE POTENTIAL WORKER EXPOSURE TO CARBON TETRACHLORIDE VAPORS, AND TO MITIGATE ANY POSSIBLE RELEASES OF CARBON TETRACHLORIDE FROM TRENCH 4 CONTAINERS. 6. FOR ALL RETRIEVED CH-RSW DETERMINED TO BE TRANSURANIC WASTE AND DESIGNATED IN ACCORDANCE WITH WAC 173-303-070 THROUGH 100, AS MIXED AND AS CONTAINING LDR RESTRICTED CONSTITUENTS, DOE SHALL TREAT SUCH WASTES TO MEET LDR REQUIREMENTS IN COMPLIANCE WITH THE SCHEDULE IN M-91-42(4) AND M-91-44(3). DOE MAY CHOOSE TO COMPLETE CERTIFICATION OF CH TRANSURANIC WASTE FOR DISPOSAL AT WIPP IN LIEU OF LDR TREATMENT, PROVIDED THAT ECOLOGY IS NOTIFIED IN WRITING OF SUCH COMPLETION OF CERTIFICATION, AND ONLY IF, AS OF THE TIME OF CERTIFICATION, SUCH WASTE IS EXEMPT FROM LDR TREATMENT REQUIREMENTS WHEN DISPOSED AT WIPP. IF DOE CHOOSES TO CERTIFY IN LIEU OF TREATMENT, IT MAY MEET THE VOLUME REQUIREMENTS SPECIFIED IN THIS MILESTONE FOR ANY GIVEN YEAR BY CERTIFYING CH TRU OR CH TRUM. NOTIFICATION OF CERTIFICATION IN LIEU OF TREATMENT WILL BE PROVIDED ANNUALLY AS PART OF THE CERTIFICATION VOLUME COMPLETION LETTER. NOTE: THE REQUIREMENTS OF ITEM 6 OF THIS MILESTONE APPLY AS SET FORTH IN THE SETTLEMENT AGREEMENT BETWEEN THE UNITED STATES AND THE STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY, DATED OCTOBER 23, 2003. 7. EACH REQUIREMENT OF THIS MILESTONE IS CONSIDERED A DISTINCT WORK REQUIREMENT INDEPENDENTLY SUBJECT TO THE ENFORCEMENT PROVISIONS OF THE AGREEMENT.	
M-091-41	REGARDING THE RETRIEVAL AND DESIGNATION OF REMOTE HANDLED (RH) RSW (ALL RSW RH WASTE REGARDLESS OF PACKAGE SIZE, INCLUDING THE 200 AREA CAISSONS), AND LDR TREATMENT OF SUCH WASTES DETERMINED TO BE MIXED.	DUE DATES AS INDICATED IN THE DESCRIPTIV

	1. DOE SHALL INITIATE FULL SCALE RETRIEVAL OF RH RSW BY TARGET DATE JANUARY 1, 2011. RETRIEVAL OF NON-CAISSON RH RSW SHALL BE COMPLETED BY DECEMBER 31, 2014. RETRIEVAL OF THE 200 AREA CAISSONS RH RSW IN THE 218-W-4B BURIAL GROUND SHALL BE COMPLETED BY DECEMBER 31, 2018. 2. DOE SHALL DESIGNATE ALL RETRIEVED RH RSW PURSUANT TO WAC 173-303-070 THROUGH 100, WITHIN 90 DAYS OF RETRIEVAL. 3. FOR ALL RETRIEVED RH-RSW DETERMINED TO BE LOW-LEVEL WASTE AND DESIGNATED IN ACCORDANCE WITH WAC 173-303-070 THROUGH 100, AS MIXED AND AS CONTAINING LDR RESTRICTED CONSTITUENTS, DOE SHALL TREAT SUCH WASTE TO MEET LDR REQUIREMENTS IN ACCORDANCE WITH THE SCHEDULE PROVIDED IN MILESTONE M-91-43(3). 4. FOR ALL RETRIEVED RH-RSW DETERMINED TO BE TRANSURANIC WASTE AND DESIGNATED IN ACCORDANCE WITH WAC 173-303-070 THROUGH 100, AS MIXED AND AS CONTAINING LDR RESTRICTED CONSTITUENTS, DOE SHALL TREAT SUCH WASTES TO MEET LDR REQUIREMENTS IN ACCORDANCE WITH THE SCHEDULE PROVIDED IN MILESTONE M-91-44(3). DOE MAY CHOOSE TO COMPLETE CERTIFICATION OF SUCH WASTES FOR DISPOSAL AT WIPP IN LIEU OF LDR TREATMENT, PROVIDED THAT ECOLOGY IS NOTIFIED IN WRITING OF SUCH COMPLETION OF CERTIFICATION, AND ONLY IF, AS OF THE TIME OF CERTIFICATION, SUCH WASTE IS EXEMPT FROM LDR TREATMENT REQUIREMENTS WHEN DISPOSED AT WIPP. NOTE: THE REQUIREMENTS OF ITEM 4 OF THIS MILESTONE APPLY AS SET FORTH IN THE SETTLEMENT AGREEMENT BETWEEN THE UNITED STATES AND THE STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY, DATED OCTOBER 23, 2003. 5. EACH REQUIREMENT OF THIS MILESTONE IS CONSIDERED A DISTINCT WORK REQUIREMENT INDEPENDENTLY SUBJECT TO THE ENFORCEMENT PROVISIONS OF THE AGREEMENT.	E TEXT OF THIS MILESTONE
M-091-42	REGARDING SMALL CONTAINERS OF: (1) NEWLY GENERATED CH WASTE; AND (2) CH RSW; AND (3) CH WASTE CURRENTLY IN ABOVE-GROUND STORAGE. 1. DOE SHALL DESIGNATE ALL NEWLY GENERATED CH WASTE AT THE POINT OF GENERATION. SUCH DESIGNATION SHALL COMPLY WITH THE REQUIREMENTS OF WAC 173-	DUE DATES AS INDICATED IN THE DESCRIPTIV E TEXT OF THIS

	303-070 THROUGH 100. 2. THERE WERE 5,066 CUBIC METERS OF CH-MLLW IN PERMITTED STORAGE AT DOE'S CENTRAL WASTE COMPLEX (CWC) AND ELSEWHERE AT HANFORD AS OF 12/31/02 (AS IDENTIFIED IN DOE HFFACO MILESTONE M-26-01 LDR REPORT MLLW TREATABILITY GROUPS MLLW-02 THROUGH MLLW-10, EXCLUDING MLLW-07) THAT HAD NOT BEEN TREATED TO MEET LDR REQUIREMENTS. (THIS VOLUME DOES NOT INCLUDE 600 CUBIC METERS OF WASTE REQUIRING THERMAL TREATMENT, AS THAT WASTE HAS SEPARATE TREATMENT REQUIREMENTS PER M-91-12 AND M-91-12A). APPROXIMATELY 4422 CUBIC METERS OF MLLW SUBJECT TO M-91-42 WAS TREATED BETWEEN 12/31/02 AND 12/31/05. DOE'S 2002 LDR REPORT ESTIMATED GENERATION OF AN ADDITIONAL ANNUAL VOLUME OF APPROXIMATELY 330 CUBIC METERS OF CH-MLLW (AS WASTE TYPES IDENTIFIED IN DOE HFFACO MILESTONE M-26-01 LDR REPORT MLLW TREATABILITY GROUPS MLLW-02 THROUGH MLLW-10, EXCLUDING MLLW-07). IT WAS ALSO ESTIMATED IN 2002 THAT DOE WOULD RETRIEVE APPROXIMATELY 800 CUBIC METERS OF CH-MLLW BY 2010. BASED ON THE CY2005 LDR SUMMARY REPORT AS OF 12/31/05 FOR MLLW SUBJECT TO M-91-42, THERE WERE APPROXIMATELY 2100 CUBIC METERS IN PERMITTED STORAGE, AND 280 CUBIC METERS FORECAST TO BE GENERATED BY THE END OF CY2009. ACCORDING TO THE M-91-PMP (HNF-19169 REV 2) APPROXIMATELY 2550 CUBIC METERS OF M-91-42 MLLW WAS EXPECTED TO BE RETRIEVED BETWEEN 12/31/05 AND 12/31/09. IN ADDITION TO MEETING THE REQUIREMENTS OF M-91-12 AND M-91-12A, DOE SHALL TREAT THE WASTE DESCRIBED ABOVE TO MEET LDR REQUIREMENTS ON A SCHEDULE MEETING, AT MINIMUM, THE FOLLOWING CUMULATIVE TOTALS BASED ON A START DATE OF 12/31/02: A. 1630 CUBIC METERS (CUMULATIVE) SHALL BE TREATED BY 12/31/04, B. 3260 CUBIC METERS BY (CUMULATIVE) SHALL BE TREATED BY 12/31/05, C. 4890 CUBIC METERS (CUMULATIVE) SHALL BE TREATED BY 12/31/06, D. 6520 CUBIC METERS (CUMULATIVE) SHALL BE TREATED BY 12/31/07, E. 7,220 CUBIC METERS (CUMULATIVE) SHALL BE TREATED BY 12/31/08, ~~AND~~ F. TARGET DATE 7,600 METERS (CUMULATIVE) SHALL BE TREATED BY 12/31/09, AND	MILESTONE

G. COMPLETE TREATMENT OF ALL CH-MLLW (5066 CUBIC METERS IN STORAGE AS OF 12/31/02 AS DESCRIBED ABOVE, AND RETRIEVED CH-MLLW AND NEWLY GENERATED CH-MLLW IN THE TREATABILITY GROUPS DESCRIBED ABOVE, AS OF 6/30/09), BY ~~12/31/09~~ DATE TO BE DETERMINED PER M-091-45.

IF CH-MLLW IN THE TREATABILITY GROUPS SUBJECT TO THIS MILESTONE GENERATED DURING THE PERIOD FROM 12/31/02 THROUGH 6/30/09 IS TREATED TO LDR STANDARDS PRIOR TO DELIVERY TO STORAGE OR DISPOSAL, THE ORIGINAL PRE-TREATMENT VOLUME OF THAT WASTE SHALL BE COUNTED TOWARD MEETING THE VOLUME REQUIREMENTS OF THIS MILESTONE. EXCEPT FOR WASTE ALREADY IN PERMITTED STORAGE AS OF 12/31/02, TREATMENT OF CERCLA WASTE WILL NOT BE COUNTED TOWARD MEETING THE VOLUME REQUIREMENTS OF THIS MILESTONE. RSW DETERMINED TO BE MLLW IN THE TREATABILITY GROUPS COVERED BY THIS MILESTONE WILL BE COUNTED TOWARD MEETING THE VOLUME REQUIREMENTS OF THIS MILESTONE WHEN TREATED.

IF THE ACTUAL VOLUME OF NEWLY GENERATED OR RETRIEVED CH-MLLW COVERED BY THIS MILESTONE IS LOWER THAN THE ESTIMATED VOLUMES ANTICIPATED BY THESE MILESTONES DOE WILL ONLY BE REQUIRED TO TREAT THE VOLUME OF WASTE GENERATED, RETRIEVED AND/OR IN STORAGE. IF THE ACTUAL VOLUME OF NEWLY GENERATED OR RETRIEVED CH-MLLW COVERED BY THIS MILESTONE IS SIGNIFICANTLY MORE THAN THE ESTIMATED VOLUMES THE PARTIES' MAY AGREE TO REVISE THESE REQUIREMENTS.

3. AFTER JUNE 30, 2009, DOE SHALL TREAT TO MEET LDR TREATMENT REQUIREMENTS ALL SMALL CONTAINTERS OF NEWLY GENERATED CH-MLLW CONTAINING LDR CONSTITUENTS IN COMPLIANCE WITH WAC 173-303-140.

4. THERE ARE APPROXIMATELY 440 CUBIC METERS OF CH-TRUM IN PERMITTED STORAGE AT DOE'S CENTRAL WASTE COMPLEX (CWC) AND ELSEWHERE AT HANFORD AS OF 12/31/02. DOE'S CY 2002 LDR REPORT ESTIMATES THAT IT WILL GENERATE AN ADDITIONAL ANNUAL VOLUME OF APPROXIMATELY 220 CUBIC METERS OF CH-TRUM AND DOE ESTIMATES THEY WILL RETRIEVE APPROXIMATELY 1600 CUBIC METERS OF CH-TRUM BY 2010. CONSIDERING THESE ESTIMATES AND THE CONSIDERABLE UNCERTAINTY ASSOCIATED WITH THEM DOE SHALL TREAT THE WASTE CATEGORIES DESCRIBED ABOVE TO MEET LDR REQUIREMENTS ON THE

FOLLOWING SCHEDULE:

- 700 CUBIC METERS BY 12/31/04;
- 1,800 CUBIC METERS (CUMULATIVE) BY 12/31/05;
- 3,000 CUBIC METERS (CUMULATIVE) BY 12/31/06;
- ~~4,200 CUBIC METERS (CUMULATIVE) BY 12/31/07;~~
- 600 CUBIC METERS BETWEEN 10/1/2007 AND 9/30/2008;
- TARGET DATE 200 ~~6,600~~ CUBIC METERS ~~(CUMULATIVE)~~ BY ~~12/31/09~~ 9/30/09;
- TARGET DATE 200~~7,600~~ CUBIC METERS ~~(CUMULATIVE)~~ BY ~~12/31/10~~ 9/30/10;
- ~~8,600 CUBIC METERS (CUMULATIVE)~~ BY 12/31/11 CUBIC METER VOLUME TO BE DETERMINED PER M-091-45.

IF THE ACTUAL VOLUME OF NEWLY GENERATED OR RETRIEVED CH-TRUM COVERED BY THIS MILESTONE IS LOWER THAN THE ESTIMATED VOLUMES ANTICIPATED BY THESE MILESTONES DOE WILL ONLY BE REQUIRED TO TREAT THE VOLUME OF WASTE GENERATED, RETRIEVED AND/OR IN STORAGE. IF THE ACTUAL VOLUME OF NEWLY GENERATED OR RETRIEVED CH-TRUM COVERED BY THIS MILESTONE IS SIGNIFICANTLY MORE THAN THE ESTIMATED VOLUMES THE PARTIES' MAY AGREE TO REVISE THESE REQUIREMENTS.

5. FOR CH TRANSURANIC WASTE NEWLY GENERATED ON OR AFTER 7/1/11 THAT IS DESIGNATED IN ACCORDANCE WITH WAC 173-303-070 THROUGH 100 AS MIXED AND AS CONTAINING LDR RESTRICTED CONSTITUENTS, DOE SHALL TREAT SUCH WASTES TO MEET LDR REQUIREMENTS PURSUANT TO WAC 173-303-140 WITHIN ONE YEAR OF GENERATION.

DOE MAY CHOOSE TO COMPLETE CERTIFICATION OF CH TRANSURANIC WASTE FOR DISPOSAL AT WIPP IN LIEU OF LDR TREATMENT, PROVIDED THAT ECOLOGY IS NOTIFIED IN WRITING OF SUCH COMPLETION OF CERTIFICATION, AND ONLY IF, AS OF THE TIME OF CERTIFICATION, SUCH WASTE IS EXEMPT FROM LDR TREATMENT REQUIREMENTS WHEN DISPOSED AT WIPP. IF DOE CHOOSES TO CERTIFY IN LIEU OF TREATMENT, IT MAY MEET THE VOLUME REQUIREMENTS SPECIFIED IN THIS MILESTONE FOR ANY GIVEN YEAR BY CERTIFYING CH TRU OR CH TRUM, PROVIDED THAT ALL CH TRUM IN PERMITTED STORAGE AS OF 7/1/11 IS TREATED TO MEET LDR REQUIREMENTS OR IS CERTIFIED BY DATE TO BE DETERMINED PER M-091-45 ~~12/31/2011~~.

NOTE: THE REQUIREMENTS OF ITEMS 4 AND 5 OF THIS MILESTONE APPLY AS SET FORTH IN THE SETTLEMENT

	AGREEMENT BETWEEN THE UNITED STATES AND THE STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY, DATED OCTOBER 23, 2003. NOTE: IN THE EVENT THAT ITEMS 4 OR 5 BECOME APPLICABLE, AMOUNTS OF CH TRUM CERTIFIED BETWEEN 12/31/02 AND THE DATE ON WHICH ITEMS 4 OR 5 BECOME APPLICABLE SHALL COUNT TOWARDS SATISFACTION OF THE OBLIGATIONS IN ITEMS 4 AND 5. 6. EACH REQUIREMENT OF THIS MILESTONE IS CONSIDERED A DISTINCT WORK REQUIREMENT INDEPENDENTLY SUBJECT TO THE ENFORCEMENT PROVISIONS OF THE AGREEMENT.	
M-091-43	REGARDING: MLLW TREATABILITY GROUP MLLW-07 WASTE AS DEFINED IN THE LDR REPORT WHICH INCLUDES THE MLLW PORTION OF: (1) NEWLY GENERATED RH LOW-LEVEL WASTE; (2) NEWLY GENERATED LARGE CONTAINERS OF CH LOW-LEVEL WASTE; (3) RH LOW-LEVEL WASTE CURRENTLY IN ABOVE-GROUND STORAGE; (4) LARGE CONTAINERS OF CH LOW-LEVEL WASTE CURRENTLY IN ABOVE-GROUND STORAGE; AND (5) RH OR LARGE CONTAINER CH LOW-LEVEL WASTE FROM RETRIEVAL. THERE WERE 81 CUBIC METERS OF RH-MLLW IN PERMITTED STORAGE AT DOE'S CENTRAL WASTE STORAGE COMPLEX (CWC) AND ELSEWHERE AT HANFORD AS OF 12/31/02 (AS IDENTIFIED IN DOE HFFACO MILESTONE M-26-01 LDR REPORT MLLW TREATABILITY GROUPS MLLW-07) THAT HAS NOT BEEN TREATED TO MEET LDR REQUIREMENTS. DOE'S 2002 LDR REPORT ESTIMATED THAT DOE WOULD GENERATE AN ADDITIONAL YEARLY VOLUME OF 280 CUBIC METERS OF WASTE IN THIS TREATABILITY GROUP. IT WAS ALSO ESTIMATED IN 2002 THAT DOE WOULD RETRIEVE APPROXIMATELY 800 CUBIC METERS BY 2010. PER THE 2005 LDR REPORT, AS OF 12/31/05 THERE WERE APPROXIMATELY 305 CUBIC METERS OF RH AND LARGE CONTAINER MLLW (LDR TREATABILITY GROUP MLLW-07) IN PERMITED STORAGE. APPROXIMATELY 66 CUBIC METERS OF THE RH AND LARGE CONTAINER MLLW WAS FORECAST TO BE GENERATED BETWEEN 12/31/05 AND 12/31/11. IN ADDITION, APPROXIMATELY 2728 CUBIC METERS OF MLLW-07 WAS EXPECTED TO BE OBTAINED FROM RETRIEVAL BETWEEN 12/31/05 AND 12/31/11. 1. DOE SHALL DESIGNATE ALL RH LOW-LEVEL WASTE AND LARGE CONTAINERS OF CH LOW-LEVEL WASTE CURRENTLY IN ABOVE-GROUND PERMITTED STORAGE (AS	DUE DATES AS INDICATED IN THE DESCRIPTIVE TEXT OF THIS MILESTONE

OF JUNE 30, 2003) ACCORDING TO THE REQUIREMENTS OF WAC 173-303-070 THROUGH 100, BY DECEMBER 31, 2008.

2. DOE SHALL DESIGNATE ALL NEWLY GENERATED RH LOW-LEVEL WASTE AND NEWLY GENERATED LARGE CONTAINERS OF CH-LOW-LEVEL WASTE AT THE POINT OF GENERATION. SUCH DESIGNATION SHALL COMPLY WITH THE REQUIREMENTS OF WAC 173-303-070 THROUGH 100.

3. DOE SHALL BEGIN TREATING RH MLLW AND LARGE CONTAINERS OF CH MLLW TO MEET LDR TREATMENT REQUIREMENTS AT:
   - 300 CUBIC METERS BY 6/30/09
   - TARGET DATE 300 CUBIC METERS ADDITIONAL BY 6/30/10
   - TARGET DATE ANNUAL RATE OF 300 CUBIC METERS BEGINNING NO LATER THAN DATE TO BE DETERMINED PER M-091-45.

~~A MINIMUM RATE OF 300 CUBIC METERS PER YEAR BEGINNING NO LATER THAN JUNE 30, OF 2008. HOWEVER, TREATMENT MAY BE STARTED EARLY SUCH THAT ANY TREATABILITY GROUP MLLW-07 WASTE TREATED BETWEEN 12/31/02 AND 6/30/09 SHALL COUNT TOWARD ACHIEVING THE FIRST 300 CUBIC METERS OF TREATMENT TO BE COMPLETED BY 6/30/09.~~ IF THERE ARE NOT 300 CUBIC METERS OF RH MLLW AND LARGE CONTAINERS OF CH MLLW IN STORAGE IN ANY GIVEN YEAR, THIS MILESTONE REQUIRES THAT DOE TREAT ONLY THAT AMOUNT THAT IS IN STORAGE. IF RH-MLLW IN THE TREATABILITY GROUPS SUBJECT TO THIS MILESTONE GENERATED DURING THE PERIOD FROM 12/31/02 THROUGH 6/30/09 IS TREATED TO LDR STANDARDS PRIOR TO DELIVERY TO STORAGE OR DISPOSAL, THE ORIGINAL PRE-TREATMENT VOLUME OF THAT WASTE SHALL BE COUNTED TOWARD MEETING THE VOLUME REQUIREMENTS OF THIS MILESTONE. EXCEPT FOR WASTE ALREADY IN PERMITTED STORAGE AS OF 12/31/02, TREATMENT OF CERCLA WASTE WILL NOT BE COUNTED TOWARD MEETING THE VOLUME REQUIREMENTS OF THIS MILESTONE. IF ACTUAL VOLUMES OF NEWLY GENERATED OR RETRIEVED RH AND LARGE CONTAINER MLLW ARE SIGNIFICANTLY MORE THAN THE ESTIMATED VOLUMES, THIS MILESTONE WILL BE REVISED TO REFLECT ACTUAL VOLUMES.

4. EACH ELEMENT OF THIS MILESTONE IS CONSIDERED A DISTINCT WORK REQUIREMENT INDEPENDENTLY SUBJECT TO THE ENFORCEMENT PROVISIONS OF THE AGREEMENT.

M-091-44	REGARDING:(1) NEWLY GENERATED RH TRANSURANIC WASTE; (2) NEWLY GENERATED LARGE CONTAINERS OF CH-TRANSURANIC WASTE; (3) RH TRANSURANIC WASTE CURRENTLY IN ABOVE GROUND STORAGE; 4) LARGE CONTAINERS OF CH TRANSURANIC WASTE CURRENTLY IN ABOVE-GROUND STORAGE; AND (5) LARGE CONTAINER OR RH TRANSURANIC WASTE FROM RETRIEVAL; 1. DOE SHALL DESIGNATE ALL RH TRANSURANIC WASTE AND LARGE CONTAINERS OF CH TRANSURANIC WASTE CURRENTLY IN ABOVE- GROUND STORAGE (AS OF JUNE 30, 2003) ACCORDING TO THE REQUIREMENTS OF WAC 173-303-070 THROUGH 100, BY TARGET DATE DECEMBER 31, 2012. 2. DOE SHALL DESIGNATE ALL NEWLY GENERATED RH TRANSURANIC WASTE AND LARGE CONTAINERS OF TRANSURANIC WASTE AT THE POINT OF GENERATION. SUCH DESIGNATION SHALL COMPLY WITH THE REQUIREMENTS OF WAC 173-303-070 THROUGH 100. 3. DOE SHALL BEGIN TREATING RH TRUM AND LARGE CONTAINERS OF CH TRUM TO MEET LDR TREATMENT REQUIREMENTS AT A MINIMUM RATE OF 300 CUBIC METERS PER YEAR BEGINNING NO LATER THAN TARGET DATE JUNE 30, 2012. IF THERE ARE NOT 300 CUBIC METERS OF RH TRUM AND LARGE CONTAINERS OF CH TRUM IN STORAGE IN ANY GIVEN YEAR, THIS MILESTONE REQUIRES THAT DOE TREAT ONLY THAT AMOUNT THAT IS IN STORAGE. IF ACTUAL VOLUMES OF NEWLY GENERATED OR RETRIEVED RH TRUM AND LARGE CONTAINER TRUM ARE SIGNIFICANTLY MORE THAN THE ESTIMATED VOLUMES, THIS MILESTONE WILL BE REVISED TO REFLECT ACTUAL VOLUMES. 4. AS TO NEWLY GENERATED RH TRUM GENERATED AFTER 12/31/18 THAT IS DESIGNATED IN ACCORDANCE WITH WAC 173-303-070 THROUGH –100 AS MIXED AND AS CONTAINING LDR RESTRICTED CONSTITUENTS, DOE SHALL TREAT OR CERTIFY IN LIEU OF TREATMENT TO MEET LDR REQUIREMENTS WITHIN ONE YEAR OF GENERATION. DOE MAY CHOOSE TO COMPLETE CERTIFICATION OF CH TRANSURANIC WASTE FOR DISPOSAL AT WIPP IN LIEU OF LDR TREATMENT, PROVIDED THAT ECOLOGY IS NOTIFIED IN WRITING OF SUCH COMPLETION OF CERTIFICATION, AND ONLY IF, AS OF THE TIME OF CERTIFICATION, SUCH WASTE IS EXEMPT FROM LDR TREATMENT REQUIREMENTS WHEN DISPOSED AT WIPP. 5. DOE MAY CHOOSE TO COMPLETE CERTIFICATION OF RH	DUE DATES AS INDICATED IN THE DESCRIPTIVE TEXT OF THIS MILESTONE

	AND LARGE CONTAINER TRANSURANIC WASTE FOR DISPOSAL AT WIPP IN LIEU OF LDR TREATMENT, PROVIDED THAT ECOLOGY IS NOTIFIED IN WRITING OF SUCH COMPLETION OF CERTIFICATION, AND ONLY IF, AS OF THE TIME OF CERTIFICATION, SUCH WASTE IS EXEMPT FROM LDR TREATMENT REQUIREMENTS WHEN DISPOSED AT WIPP. NOTE: THE REQUIREMENTS OF ITEMS 3,4, AND 5 OF THIS MILESTONE APPLY AS SET FORTH IN THE SETTLEMENT BETWEEN THE UNITED STATES AND THE STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY, DATED OCTOBER 23, 2003. 6. EACH REQUIREMENT OF THIS MILESTONE IS CONSIDERED A DISTINCT WORK REQUIREMENT INDEPENDENTLY SUBJECT TO THE ENFORCEMENT PROVISIONS OF THE AGREEMENT. 7. IF DOE CHOOSES TO CERTIFY IN LIEU OF TREATMENT, (PER REQUIREMENTS IN M-91-44 (4)) IT MAY MEET THE VOLUME REQUIREMENTS SPECIFIED IN M-91-44 FOR ANY GIVEN YEAR BY CERTIFYING RH OR LARGE CONTAINER TRU OR RH OR LARGE CONTAINER TRUM. NOTIFICATION OF CERTIFICATION IN LIEU OF TREATMENT WILL BE PROVIDED ANNUALLY AS PART OF THE CERTIFICATION VOLUME COMPLETION LETTER.	
M-091-45	THE PARTIES WILL COMPLETE NEGOTIATIONS AND DOE WILL SUBMIT A CHANGE PACKAGE FOR INTERIM MILESTONES TO REPLACE ALL "TO BE DETERMINED" ("TBD") DATES IN M-091-01, M-091-40 PARAGRAPHS 1 AND 3, M-091-42 PARAGRAPHS 2.G AND 5, M-91-43 PARAGRAPH 3; AND A CUBIC METER VOLUME FIGURE TO REPLACE "CUBIC METER VOLUME TO BE DETERMINED" IN M-91-42 PARAGRAPH 4. THESE NEGOTIATIONS WILL ALSO ADDRESS REMAINING M-91-42 "NO PATH" AND TSCA WASTE.	12/31/2009

Change Number	Federal Facility Agreement and Consent Order Change Control Form Do not use blue ink. Type or print using black ink.	Date
M-15-08-07		August 4, 2009

Originator
B.L Charboneau

Phone
(509) 373-6137

Class of Change
[X] I - Signatories [ ] II - Executive Manager [ ] III - Project Manager

Change Title

Modification to Hanford Federal Facility Agreement and Consent Order (HFFACO) M-15 series milestones

Description/Justification of Change

DOE has submitted this change request to reach agreement on adjustments in workscope and milestones consistent with available funding for FY-09 and with a shift of resources to the river corridor and other high priority work. This shift of resources is expected to require a change to M-015-00 and M-015-00C (a change to M-15-21A is being addressed in Change Package M-16-08-07).

The Parties will continue to work together per HFFACO Article, XLVIII. Cost Schedule, Scope, Integration, Planning and Reporting to establish due dates for the milestones that are being struck in this change package. DOE will prepare and submit a change package for new interim milestones by 12/31/09 for those milestones that are struck by this change package.

Where deep vadose zone contamination is present it is being addressed at each of the current operable units. The Parties intend to continue discussions on the best path forward to complete the RI/FS process for waste sites with deep vadose issues. Deep vadose zone contamination will be further discussed for the remainder of the source units in the Central Plateau not addressed in this change package through development of a comprehensive strategy for deep vadose zone.

Impact of Change
Approval of this change package impacts the follow-on schedules for obtaining RODs, work plans, and remediation.

Affected Documents

The Hanford Federal Facility Agreement and Consent Order, as amended, and Hanford Site internal planning, management and budget documents (e.g., baseline control documents, related work authorization and directives).

Approvals

DOE	8/10/09 Date	X Approved	____ Disapproved
EPA	8/11/09 Date	X Approved	____ Disapproved
Ecology	8/11/09 Date	X Approved	____ Disapproved

Changes to the existing milestones are displayed by Highlighting to indicate addition of text and by ~~Strikeout~~ to indicate deletion of text.

M-015-00	COMPLETE THE RI/FS (OR RFI/CMS) PROCESS FOR ALL OPERABLE UNITS. IN INSTANCES WHERE RCRA AUTHORITY REQUIRES INVESTIGATION OF PAST PRACTICE UNITS, ECOLOGY AGREES, PURSUANT TO ECOLOGY'S DANGEROUS WASTE REGULATIONS, THAT DOE MAY SATISFY THE REQUIREMENTS FOR AN RFI/CMS REPORT BY SUBMITTING AN RI/FS REPORT. A DAY FOR DAY SLIP IN SUBMITTING THE FEASIBILITY STUDY REPORT AND PROPOSED PLAN MILESTONE WILL BE GIVEN FOR EACH DAY THE RI/FS WORK PLAN IS NOT APPROVED FOLLOWING SIX MONTHS AFTER SUBMITTAL.	~~12/31/2011~~ To Be Determined
M-015-00C LEAD AGENCY: DUAL	COMPLETE ALL 200 AREA NON-TANK FARM OPERABLE UNIT SITE INVESTIGATIONS UNDER APPROVED WORK PLAN SCHEDULES THROUGH SUBMITTAL OF FEASIBILITY STUDY REPORTS AND A RECOMMENDED REMEDY(IES). IN INSTANCES WHERE RCRA AUTHORITY REQUIRES INVESTIGATION OF PAST PRACTICE UNITS, ECOLOGY AGREES, PURSUANT TO ECOLOGY'S DANGEROUS WASTE REGULATIONS, THAT DOE MAY SATISFY THE REQUIREMENTS FOR AN RFI/CMS REPORT BY SUBMITTING AN RI/FS REPORT. THE RECOMMENDED REMEDY(IES) WILL BE SUFFICIENTLY COMPREHENSIVE TO SATISFY THE TECHNICAL REQUIREMENTS OF RCRA, HAZARDOUS WASTE MANAGEMENT ACT (HWMA), AND CERCLA STATUTORY AUTHORITIES AND RESPECTIVE REGULATIONS WITH RESPECT TO ALL HAZARDOUS SUBSTANCES, PURSUANT TO THE HFFACO ARTICLE IV PARAGRAPH 17 AND ACTION PLAN SECTION 5.4.	~~12/31/2011~~ To Be Determined
M-015-51	SUBMIT A REVISED FEASIBILITY STUDY REPORT AND PROPOSED PLAN FOR THE 200 BC CRIBS AND TRENCHES FOR THE NEW OU 200-BC-1 TO EPA, THAT WILL INCLUDE THE RESULTS OF THE TREATABILITY TESTS FOR 200 BC CRIBS AND TRENCHES.	~~04/30/2010~~ 09/30/2010
M-015-38B	SUBMIT A REVISED FEASIBILITY STUDY REPORT AND REVISED PROPOSED PLAN FOR THE 200-CW-1 WASTE SITES IN THE OUTER AREA OF THE CENTRAL PLATEAU TO ECOLOGY. THIS PROPOSED PLAN MAY BE USED AS A BASIS FOR A RECORD OF DECISION FOR THE OUTER CENTRAL PLATEAU AREA.	11/30/2010
M-015-40E	~~SUBMIT A FEASIBILITY STUDY REPORT AND PROPOSED PLAN FOR OU 200-SC-1.~~ THE PARTIES WILL COMPLETE NEGOTIATIONS AND DOE WILL SUBMIT A CHANGE PACKAGE FOR NEW INTERIM MILESTONES THAT SET FORTH A SCHEDULE TO COMPLETE THE RI/FS PROCESS FOR 200-SC-1, 200-PW-2, 200-PW-4, 200-TW-1, 200-PW-5, 200-TW-2, 200-LW-1, 200-LW-2, AND 200-BP-5 OPERABLE UNITS. THE PARTIES WILL ALSO COMPLETE NEGOTIATIONS AND DOE WILL SUBMIT A CHANGE PACKAGE FOR THE M-015-00 AND M-015-00C MILESTONES.	~~12/31/2010~~ 12/31/2009

~~M-015-43D~~	~~SUBMIT THE FEASIBILITY STUDY REPORT AND A REVISED RECOMMENDED REMEDY(IES) FOR 200-PW-2 AND 200-PW-4 OUS TO ECOLOGY.~~	~~12/31/2010~~
~~M-015-42D~~	~~SUBMIT A REVISED FEASIBILITY STUDY REPORT AND REVISED PROPOSED PLAN FOR 200-TW-1 AND 200-PW-5 OUS TO EPA.~~	~~12/31/2011~~
~~M-015-42E~~	~~SUBMIT A REVISED FEASIBILITY STUDY REPORT AND A REVISED RECOMMENDED REMEDY(IES) FOR 200-TW-2 OU TO ECOLOGY.~~	~~12/31/2011~~
~~M-015-46B~~	~~SUBMIT THE FEASIBILITY STUDY REPORT AND THE RECOMMENDED REMEDY FOR 200-LW-1 AND 200-LW-2 OUS TO ECOLOGY.~~	~~12/31/2011~~
~~M-015-83~~	~~SUBMIT A PROPOSED PLAN FOR 200-UW-1.~~	~~3/31/2010~~

Change Number M-16-08-09	**Federal Facility Agreement and Consent Order** ***Change Control Form*** Do not use blue ink. Type or print using black ink.	**Date** August 4, 2009

Originator: Thomas K. Teynor **Phone:** (509) 376-6363

Class of Change

[X] I – Signatories [ ] II – Executive Manager [ ] III – Project Manager

Change Title

Modification of Hanford Federal Facility Agreement and Consent Order (Agreement) 100 K Area M-016 Major and Interim Milestones

Description/Justification of Change

Approval of this change package modifies the *Hanford Federal Facility Agreement and Consent Order* (HFFACO) M-16-00A major milestone, two interim milestones, and deletes one interim milestone. This change package establishes a new M-016-00C major milestone and six new M-16 interim milestones. The M-34 series milestones for remediation of the K Basins are deleted as the remaining work scope is being moved to the M-16 series per this change package to promote integration with 100 K Area closure activities. The M-034-30 interim milestone is being deleted per change package M-34-08-03 and is being re-established as M-016-140. The delay in treating the sludge and removing the K West Basin is now impacting soil remediation efforts in the surrounding area and the Parties have agreed that the two activities should be more closely aligned in the M-16 milestone series.

Continued on page 2

Impact of Change

Impacts occur to milestones identified in associated change packages M-93-08-01 and M-34-08-03.

Affected Documents

The Hanford Federal Facility Agreement and Consent Order, as amended and Hanford Site internal planning management, and budget documents (e. g., USDOE and USDOE contractor Baseline Change Control documents; Multi-Year Work Plan; Site Wide Systems Engineering Control Documents; Project Management Plans, and, if appropriate, Land Disposal Restrictions Report requirements).

Approvals

Ecology	8/11/09 Date	X Approved	___ Disapproved
DOE-RL	8/10/09 Date	X Approved	___ Disapproved
EPA	8/11/09 Date	X Approved	___ Disapproved

Description/Justification of Change

Hexavalent chromium

Hexavalent chromium vadose contamination and groundwater plumes are at levels that pose a risk to human health and/or the environment in the 100 Area. Two of the new interim milestones (M-016-150 and M-016-155) are for a chromium response action for the 100 Area.

DOE plans to evaluate remediation alternatives for chromium in the vadose zone and groundwater in the 100 Area and to document the results of the evaluation in a focused feasibility study (FS). Those plans include preparing a focused feasibility study that will: contain an evaluation of the 100 Area hexavalent chromium contamination areas, including a detailed examination of the 100 D area. The FS will contain an evaluation of remedial alternatives that address hexavalent chromium contamination areas identified within the 100 Area (including 100-BC-5), including biological and/or chemical in-situ reduction. DOE will prepare a Proposed Plan to amend existing source and groundwater 100 Area RODs to include remedial action for hexavalent chromium contamination and place supporting documents in the administrative record. The Proposed Plan will include biological and/or chemical in-situ reduction as a remedial action alternative. Upon amendment of the RODs, DOE will submit revisions of Remedial Design/Remedial Action (RD/RA) Work Plan(s) to implement the selected remedy for hexavalent chromium in the amended RODs.

100 K Area Cleanup to be Completed in Phases

A 100-K Area perimeter boundary has been identified to segregate waste sites and structures that require coordination and detailed integration with the Sludge Treatment Project to safely and effectively complete remediation. In many cases, these waste sites and structures are in proximity to the still active KW Fuel Storage Basin or to facilities needed to keep the KW Basin operational. The perimeter boundary (with some exceptions on the east-side) generally coincides with the outer-most perimeter fences around the 100-K Area (encompassing the reactors and facilities) and the area between the northern perimeter fence and the Columbia River. The perimeter boundary was chosen to exclude the waste sites (118-K-1, 100-K-2, 100-K-78, 126-K-1, 128-K-2, and 600-29) that do not require integration with the Sludge Treatment Project for completion.

100 K Phases and Scope

The remediation of the 100 K Area will be accomplished in 3 distinct phases. The work is being phased to safely and efficiently sequence the activities to insure that work crews are not impacting active operations that will be performed in the K Area throughout the on going sludge activities.

The waste sites and facilities that are included in each of the phases are specified in the RD/RA Work Plans.

Phase 1 will encompass facilities (approx. 21), waste sites (approx. 59), and hexavalent chromium response actions.

Phase 2 will encompass facilities (approx. 29), and waste sites (approx. 52) that are sequenced to safely follow phase 1, are not impacted by sludge activities, and are located around and south of the two reactors.

Phase 3 will encompass the remaining facilities (approx. 29) and waste sites (approx. 13) that will follow after the sludge is removed from the K West Basin. Milestones will be set for this work following the M-016-140 deliverable.

Modifications to existing Tri-Party Agreement milestones are denoted with ~~strikeout~~; new milestone/text are denoted with shading.

Milestone/Target	Description	Date
M-016-00A	COMPLETE ALL INTERIM RESPONSE ACTIONS FOR THE 100 AREAS,WITH THE EXCEPTION OF THE 100 K AREA, BY THE SPECIFIED DUE DATE AS APPROVED IN A REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN. COMPLETION OF INTERIM RESPONSE ACTIONS IS DEFINED AS THE COMPLETION OF THE INTERIM ROD OR ACTION MEMORANDUM REQUIREMENTS IN ACCORDANCE WITH AN APPROVED RD/RA WORK PLAN OR REMOVAL ACTION WORK PLAN AND OBTAIN EPA AND/OR ECOLOGY APPROVAL OF THE APPROPRIATE PROJECT CLOSEOUT DOCUMENTS.	12/31/2012
M-016-00C	COMPLETE ALL INTERIM RESPONSE ACTIONS FOR THE 100 K AREA. COMPLETION OF INTERIM RESPONSE ACTIONS IS DEFINED AS THE COMPLETION OF THE INTERIM ROD OR ACTION MEMORANDUM REQUIREMENTS IN ACCORDANCE WITH AN APPROVED RD/RA WORK PLAN OR REMOVAL ACTION WORK PLAN AND OBTAIN EPA APPROVAL OF THE APPROPRIATE PROJECT CLOSEOUT DOCUMENTS.	TBD
M-016-53	COMPLETE THE INTERIM RESPONSE ACTIONS FOR THE 100 K AREA WITHIN THE PERIMETER BOUNDARY AND TO THE RIVER FOR PHASE 1 ACTIONS. PHASE 1 IS DEFINED IN THE 100K AREA RD/RA WORK PLANS.	12/31/2012
M-016-57	INITIATE SOIL REMEDIATION AT K EAST BASIN. INITIATE FULL SCALE REMEDIAL ACTION OF THE 105-KE FUEL STORAGE BASIN SITE WITHIN ONE MONTH OF COMPLETING MILESTONE M-016-160 ~~M-34-32~~.	10/31/2009
~~M-016-58~~	~~INITIATE SOIL REMEDIATION AT K WEST BASIN.~~	~~04/30/2009~~

	~~INITIATE FULL SCALE REMEDIAL ACTION OF THE 105-KW FUEL STORAGE BASIN WASTE SITE WITHIN ONE MONTH OF COMPLETING MILESTONE M-34-00A.~~	
M-016-160	COMPLETE REMOVAL OF THE K EAST BASIN STRUCTURE.	09/30/2009
M-016-140	SUBMIT REVISED RD/RA WORK PLANS FOR 100 K AREA RODS AS PRIMARY DOCUMENT(S) PER HFFACO 11.6 WITH NEW PROPOSED MILESTONES INCLUDING FOR THE FOLLOWING: • COMPLETE REMOVAL OF THE K WEST BASIN • COMPLETE REMOVAL OF ALL SLUDGE (INCLUDES CONTAINER, SETTLER TANK SLUDGE) FROM K WEST BASIN EXCEPT KNOCK OUT POT CONTENTS. • COMPLETE REMOVAL OF KNOCK OUT POT CONTENTS • COMPLETE TREATMENT AND PACKAGING OF FIRST CONTAINER OF TRU SLUDGE WASTE CERTIFIABLE FOR DISPOSAL AT WIPP • COMPLETE TREATMENT AND PACKAGING OF SLUDGE FOR DISPOSAL AT WIPP • BEGIN 105-KW REACTOR INTERIM SAFE STORAGE • COMPLETE 105-KW REACTOR INTERIM SAFE STORAGE • INITIATE SOIL REMEDIATION UNDER K WEST BASIN • COMPLETE ALL INTERIM RESPONSE ACTIONS AT THE 100 K AREA	3/31/2011
M-016-143	COMPLETE THE INTERIM RESPONSE ACTIONS FOR THE 100 K AREA WITHIN THE PERIMETER BOUNDARY AND TO THE RIVER FOR PHASE 2 ACTIONS. PHASE 2 IS DEFINED IN THE 100 K AREA RD/RA WORK PLANS.	12/31/2015
M-016-145	COMPLETE THE INTERIM RESPONSE ACTIONS FOR 100 K AREA FACILITIES AND WASTE SITES NOT INCLUDED AS PHASE 1, PHASE 2, OR PHASE 3 WORK. THESE ARE THE FACILITIES AND WASTE SITES WHICH ARE OUTSIDE THE 100-K PERIMETER BOUNDARY. PHASE 1, PHASE 2, AND PHASE 3 FACILITIES AND WASTE SITES ARE DEFINED IN THE 100 K AREA RD/RA WORK PLANS.	12/31/2012
M-016-150	DOE WILL SUBMIT A PROPOSED PLAN TO EPA AND ECOLOGY TO AMEND EXISTING 100 AREA INTERIM ACTION RODS FOR REMEDIATION OF HEXAVALENT	06/30/2009

	CHROMIUM IN THE VADOSE ZONE AND GROUNDWATER. THE PROPOSED PLAN WILL INCLUDE BIOLOGICAL AND/OR CHEMICAL IN-SITU REDUCTION AS AN ALTERNATIVE.	
M-016-155	DOE WILL SUBMIT REVISED RD/RA WORK PLANS FOR 100 AREA INTERIM REMEDIAL ACTIONS IN ACCORDANCE WITH THE ROD RESULTING FROM MILESTONE M-016-150. IT IS ASSUMED THAT THE RECORD OF DECISION WILL BE SIGNED 6 MONTHS AFTER THE PROPOSED REMEDY IS SUBMITTED. A DAY-FOR-DAY SLIP IN THE RD/RAWP DUE DATE WILL BE GIVEN FOR EACH DAY THE REMEDY DECISION IS NOT ISSUED PAST THE 6 MONTH DATE.	06/30/2010

Change Number	Federal Facility Agreement and Consent Order **Change Control Form** Do not use blue ink. Type or print using black ink.	Date
M-34-08-03		August 4, 2009

Originator: Thomas K. Teynor **Phone** 376-6363

Class of Change

[X] I - Signatories [ ] II - Executive Manager [ ] III - Project Manager

Change Title:

Modification of the M-34-00 K Basin Closure Major and Interim Milestones to align with the impacts from the delay to the disposition of sludge

Description/Justification of Change:

Approval of this change package modifies the *Hanford Federal Facility Agreement and Consent Order* (HFFACO) M-34-00 series major and interim milestones. The milestones are being deleted as M-34 series and are being moved to the M-016 series per change package M-16-08-09 to promote integration with 100 K Area closure activities. The parties agree that good cause exists for moving the milestones due to the technical and engineering challenges facing this project. The delay in treating the sludge and removing the K West Basin is now impacting soil remediation efforts in the surrounding area and the Parties have agreed that the two activities should be more closely aligned in the M-16 milestone series.

Impact of Change

This change deletes the scope of the M-34 series milestones and moves it to the M-16 series in change package M-16-08-09.

Affected Documents

The *Hanford Federal Facility Agreement and Consent Order*, as amended, and the Hanford Site internal planning management, and budget documents (e.g., USDOE and USDOE contractor Baseline Change Control documents; Multi-Year Work Plan; Sitewide Systems Engineering Control Documents and Project Management Plans).

Approvals

Ecology	8/11/09 Date	X Approved	___ Disapproved
DOE-RL	8/10/09 Date	X Approved	___ Disapproved
EPA	8/11/09 Date	X Approved	___ Disapproved

M-34-08-03

Description/Justification Continued.

Shaded text is added, ~~strikethrough~~ text is deleted.

Milestone/Target	Description	Date
~~M-034-00A LEAD AGENCY:EPA~~	~~COMPLETE REMOVAL OF THE K BASINS AND THEIR CONTENT.~~ ~~NOTE:UNLESS OTHERWISE NOTED, THE TERM "K BASINS" IS USED TO DENOTE BOTH K EAST AND K WEST BASINS.~~ ~~THIS MILESTONE WILL BE COMPLETE WHEN BOTH K EAST AND K WEST BASINS, SPENT NUCLEAR FUEL, SLUDGE, DEBRIS AND WATER ARE REMOVED.~~	~~03/31/2009~~
~~M-034-30~~	~~INITIATE SLUDGE TREATMENT.~~ ~~THIS INTERIM MILESTONE WILL BE COMPLETE FOLLOWING TREATMENT AND PACKAGING OF THE FIRST UNIT OF SLUDGE INTO A FORM THAT IS CERTIFIABLE FOR DISPOSAL OFFSITE.~~	~~12/31/2008~~
~~M-034-31~~	~~COMPLETE SLUDGE TREATMENT.~~ ~~THIS INTERIM MILESTONE WILL BE COMPLETE FOLLOWING TREATMENT AND PACKAGING OF ALL SLUDGE FOR DISPOSAL OFFSITE.~~	~~11/31/2009~~
~~M-034-32~~	~~COMPLETE REMOVAL OF THE K EAST BASIN STRUCTURE.~~	~~09/30/2009~~

Change Number M-93-08-01	**Federal Facility Agreement and Consent Order** ***Change Control Form*** Do not use blue ink. Type or print using black ink.	**Date** August 4, 2009

Originator: Thomas K. Teynor **Phone:** (509) 376-6363

Class of Change

[ ] I – Signatories [X] II – Executive Manager [ ] III – Project Manager

Change Title

Modification of Hanford Federal Facility Agreement and Consent Order (Agreement) 100 K Area M-093-22 Interim Milestone

Description/Justification of Change

Approval of this change package modifies Hanford *Federal Facility Agreement and Consent Order* (HFFACO) M-93-00 series interim milestone. The scope and due date for M-093-22 are being revised due to impacts from the delay in removing sludge from the K East and K West Basins. The new date for this milestone is based on past experience completing similar Hanford site reactor interim safe storage work. Good cause exists in accordance with HFFACO Article XL paragraph 120(D) to extend this milestone. The K West ISS due date will be based on the remedial action work plan per HFFACO interim milestone M-016-140. The ISS of K West reactor is removed from M-093-22 because completing K West ISS will be delayed longer than the K East reactor ISS due to extended use of the K West basin for sludge storage. A future milestone for completion of ISS of the K West reactor will be set following the M-016-140 deliverable.

Impact of Change

This change delays the date when the 105 K East and 105 K West reactors are placed into interim safe storage. The change is being integrated with a comprehensive realignment of 100 K Area milestones that are affected due to the design, testing and treatment of sludge. Impacts occur to milestones identified in change packages M-16-08-09 and M-34-08-03.

Affected Documents

The Hanford Federal Facility Agreement and Consent Order, as amended and Hanford Site internal planning management, and budget documents (e.g., USDOE and USDOE contractor Baseline Change Control documents; Multi-Year Work Plan; Site Wide Systems Engineering Control Documents; Project Management Plans, and, if appropriate, Land Disposal Restrictions Report requirements).

Approvals

Jay J. M[illegible]	8/11/09	X Approved	___ Disapproved
Ecology	Date		
David A. Brockman	8/10/09	X Approved	___ Disapproved
DOE-RL	Date		
[illegible]	8/11/09	X Approved	___ Disapproved
EPA	Date		

Modifications to existing Tri-Party Agreement milestones are denoted with ~~strikeout~~; new milestone/text are denoted with shading.

Milestone/Target	Description	Date
M-093-22	COMPLETE 105-KE ~~AND 105-KW~~ REACTOR INTERIM SAFE STORAGE IN ACCORDANCE WITH THE REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN.	~~09/30/2011~~ 07/31/2014

Change Number	Federal Facility Agreement and Consent Order Change Control Form Do not use blue ink. Type or print using black ink.	Date:
M-94-09-01		August 4, 2009

Originator:	Phone:
R. F. Guercia	(509) 376-5494

Class of Change:

[X] I - Signatories	[ ] II - Executive Manager	[ ] III - Project Manager

Change Title:

Modify Tri-Party Agreement Milestones M-094-00, M-094-03, M-094-07, M-094-08, and M-094-09 to support long term mission of the Pacific Northwest National Laboratory

Description/Justification of Change:

The Department of Energy determined in November 2006 that it needed to retain certain buildings and utilities within the 300 Area to support the ongoing mission of the Pacific Northwest National Laboratory. Therefore, the previous strategy and schedule for declaring all facilities within the 300 area as surplus and remediating the facilities is being modified. Specifically, retention of the 331 Life Sciences Laboratory and the 325 Radiochemical Processing Laboratory complexes require waste sites covered by this milestone series to remain unremediated until the facilities associated with them are no longer needed (approximately 20 years). The waste sites associated with these facilities are mainly process sewer lines that have been flushed, drained and capped, or repaired to allow continued operation and are considered stable. This will also impact portions of the below grade demolition of the 327 facility. Closure of the 324 facility is required by M-089-00 and is being deleted from M-094-03.

Description/Justification of Change and Tri-Party Agreement milestones are continued on pages 2-3 of this Tri-Party Agreement Change Package.

Impact of Change:

Modifies existing Tri-Party Agreement Milestone M-94-00 and Interim Milestones M-094-03, M-094-07, M-094-08 and M-094-09 to allow Pacific Northwest National Laboratory operated facilities to remain in use while the remainder of the 300 Area undergoes cleanup. Deletes reference to the 324 facility from the M-094 milestone series. Modifies regulatory requirements governing Hanford remediation activities. Administrative action is required to incorporate this change in Appendix D of the Tri-Party Agreement.

Affected Documents:

The Hanford Federal Facility Agreement and Consent Order, as amended, and Hanford Site internal planning management and budget documents (e.g., USDOE and USDOE contractor Baseline Change Control documents; Multi-Year Work Plan; Sitewide Systems Engineering Control Documents; Project Management Plans, and, if appropriate, LDR Report requirements).

Approvals

	Date	Approved	Disapproved
DOE	8/10/09	X	
EPA	8/11/09	X	
Ecology	8/11/09	X	

Modifications established by approval of this Tri-Party Agreement Change Control Form are denoted as ~~strikeout~~ for deletions/modification and shading for new text.

Milestone Number	Milestone Description	Completion Date
M-094-00	Complete disposition of 300 Area surplus facilities identified in the removal action work plan(s) for the 300 Area facilities ~~to be defined as the 220 facilities listed in the Hanford River Corridor Closure Contract Solicitation #DE-RP06-04RL14655.~~ Completion of facility disposition is defined as the completion of deactivation, decontamination, decommissioning, and demolition and obtain EPA and/or Ecology approval of the appropriate project closeout documents. The cleanup of 300-FF-2 waste sites associated with 300 Area surplus facilities and utilities will be performed in accordance with Tri-Party Agreement Major Milestone M-016-00B, M-016-69, and approved Remedial Design/Remedial Action Work Plans for 300 Area waste sites by the specified due date as approved in Removal or Remedial Action Work Plans.	9/30/2015
M-094-03	Complete Disposition of the following surplus facilities: 303M, 332, 333, 334, 334A, 3221, 3222, 3223, 3224, 3225, ~~324~~, ~~324B, 327~~.	9/30/2010
M-094-07	Complete the selected removal and/or remedial actions ~~that are selected~~ for 6 of the following ~~19~~ high priority facilities: 305B, 306E, 306W, 307 Retention Basins, 308, 309, 321, 323, 324, 324B, ~~325,~~ ~~326~~, 327, ~~329~~, 333, 340, 3706, ~~307 trench~~ and 3720; to include the 306E, 306W, 3720 and 305B facilities ~~The 307 trench (also known as the 316-3 waste site) is a candidate waste site. Completion of this milestone commitment for the 307 trench includes the necessary characterization to determine if further remediation is necessary and will be met when the sampling results have been accepted by EPA.~~ The selected removal action for the ~~other~~ 18 facilities listed is or is expected to be completion of deactivation, decontamination, decommissioning, and demolition (D4) of the facility. In accordance with approved work plans, foundation, subsurface structures, and/or soil contamination can be deferred to a comprehensive remedial action program, but waste sites will be established in the interim to track this cleanup commitment.	12/30/2009 ~~See TPA CR M-94-04-01 Table 1~~

M-094-08	Complete the selected removal and/or remedial actions ~~that are selected~~ for ~~12~~ 11 of the following ~~19~~ high priority facilities: 305B, 306E, 306W, 307 Retention Basins, 308, 309, 321, 323, 324, 324B, ~~325~~, ~~326~~, 327, ~~329~~, 333, 340, 3706, ~~307 trench~~ and 3720. ~~The 307 trench (also known as the 316-3 waste site) is a candidate waste site. Completion of this milestone commitment for the 307 trench includes the necessary characterization to determine if further remediation is necessary and will be met when the sampling results have been accepted by EPA.~~ The selected removal action for the ~~other~~ ~~18~~ facilities listed is or is expected to be completion of deactivation, decontamination, decommissioning, and demolition (D4) of the facility. In accordance with approved work plans, foundation, subsurface structures, and/or soil contamination can be deferred to a comprehensive remedial action program, but waste sites will be established in the interim to track this cleanup commitment.	12/31/2011
M-094-09	Complete the selected removal and/or remedial actions ~~that are selected~~ for ~~15~~ 13 of the following ~~19~~ high priority facilities: 305B, 306E, 306W, 307 Retention Basins, 308, 309, 321, 323, 324, 324B, ~~325~~, 326, 327, 329, 333, 340, 3706, ~~307 trench~~ and 3720; to include the 323 facility ~~and the 307 trench~~. ~~The 307 trench (also known as the 316-3 waste site) is a candidate waste site. Completion of this milestone commitment for the 307 trench includes the necessary characterization to determine if further remediation is necessary and will be met when the sampling results have been accepted by EPA.~~ The selected removal action for the ~~other~~ ~~18~~ facilities listed is or is expected to be completion of deactivation, decontamination, decommissioning, and demolition (D4) of the facility. In accordance with approved work plans, foundation, subsurface structures, and/or soil contamination can be deferred to a comprehensive remedial action program, but waste sites will be established in the interim to track this cleanup commitment.	9/30/2013

Change Number	Federal Facility Agreement and Consent Order **Change Control Form** Do not use blue ink. Type or print using black ink.	Date:
M-16-07-04		August 4, 2009

Originator:	Phone:
R. F. Guercia	(509) 376-5494

Class of Change:

[X] I - Signatories	[ ] II - Executive Manager	[ ] III - Project Manager

Change Title:

Modifications to Tri-Party Agreement Milestone Series M-016-69, M-016-74, M-016-00A, and M-016-00B.

Description/Justification of Change:

The Department of Energy determined in November 2006 that it needed to retain certain buildings and utilities within the 300 Area to support the ongoing mission of the Pacific Northwest National Laboratory. Some existing waste sites are located under or directly abutting facilities and utilities that will be retained. Specifically, retention of the 331 complex and the 325 complex require waste sites to remain unremediated until the facilities and utilities associated with them are no longer needed (approximately 20 years). The revised milestones will allow these buildings and utility corridors to remain long term, while retaining the requirement to remediate the waste sites in accordance with a work plan approved by the lead regulatory agency. The Remedial Design/Remedial Action Work Plans will provide schedule dates for deferred activities. The waste sites associated with these facilities are mainly process sewer lines that have been flushed, drained and capped, or repaired to allow continued operation.

Description/Justification of Change and Tri-Party Agreement milestones are continued on page 2 of this Tri-Party Agreement Change Package.

Impact of Change:

Modifies existing Tri-Party Agreement Interim Milestone M-016-69, M-016-74, and clarifies M-016-00A and M-016-00B, to allow the Pacific Northwest National Laboratory to operate in the 300 Area beyond 2010. Modifies regulatory requirements governing Hanford remediation activities. Administrative action is required to incorporate this change in Appendix D of the Tri-Party Agreement.

Affected Documents:

The Hanford Federal Facility Agreement and Consent Order, as amended, and Hanford Site internal planning management and budget documents (e.g., USDOE and USDOE contractor Baseline Change Control documents; Multi-Year Work Plan; Sitewide Systems Engineering Control Documents; Project Management Plans, and, if appropriate, LDR Report requirements).

Approvals

	Date	Approved	Disapproved
DOE	8/11/09	X	
EPA	8/11/09	X	
Ecology	8/11/09	X	

Description/Justification of Change (continued)

The milestones are identified on Tri-Party Agreement Change Control Form. Modifications established by approval of this Tri-Party Agreement Change Control Form are denoted as ~~strikeout~~ for deletions/modification and shading for new text.

Milestone Number	Milestone Description	Completion Date
M-016-00A	Complete all interim response actions for the 100 Area Units, with the exception of the 100 K Area, by the specified due date as approved in a Remedial Design/Remedial Action Work Plan. Completion of interim response actions is defined as the completion of the interim ROD or Action Memorandum requirements in accordance with the RD/RA work plan or Removal Action Work Plan and obtain EPA and/or Ecology approval of appropriate project closeout documents.	12/31/2012
M-016-00B	Complete all interim 300 Area remedial actions including the 618-10 and 618-11 burial grounds but not including sites associated with retained 300 area facilities and the utility corridors. Completion of interim remedial actions for waste sites associated with the retained 300 Area facilities and their utilities, are subject to approved Remedial Design/Remedial Action Work Plans. Completion of all interim remedial actions is defined as the completion of the interim ROD requirements in accordance with the RD/RA work plan and obtain EPA approval of appropriate project closeout documents. The disposition of impeding surplus facilities will be performed in accordance with milestone M-94-00.	09/30/2018
M-016-69	Complete all interim 300 Area remedial actions to include confirmatory sampling of all candidate sites listed in the 300-FF-2 ROD (except for 618-10 and 618-11 burial grounds.) Completion of interim remedial actions for waste sites associated with the retained 300 Area facilities and utility corridors are subject to approved Remedial Design/Remedial Action Work Plans. Completion of all interim remedial actions is defined as the completion of the ROD requirements in accordance with an approved RD/RA Work Plan and obtains EPA approval of the appropriate project closeout documents. Completion of confirmatory sampling is defined as the completion of the sampling necessary to determine whether or not the waste site meets criteria for cleanup or can be closed out from the Waste Information Data System (WIDS) as defined in the RD/RA Work Plan. The disposition of impeding surplus facilities will be performed in accordance with Milestone M-094-00.	9/30/2015
M-016-74	Complete interim remediation (to include excavation loadout, closeout sampling, backfill and revegetation), for all 300 Area "inside the fence" waste sites north of Apple Street, except that the ~~300-RLWS, 300-15, 300-4,~~ 300-268 and 300-123 waste sites remediation need only be completed through excavation and loadout. Waste sites 300-4, 300-15, 300 RRLWS, and 300 RLWS are impacted by 300 Area building retentions and are addressed in M-016-00B.	09/30/2012

Change Number	Federal Facility Agreement and Consent Order **Change Control Form** Do not use blue ink. Type or print using black ink.	Date:
M-89-09-01		August 4, 2009

Originator:	Phone:
R. F. Guercia	(509) 376-5494

Class of Change:

[X] I - Signatories	[ ] II - Executive Manager	[ ] III - Project Manager

Change Title:

Modifications to Tri-Party Agreement Milestone Series M-089-00

Description/Justification of Change:

The Department of Energy determined in November 2006 that it needed to retain certain buildings within the 300 Area to support the ongoing mission of the Pacific Northwest National Laboratory. Utilities required to support continued operations of the 325 Radiochemical Processing Laboratory are adjacent to the 324 Chemical and Materials Engineering Laboratory. Closure requirements for continued operations are described in the "324 Building Radiochemical Engineering Cells, High Level Vault, Low Level Vault, and Associated Area Closure Plan." The schedule for completing the utility modifications to allow continued operations of the 325 Laboratory will not support the current milestone completion date for closure of the 324 Chemical and Materials Engineering Laboratory. Designs drawn up to support the decision to retain the 325 Radiochemical Processing Laboratory long term provide for the rerouting of the final set of utilities from the 324 Chemical and Materials Engineering Laboratory footprint in 2011. This TPA modification prevents a costly expedited relocation of the sanitary sewer system supporting the 325 Radiochemical Processing Laboratory.

Impact of Change:

Extends completion date for M-089-00. Modifies regulatory requirements governing Hanford remediation activities. Administrative action is required to incorporate this change in Appendix D of the Tri-Party Agreement.

Affected Documents:

The Hanford Federal Facility Agreement and Consent Order, as amended, and Hanford Site internal planning management and budget documents (e.g., USDOE and USDOE contractor Baseline Change Control documents; Multi-Year Work Plan; Sitewide Systems Engineering Control Documents; Project Management Plans, and, if appropriate, LDR Report requirements).

Approvals

	Date	Approved	Disapproved
DOE	8/10/09	X	
EPA	8/11/09	X	
Ecology	8/11/09	X	

Description/Justification of Change (continued)

The milestone is identified on Tri-Party Agreement Change Control Form. Modifications established by approval of this Tri-Party Agreement Change Control Form are denoted as ~~strikeout~~ for deletions/modification and shading for new text.

M-089-00	Complete closure of Non-permitted mixed waste closure units in the 324 building REC B-cell, REC D-cell, and high level vault.	09/30/~~2010~~ 2012

Change Number	Federal Facility Agreement and Consent Order Change Control Form Do not use blue ink. Type or print using black ink.	Date
C-08-06		August 4, 2009

Originator
Matthew McCormick

Phone
(509) 373-9971

Class of Change

[ ] I - Signatories [X] II - Executive Manager [ ] III - Project Manager

Change Title

Designation of Appendix C Groundwater Operable Units and River Corridor Source Operable Units as CERCLA Past Practice

Description/Justification of Change

Approval of this change package designates all of the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Appendix C Groundwater Operable Units and all River Corridor Source Operable Units as CERCLA Past Practice (CPP) units.

This proposed change is the result of RCRA/CERCLA integration meetings that have been conducted by the Tri-Parties that led to a joint agreement that a single regulatory framework may better align and streamline cleanup of Groundwater Operable Units and River Corridor Source Operable Units.

This change package is consistent with the Hanford Site Groundwater Strategy (DOE/RL-2002-59): to restore groundwater to its intended beneficial use to protect human health, the environment, and the Columbia River. *Continued on page 2*

Impact of Change

This change will better align and streamline the regulatory process in place for all of the Groundwater Operable Units and River Corridor Source Operable Units

Affected Documents

Hanford Federal Facility Agreement (Tri-Party Agreement) Appendix C

Approvals

DOE	8/10/09 Date	X Approved	____ Disapproved
EPA	8/11/09 Date	X Approved	____ Disapproved
Ecology	8/11/09 Date	X Approved	____ Disapproved

Continued from Page 1

Description/Justification of Change

Approval of this change request will modify the Hanford Federal Facility Agreement Appendix C as follows:

- Re-categorize the 100-DR-2 and 100-HR-2 Operable Units from RCRA Past Practice (RPP) to CERCLA Past Practice (CPP)
- Re-categorize the 100 NR-1 Operable Unit from RPP to CPP
- Designate Groundwater Operable Units to be CERCLA Past Practice (CPP) units.

Beginning on Page 3 changes to Appendix C are displayed by highlight to indicate addition of text and by ~~strikeout~~ to indicate deletion of text. Only the Groundwater Operable Units and the 100 Area Operable Units with changes are shown.

Appendix C

Listing by Operable Unit. (Sheet XX of XX)

OPERABLE UNIT Waste Unit Name	LEAD REGULATORY AGENCY Waste Unit Aliases	Unit Type	Status
100-DR-1	**Ecology**	**CPP**	
100-D-1	100-D-1, Contaminated Drain, Contaminated Storm Drain	Process Sewer	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-D-2	100-D-2, Solid Waste Site, Lead Sheeting	Foundation	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-D-3	100-D-3, Solid Waste Burial Ground, Silica Gel	Burial Ground	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-D-4	100-D-4, Sludge Trench #5, 107-DR Sludge Trench #5, 107-D-5, 107-D5	Trench	Closed Out (3/25/1999)
100-D-5	100-D-5, Waste Site Near 103-D, Undocumented Solid Waste Site, Undocumented Solid Waste Site Near 103-D	Burial Ground	
100-D-6	100-D-6, Buried VSR Thimble, Minor Construction Burial Ground #1, Burial Ground 4D, 118-D-4D	Burial Ground	
100-D-7	100-D-7, Undocumented Solid Waste Site	Dumping Area	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-D-8	100-D-8, 105-DR Process Sewer Outfall Site, Undocumented Liquid Waste Site, 1907-DR	Outfall	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-D-18	100-D-18, Sludge Trench #4, 107-D Sludge Trench #4, 107-D-4, 107-D4	Trench	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)
100-D-19	100-D-19, Sludge Trench #6, 107-D Sludge Trench #6	Trench	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-D-20	100-D-20, Sludge Trench #3, 107-D Sludge Trench #3, 107-D-3, 107-D3	Trench	Closed Out (3/25/1999)

Appendix C

Listing by Operable Unit. (Sheet XX of XX)

OPERABLE UNIT Waste Unit Name	LEAD REGULATORY AGENCY Waste Unit Aliases	Unit Type	Status
100-DR-1 (continued)			
100-D-21	100-D-21, Sludge Trench #2, 107-DR Sludge Trench #2, 107-D-2, 107-D2	Trench	Closed Out (3/25/1999)
100-D-22	100-D-22, Sludge Trench #1, 107-DR Sludge Trench #1, 107-D-1, 107-D1	Trench	Closed Out (3/25/1999)
100-D-24	100-D-24, 119D Sample Building Drywell	French Drain	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-D-25	100-D-25, Unplanned Release: 107-DR Basin Leaks	Unplanned Release	Closed Out (1/6/2000)
100-D-29	100-D-29, Effluent Line Leak #2	Unplanned Release	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995); Proximity Site to 100-D-48, 100-D-49
100-D-30	100-D-30, 190-D Sodium Dichromate Soil Contamination, 185-D, 189-D Decontamination & Demolition Project, 185-D Sodium Dichromate Trench & Sump	Unplanned Release	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-D-31	100-D-31,100-D Water Treatment Facilities Underground Pipelines	Process Sewer	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-D-32	100-D-32, Minor Construction Burial Ground #6	Burial Ground	
100-D-33	100-D-33, Minor Construction Burial Ground #4 East Trench	Burial Ground	
100-D-35	100-D-35, Minor Construction Burial Ground #4 West Trench	Burial Ground	
100-D-41	100-D-41, Minor Construction Burial Ground #5 Trench, 118-18, 118-D-18	Burial Ground	

Appendix C

Listing by Operable Unit. (Sheet XX of XX)

OPERABLE UNIT Waste Unit Name	LEAD REGULATORY AGENCY Waste Unit Aliases	Unit Type	Status
100-DR-1 (continued)			
100-D-42	100-D-42, Buried VSR Thimble Site	Burial Ground	
100-D-45	100-D-45, Buried VSR Thimble Site, Burial Ground 4B, 118-D-4B	Burial Ground	
100-D-48	100-D-48, 100-D Reactor Cooling Water Effluent Underground Pipelines	Radioactive Process Sewer	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)
100-D-48:1	100-D-48:1, North Pipelines from 116-D-7 to the Outfalls		
100-D-48:2	100-D-48:2, West Pipelines from D Avenue to 116-D-7		
100-D-48:3	100-D-48:3, Effluent Pipelines from D Avenue to 105-D Reactor		
100-D-49	100-D-49, 100-DR Reactor Cooling Water Effluent Underground Pipelines	Radioactive Process Sewer	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)
100-D-49:1	100-D-49:1, North Pipelines from 116-DR-9 to the Outfalls		
100-D-49:2	100-D-49:2, East Pipelines from D Avenue to 116-DR-9		
100-D-49:3	100-D-49:3, Effluent Pipelines from D Avenue to 105-DR Reactor		
100-D-52	100-D-52, 105-D Downcomer Insulation Space Dry Well	French Drain	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995); Proximity Site to 100-D-48

Appendix C

Listing by Operable Unit. (Sheet XX of XX)

OPERABLE UNIT Waste Unit Name	LEAD REGULATORY AGENCY Waste Unit Aliases	Unit Type	Status
100-DR-1 (continued)			
116-D-1A	116-D-1A, 105-D Storage Basin Trench #1	Trench	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)
116-D-1B	116-D-1B, 105-D Storage Basin Trench #2	Trench	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)
116-D-2	116-D-2, 105-D Pluto Crib, 116-D-2A	Crib	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)
116-D-3	116-D-3, 108-D Crib #1	Crib	Amendment to the Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995) (1997)
116-D-4	116-D-4, 108-D Crib #2	Crib	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)
116-D-5	116-D-5, 1904-D Outfall Structure	Outfall	Interim Record of Decision, 100 Area Remaining Sites (1999)†
116-D-6	116-D-6, 105-D Cushion Corridor French Drain	French Drain	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)
116-D-7	116-D-7, 107-D Retention Basin, 107-D	Retention Basin	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)
116-D-9	116-D-9, 117-D Crib, 117-D Seal Pit Crib	Crib	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)
116-D-10	116-D-10, 105-D Fuel Storage Basin Cleanout Percolation Pit, 105-D Fuel Storage Discharge Ponds, 105-D Ponds	Pond	Interim Record of Decision, 100 Area Remaining Sites (1999)†
120-D-2	120-D-2, 186-D Waste Acid Reservoir	Surface Impoundment	Interim Record of Decision, 100 Area Remaining Sites (1999)†

Appendix C

Listing by Operable Unit. (Sheet XX of XX)

OPERABLE UNIT Waste Unit Name	LEAD REGULATORY AGENCY Waste Unit Aliases	Unit Type	Status
100-DR-1 (continued)			
126-D-2	126-D-2, 184-D Coal Pit/Burial Ground	Burial Ground	
128-D-2	128-D-2, 128-D-2 Burn Pit	Burn Pit	Interim Record of Decision, 100 Area Remaining Sites (1999)†
130-D-1	130-D-1, 1716-D Gasoline Storage Tank, 1706-D Gasoline Storage Tank	Storage Tank	Interim Record of Decision, 100 Area Remaining Sites (1999)†
132-D-1	132-D-1, 115-D/DR Gas Recirculating Facility	Process Unit/Plant	Interim Record of Decision, 100 Area Remaining Sites (1999)†
132-D-2	132-D-2, 117-D Filter Building	Process Unit/Plant	Interim Record of Decision, 100 Area Remaining Sites (1999)†
132-D-3	132-D-3, 1608-D Waste Water Pumping Station, 1608-D Effluent Pumping Station	Pump Station	Interim Record of Decision, 100 Area Remaining Sites (1999)†
1607-D2	1607-D2, 1607-D2 Septic Tank and Associated Drain Fields, 124-D-2, 1607-D2 Sanitary Sewer System, 1607-D2 Septic Tank	Septic Tank	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995); Proximity Site to 100-D-48
1607-D2:1	1607-D2:1, Original 1607-D2 Tile Field, Eastern 1607-D2 Tile Field		Closed Out (3/25/1999)
1607-D2:2	1607-D2:2 Replacement 1607-D2 Tile Field, Northern Tile Field		
1607-D2:3	1607-D2:3, Sanitary Sewer Pipelines		
1607-D2:4	1607-D2:4, 1607-D2 Septic Tank		Closed Out (11/23/1999)
1607-D4	1607-D4, 1607-D4 Septic Tank and Associated Drain Field, 124-D-4, 1607-D4 Sanitary Sewer System, 1607-D4 Septic Tank	Septic Tank	Interim Record of Decision, 100 Area Remaining Sites (1999)†

Appendix C

Listing by Operable Unit. (Sheet XX of XX)

OPERABLE UNIT Waste Unit Name	LEAD REGULATORY AGENCY Waste Unit Aliases	Unit Type	Status
100-DR-1 (continued)			
1607-D5*	1607-D5, 1607-D5 Septic Tank and Associated Drain Field, 124-D-5, 1607-D5 Sanitary Sewer System, 1607-D5 Septic Tank	Septic Tank	Interim Record of Decision, 100 Area Remaining Sites (1999)†
116-DR-1&2	116-DR-1&2, 107-DR Liquid Waste Disposal Trench #1, 107-DR Liquid Waste Disposal Trench #2, 116-DR-1, 116-DR-2	Trench	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)
116-DR-5	116-DR-5, 1904-DR Outfall Structure, 1904-DR	Outfall	Interim Record of Decision, 100 Area Remaining Sites (1999)†
116-DR-9	116-DR-9, 107-DR Retention Basin, 107-DR	Retention Basin	Closed Out (1/6/2000)
628-3	628-3, 628-3 Burn Pit	Burn Pit	Interim Record of Decision, 100 Area Remaining Sites (1999)†
UPR-100-D-1	UPR-100-D-1, Oil Soaked Soil	Unplanned Release	Interim Record of Decision, 100 Area Remaining Sites (1999)†
UPR-100-D-2	UPR-100-D-2, Effluent Line Leak #1	Unplanned Release	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995); Proximity Site to 100-D-48, 100-D-49
UPR-100-D-3	UPR-100-D-3, Effluent Line Leak #3	Unplanned Release	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995); Proximity Site to 100-D-48, 100-D-49
UPR-100-D-4	UPR-100-D-4, Unplanned Release: 107-D Basin Leaks	Unplanned Release	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995); Proximity Site to 100-D-48, 100-D-49
UPR-100-D-5	UPR-100-D-5, Effluent Line Leak #4	Unplanned Release	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995); Proximity Site to 100-D-48, 100-D-49

Appendix C

Listing by Operable Unit. (Sheet XX of XX)

OPERABLE UNIT Waste Unit Name	LEAD REGULATORY AGENCY Waste Unit Aliases	Unit Type	Status
100-DR-2	**Ecology**	~~RPPCPP~~	
100-D-12	100-D-12, Sodium Dichromate / Acid Railcar and Truck Unload Station and Associated French Drain, Undocumented Liquid Waste Site	Pump Station	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-D-13	100-D-13, Unnumbered Septic System A, Septic Tank D-13, 100 DR Area Sewage Disposal Unit.124-DR-3, 1607-DR3	Septic Tank	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-D-15	100-D-15, Debris North of 100-D Area Perimeter Road and Debris South of 100-D Perimeter Road - within 100-D-55 (Gravel Pit #21)	Dumping Area	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-D-23	100-D-23, 119-DR Sample Building Drywell	French Drain	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-D-27	100-D-27, 151-D Substation UPR, A-2 Substation Transformer #A401C Leak	Unplanned Release	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-D-28	100-D-28, 190-DR Building Septic System	Septic Tank	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-D-40	100-D-40, Minor Construction Burial Ground #5 Hole	Burial Ground	
100-D-43	100-D-43, Buried VSR Thimble Site, Burial Ground 4C, 118-D-4C	Burial Ground	
100-D-46	100-D-46, Burial Ground 4A, 118-D-4A	Burial Ground	
100-D-47	100-D-47, Construction C.G. 558-Rod Burial, Burial Ground 4E, 118-D-4E	Burial Ground	
116-D-8	116-D-8, 100-D Cask Storage Pad	Storage	Interim Record of Decision, 100 Area Remaining Sites (1999)†

Appendix C

Listing by Operable Unit. (Sheet XX of XX)

OPERABLE UNIT Waste Unit Name	LEAD REGULATORY AGENCY Waste Unit Aliases	Unit Type	Status
100-DR-2 (continued)			
118-D-1	118-D-1, 100-D Burial Ground No. 1	Burial Ground	
118-D-2	118-D-2, 100-D Burial Ground No. 2	Burial Ground	
118-D-3	118-D-3, 100-D Burial Ground No. 3	Burial Ground	
118-D-4	118-D-4, Construction Burial Ground, Burial Ground 4F, 118-D-4F	Burial Ground	
118-D-5	118-D-5, Ball 3X Burial Ground, Burial Ground 4G, 118-D-4G	Burial Ground	
128-D-1	128-D-1, 100 D/DR Burning Pit	Burn Pit	Interim Record of Decision, 100 Area Remaining Sites (1999)†
116-DR-3	116-DR-3, 105-DR Storage Basin Trench	Trench	Amendment to the Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995) (1997)
116-DR-4	116-DR-4, 105-DR Pluto Crib	Crib	Amendment to the Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995) (1997)
116-DR-6	116-DR-6, 1608-DR Liquid Disposal Trench, Wash Pad Liquid Waste Site 3C	Trench	Amendment to the Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995) (1997)
116-DR-7	116-DR-7, 105-DR Inkwell Crib	Crib	Interim Record of Decision, 100 Area Remaining Sites (1999)†
116-DR-8	116-DR-8, 117-DR Crib, 117-DR Seal Pit Crib	Crib	Interim Record of Decision, 100 Area Remaining Sites (1999)†

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Listing by Operable Unit. (Sheet XX of XX)

OPERABLE UNIT Waste Unit Name	LEAD REGULATORY AGENCY Waste Unit Aliases	Unit Type	Status
100-DR-2 (continued)			
116-DR-10	116-DR-10, 105-DR Fuel Storage Basin Cleanout Percolation, 105-DR Fuel Storage Discharge Pond, 105-DR Pond	Pond	Interim Record of Decision, 100 Area Remaining Sites (1999)†
118-DR-1	118-DR-1, 105-DR Gas Loop Burial Ground	Burial Ground	
126-DR-1*	126-DR-1, 190-DR Clearwell Tank Pit	Dumping Area	
132-DR-1	132-DR-1, 1608-DR Waste Water Pumping Station, 1608-DR Effluent Pumping Station	Pump Station	Interim Record of Decision, 100 Area Remaining Sites (1999)†
600-30	600-30, 100-DR Construction Lay-down Area	Dumping Area	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-HR-1	**Ecology**	**CPP**	
100-H-3	100-H-3, 1716-H Garage Fuel Tank Site	Storage Tank	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-H-4	100-H-4, 1717-H Hot Shop, French Drain, and, Contaminated Storage Unit	Maintenance Shop	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-H-5	100-H-5, 107-H Retention Basin Sludge Burial Site, 107-H Buried Sludge Site, 107-H Grave	Burial Ground	Amendment to the Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995) (1997)
100-H-7	100-H-7, French Drain A	French Drain	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-H-8	100-H-8, French Drain B	French Drain	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-H-9	100-H-9, French Drain C	French Drain	Interim Record of Decision, 100 Area Remaining Sites (1999)†

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Listing by Operable Unit. (Sheet XX of XX)

OPERABLE UNIT Waste Unit Name	LEAD REGULATORY AGENCY Waste Unit Aliases	Unit Type	Status
100-HR-1 (continued)			
100-H-10	100-H-10, French Drain D	French Drain	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-H-11	100-H-11, Expansion Box French Drain E	French Drain	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-H-12	100-H-12, Expansion Box French Drain F and Shielding Lead	French Drain	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-H-13	100-H-13, French Drain G	French Drain	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-H-14	100-H-14, Surface Contamination Zone H	Unplanned Release	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-H-17	100-H-17, 116-H-2 Trench Overflow	Unplanned Release	Amendment to the Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995) (1997)
100-H-21	100-H-21, 100-H Reactor Cooling Water Effluent Underground Pipelines	Radioactive Process Sewer	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)
100-H-22	100-H-22, Soil Contaminated by Effluent Line Leakage	Unplanned Release	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-H-24	100-H-24, 151-H Electrical Facilities, 151-H Substation	Electrical Substation	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-H-31	100-H-31, Polychlorinated Biphenyl in Soil On North Side of 105-H Reactor Building	Unplanned Release	Interim Record of Decision, 100 Area Remaining Sites (1999)†
116-H-1	116-H-1, 107-H Liquid Waste Disposal Trench	Trench	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)

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Listing by Operable Unit. (Sheet XX of XX)

OPERABLE UNIT Waste Unit Name	LEAD REGULATORY AGENCY Waste Unit Aliases	Unit Type	Status
100-HR-1 (continued)			
116-H-2	116-H-2, 1608-H Liquid Waste Disposal Trench, 1608-H Crib & Trench	Trench	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)
116-H-3	116-H-3, 105-H Dummy Decontamination French Drain, Perf Decontamination Drain	French Drain	Amendment to the Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995) (1997)
116-H-4	116-H-4, 105-H Pluto Crib	Crib	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)
116-H-5	116-H-5, 116-H-5 Outfall Structure, 1904-H Outfall Structure, 116-H-5 Outfall Structure and Riverlines	Outfall	Interim Record of Decision, 100 Area Remaining Sites (1999)†
116-H-7	116-H-7, 107-H Retention Basin, 107-H	Retention Basin	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995)
116-H-9	116-H-9, 117-H Crib, 117-H Seal Pit Crib	Crib	Interim Record of Decision, 100 Area Remaining Sites (1999)†
126-H-2*	126-H-2, 183-H Clearwells/Disposal Pit	Dumping Area	Interim Record of Decision, 100 Area Remaining Sites (1999)†
132-H-1	132-H-1, 116-H Reactor Exhaust Stack Burial Site	Burial Ground	Interim Record of Decision, 100 Area Remaining Sites (1999)†
132-H-3	132-H-3, 1608-H Waste Water Pumping Station Site, 116-H-8, 1608-H Effluent Pumping Station Site	Pump Station	Interim Record of Decision, 100 Area Remaining Sites (1999)†
1607-H2	1607-H2, 1607-H2 Septic Tank and Associated Drain Field, 1607-H2 Sanitary Sewer System, 124-H-2, 1607-H2 Septic Tank	Septic Tank	Interim Record of Decision, 100 Area Remaining Sites (1999)†

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Listing by Operable Unit. (Sheet XX of XX)

OPERABLE UNIT Waste Unit Name	LEAD REGULATORY AGENCY Waste Unit Aliases	Unit Type	Status
100-HR-1 (continued)			
1607-H4	1607-H4, 1607-H4 Septic Tank and Associated Drain Field, 1607-H4 Sanitary Sewer System, 124-H-4, 1607-H4 Septic Tank	Septic Tank	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-HR-2	**Ecology**	**~~RPPCPP~~**	
100-H-2	100-H-2, Buried Thimble Site	Burial Ground	Interim Remedial Action Record of Decision, 100-BC-1, 100-DR-1, 100-HR-1 (1995); Proximity Site to 116-H-2
118-H-1	118-H-1, 100-H Burial Ground No. 1, 100-H-1	Burial Ground	
118-H-2	118-H-2, H-1 Loop Burial Ground, 100-H Burial Ground No. 2	Burial Ground	
118-H-3	118-H-3, Construction Burial Ground	Burial Ground	
118-H-4	118-H-4, Ball 3X Burial Ground	Burial Ground	
118-H-5	118-H-5, 105-H Thimble Pit	Burial Ground	
128-H-1	128-H-1, 100-H Burning Pit, 100-H Burning Pit No. 1	Burn Pit	Interim Record of Decision, 100 Area Remaining Sites (1999)†
128-H-2	128-H-2, 100-H Burning Ground #2	Burn Pit	Interim Record of Decision, 100 Area Remaining Sites (1999)†
128-H-3	128-H-3, 100-H Burning Ground #3	Burn Pit	Interim Record of Decision, 100 Area Remaining Sites (1999)†
132-H-2	132-H-2, 117-H Filter Building Site	Burial Ground	Interim Record of Decision, 100 Area Remaining Sites (1999)†

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Listing by Operable Unit. (Sheet XX of XX)

OPERABLE UNIT Waste Unit Name	LEAD REGULATORY AGENCY Waste Unit Aliases	Unit Type	Status
100-HR-2 (continued)			
1607-H1*	1607-H1, 1607-H1 Septic Tank and Associated Drain Field, 124-H-1, 1607-H1 Sanitary Sewer System, 1607-H1 Septic Tank	Septic Tank	Interim Record of Decision, 100 Area Remaining Sites (1999)†
600-151	600-151, Dumping Areas 50 yards and 200 yards Downstream of River Mile 14, Military installation NW of 100H Area	Dumping Area	Interim Record of Decision, 100 Area Remaining Sites (1999)†
100-IU-3	**Ecology**	**CPP**	
600-8	600-8, MIL - H-06C, Control Center for "Battery A" Nike Missile, Wahluke Slope Nike Missile Base, WSNMB, 600-103 (Part)	Military Compound	Deleted From NPL (7/8/1998)
600-9	600-9, MIL - H-06L, Battery "A" Nike Missile Installation Launch Site, Wahluke Slope Nike Missile Base, WSNMB, 600-103 (Part)	Military Compound	Deleted From NPL (7/8/1998)
600-104	600-104, USBR, USBR 2,4-D Burial Site, USBR-2.4-D	Burial Ground	Deleted From NPL (7/8/1998)
100-IU-4	**Ecology**	**CPP**	
600-105	600-105, SDBDL, Sodium Dichromate Barrel Disposal Landfill	Burial Ground	Closed Out (2/12/1996)
100-NR-1	**Ecology**	**~~RPP~~ CPP**	

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Listing by Operable Unit. (Sheet XX of XX)

100-NR-1 (continued)

2607-FSM*	2607-FSM, 609 Building Septic Tank 2607-FSM, 100 Area Fire Station Septic Tank, 1607-FSM, 6607-FSM	Septic Tank
100-N-1	100-N-1, HGP Settling Pond	Pond
100-N-3*	100-N-3, Maintenance Garage French Drain, Maintenance Garage Waste Water Treatment Unit	French Drain
100-N-4*	100-N-4, HGP Tile Field	Drain/Tile Field
100-N-5	100-N-5, HGP Disposal and Storage Area, HGP Bone Yard	Storage
100-N-41	100-N-41, 1701-NE Septic Tank	Septic Tank
100-N-45	100-N-45, 1703-N Septic Tank	Septic Tank
100-N-46	100-N-46, HGP Diesel Oil Storage Tank	Storage Tank
116-N-1**	116-N-1, 1301-N Liquid Waste Disposal Facility, 1301-N Crib and Trench	Crib
116-N-2	116-N-2, 1310-N Chemical Waste Storage Tank, The Golf Ball, 1310-N Waste Storage Area	Storage Tank
116-N-3**	116-N-3, 1325-N Liquid Waste Disposal Facility, 1325-N Crib and Trench	Crib

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Listing by Operable Unit. (Sheet XX of XX)

100-NR-1 (continued)

116-N-4	116-N-4, 1300-N Emergency Dump Basin	Retention Basin
118-N-1	118-N-1, 100-N Area Silos, 100-N Area Spacer Silos, 118-N, 1303-N Spacer Silos, 1303-N Radioactive Dummy Burial Facility	Silo
120-N-1**	120-N-1, 1324-NA Percolation Pond	Pond
120-N-2**	120-N-2, 1324-N Surface Impoundment	Surface Impoundment
120-N-3	120-N-3, 163-N Neutralization Pit and French Drain	French Drain
120-N-7	120-N-7, 108-N Acid Unloading Facility French Drain	French Drain
124-N-1*	124-N-1, 124-N-1 Septic Tank, 100-N Sanitary Sewer System No. 1	Septic Tank
124-N-2	124-N-2, 124-N-2 Septic Tank, 100-N Sanitary Sewer System No. 2	Septic Tank
124-N-3	124-N-3, 124-N-3 Septic Tank, 100-N Sanitary Sewer System No. 3	Septic Tank
124-N-4	124-N-4, 100-N Sanitary Sewer System No. 4, 124-N-4 Septic Tank	Septic Tank
124-N-9*	124-N-9, 124-N-9 Septic Tank, 100-N Sanitary Sewer System No. 9	Septic Tank
124-N-10*	124-N-10, 124-N-10 Sanitary Sewer System, 100-N Central Sewer System No. 10, Project H-677	Sewage Lagoon
128-N-1	128-N-1, 100-N Burning Pit, 128-N-1 Burning Pit	Burn Pit

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Listing by Operable Unit. (Sheet XX of XX)

100-NR-1 (continued)

130-N-1*	130-N-1, 183-N Backwash Discharge Pond, 126-N-1, 183-N Filter Backwash Pond,	Pond
1908-NE	1908-NE, HGP Outfall, 1908-NE Building	Outfall
628-2	628-2, 100 Area Fire Station Burn Pit	Burn Pit
UPR-100-N-1	UPR-100-N-1, 100-N 1304-N Dump Tank, UN-100-N-1, Emergency Dump Tank Inlet Valve Box Leak	Unplanned Release
UPR-100-N-2	UPR-100-N-2, 100-N FLV-858 Valve Leak, UN-100-N-2	Unplanned Release
UPR-100-N-3	UPR-100-N-3, Dummy Fuel Transfer Line, UN-100-N-3, Spacer Disposal System Transport Line Leak, UN-116-N-3	Unplanned Release
UPR-100-N-4	UPR-100-N-4, 1322-A Sump Overflow, UN-100-N-4	Unplanned Release
UPR-100-N-5	UPR-100-N-5, 1310-N Chemical Waste Storage Tank Leak, UN-100-N-5, 116-N-2 Radioactive Chemical Waste Treatment Storage Facility	Unplanned Release
UPR-100-N-6	UPR-100-N-6, 1 1/2 Inch Chemical Decontam. Waste Drain Line Leaks, UN-100-N-6, UN-116-N-6, Chemical Decontamination Waste Drain Line Leak	Unplanned Release
UPR-100-N-7	UPR-100-N-7, Ten-inch Radioactive Drain Return Line Leak, UN-116-N-7, UN-100-N-7	Unplanned Release
UPR-100-N-8	UPR-100-N-8, 1322-A Sump Overflow, UN-100-N-8	Unplanned Release

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Listing by Operable Unit. (Sheet XX of XX)

100-NR-1 (continued)

UPR-100-N-9	UPR-100-N-9, 119-N Cooling Water Drain Line Leak, UN-100-N-9	Unplanned Release
UPR-100-N-10	UPR-100-N-10, 100-N Area 105-N Check Valve, UN-100-N-10, Lift Station Gravity Drain Line Leak	Unplanned Release
UPR-100-N-11	UPR-100-N-11, Five Hundred Pound Valve Bonnet Contamination in Uncontrolled Area, 100-N Area Valve Bonnet, UN-100-N-11	Unplanned Release
UPR-100-N-12	UPR-100-N-12, Spacer Transport Line Leak, UN-100-N-12	Unplanned Release
UPR-100-N-13	UPR-100-N-13, 1314-N Loading Station, 1314-N Drywell Overflow, UN-100-N-13	Unplanned Release
UPR-100-N-14	UPR-100-N-14, 119-N Drain System Leak, UN-100-N-14	Unplanned Release
UPR-100-N-17	UPR-100-N-17, 166-N Diesel Oil Supply Line Leak, UN-100-N-17	Unplanned Release
UPR-100-N-18	UPR-100-N-18, 166-N Four-inch Diesel Oil Supply Line to 184-N Leak, UN-100-N-18	Unplanned Release
UPR-100-N-19	UPR-100-N-19, 184-N Day Tank Fuel Oil Spill, UN-116-N-19, UN-100-N-19	Unplanned Release
UPR-100-N-20	UPR-100-N-20, 166-N Two-inch Diesel Oil Return Line Leak, UN-116-N-20, UN-100-N-20	Unplanned Release
UPR-100-N-21	UPR-100-N-21, 184-N Diesel Oil Day Tank Overflow, UN-116-N-21, UN-100-N-21	Unplanned Release

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Listing by Operable Unit. (Sheet XX of XX)

100-NR-1 (continued)

UPR-100-N-22	UPR-100-N-22, 184-N Diesel Oil Supply Line Leak No. 1, UN-100-N-22, UN-116-N-22	Unplanned Release
UPR-100-N-23	UPR-100-N-23, 184-N Diesel Oil Supply Line Leak No. 2, UN-100-N-23, UN-116-N-23	Unplanned Release
UPR-100-N-24	UPR-100-N-24, 166-N Fuel Oil Supply Line Leak, UN-116-N-24, UN-100-N-24	Unplanned Release
UPR-100-N-25	UPR-100-N-25, Uncontrolled Venting of 1310-N Tank, UN-100-N-25	Unplanned Release
UPR-100-N-26	UPR-100-N-26, Backflow of Radioactive Waste in 1314-N Facility, UN-100-N-26	Unplanned Release
UPR-100-N-29	UPR-100-N-29, 1304-N Dump Tank, Emergency Dump Tank Bypass Line Leak, UN-100-N-29	Unplanned Release
UPR-100-N-30	UPR-100-N-30, 1304-N Dump Tank, Emergency Dump Tank Overflow, UN-100-N-30	Unplanned Release
UPR-100-N-31	UPR-100-N-31, Radioactive Effluent Water Spill Near 1301-N, UN-100-N-31	Unplanned Release
UPR-100-N-32	UPR-100-N-32, 1304-N Dump Tank, Emergency Dump Tank Bypass Line Leak, UN-100-N-32	Unplanned Release
UPR-100-N-35	UPR-100-N-35, 100-N Fuel Basin Drainage System Leak, UN-116-N-35, 105-N Fuel Storage Basin Drainage System Leak, UN-100-N-35	Unplanned Release
UPR-100-N-37	UPR-100-N-37, HGP Transformer Yard	Unplanned Release

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Groundwater Operable Units

Operable Unit	Lead Regulatory Agency	Past Practice Process
100-BC-5 (GW O.U.)	EPA	CPP
100-FR-3 (GW O.U.)	EPA	CPP
100-HR-3 (GW O.U.)	Ecology	CPP
100-KR-4 (GW O.U.)	EPA	CPP
100-NR-2 (GW O.U.)	Ecology	CPP
200-BP-5 (GW O.U.)	EPA	CPP
200-PO-1 (GW O.U.)	Ecology	CPP
200-UP-1 (GW O.U.)	Ecology	CPP
200-ZP-1 (GW O.U.)	EPA	CPP
300-FF-5 (GW O.U.)	EPA	CPP

* Active waste management units where a hazardous substance has been potentially released or a substantial threat of a release of a hazardous substance exists.
**Treatment Storage and Disposal (TSD) units where closure and permitting activities are to be coordinated with past practice investigation and remediation activities.
† Interim Action Record of Decision for the 100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-1, 100-FR-2, 100-HR-1, 100-HR-2, 100-KR-1, 100-KR-2, 100-IU-2, 100-IU-6, and 200-CW-3 Operable Units (1999)